



\$12 US

# Wise Traditions

IN FOOD, FARMING AND THE HEALING ARTS  
A PUBLICATION OF THE WESTON A. PRICE FOUNDATION®



Education ♦ Research ♦ Activism  
westonaprice.org



Volume 24 Number 2

Summer 2023

## FEATURES

OMEGA-6 APOCALYPSE Page 14  
Dr. Chris Knobbe explains the major dangers of industrial seed oils

WHY WE NEED A HIGH-LYSINE DIET Page 24  
Joan McGovern Tandler extols the benefits of lysine and the problems with arginine

EGGS IN THE MIDDAY MEAL SCHEME Page 40  
Dr. Sylvia Karpagam describes opposition to feeding eggs to school children in Karnataka, India

## DEPARTMENTS

PRESIDENT'S MESSAGE	Page 2	VACCINATION UPDATES	Page 75
LETTERS	Page 3	SOY ALERT!	Page 86
CAUSTIC COMMENTARY	Page 7	FARM AND RANCH	Page 89
WISE TRADITIONS 2023	Page 10	RAW MILK UPDATES	Page 92
READING BETWEEN THE LINES	Page 44	HEALTHY BABY GALLERY	Page 93
HOMEOPATHY JOURNAL	Page 51	LOCAL CHAPTERS	Page 94
WAPF PODCAST INTERVIEW	Page 54	SHOP HEARD 'ROUND THE WORLD	Page 107
ALL THUMBS BOOK REVIEWS	Page 63	MEMBERSHIP	Page 124
TIM'S VIDEO REVIEWS	Page 73		





# Wise Traditions

IN FOOD, FARMING AND THE HEALING ARTS

Volume 24 Number 2

Summer 2023

## EDITORS

Sally Fallon Morell, MA  
Merinda Teller

## COVER DESIGN

Kim Waters

## COPY EDITORS

Kathy Kramer  
Anita Schubert

## LAYOUT & DESIGN

Michelle Bielovitz

WiseTraditions is mailed quarterly to members of the Weston A. Price Foundation  
PMB 106-380  
4200 Wisconsin Avenue, NW  
Washington, DC 20016  
Phone: (703) 820-3333  
Fax: (571) 777-8932  
Email: [info@westonaprice.org](mailto:info@westonaprice.org)  
Website: [westonaprice.org](http://westonaprice.org)

## DISCLAIMER

The information published herein is not intended to be used as a substitute for appropriate care of a qualified health practitioner.

## PERMISSION TO REPRODUCE

We encourage the reproduction and dissemination of the information published in WiseTraditions with credit to the Weston A. Price Foundation, as long as it is solely used to educate others. Permission in writing is required if you intend to make money using the material herein.

# THE WESTON A. PRICE FOUNDATION®


*Education ♦ Research ♦ Activism*

The Weston A. Price Foundation is a nonprofit, tax-exempt charity founded in 1999 to disseminate the research of nutrition pioneer Weston A. Price, DDS, whose studies of isolated nonindustrialized peoples established the parameters of human health and determined the optimum characteristics of human diets. Dr. Price's research demonstrated that men and women achieve perfect physical form and perfect health, generation after generation, only when they consume nutrient-dense whole foods and the vital fat-soluble activators found exclusively in animal fats.

The Foundation is dedicated to restoring nutrient-dense foods to the American diet through education, research and activism and supports a number of movements that contribute to this objective, including accurate nutrition instruction, organic and biodynamic farming, pasture-feeding of livestock, community-supported farms, honest and informative labeling, prepared parenting and nurturing therapies. Specific goals include establishment of universal access to clean, certified raw milk and a ban on the use of soy-based infant formula.

The Foundation seeks to establish a laboratory to test nutrient content of foods, particularly butter produced under various conditions; to conduct research into the "X" Factor, discovered by Dr. Price; and to determine the effects of traditional preparation methods on nutrient content and availability in whole foods.

The board and membership of the Weston A. Price Foundation stand united in the belief that modern technology should be harnessed as a servant to the wise and nurturing traditions of our ancestors rather than used as a force destructive to the environment and human health; and that science and knowledge can validate those traditions.

The Weston A. Price Foundation is supported by membership dues and private donations and receives no funding from the meat or dairy industries. 



# Wise Traditions

IN FOOD, FARMING AND THE HEALING ARTS

A PUBLICATION OF

THE WESTON A. PRICE FOUNDATION®



Volume 24 Number 2

SUMMER 2023

## CONTENTS

### FEATURES

- The Omega-6 Apocalypse** Page 14  
Dr. Chris Knobbe explains the major dangers of industrial seed oils
- Why We Need a High-Lysine Diet** Page 24  
Joan McGovern Tendler extols the benefits of lysine and the problems with arginine
- Eggs in Midday Meal Scheme** Page 40  
Dr. Sylvia Karpagam describes opposition in Karnataka, India, over feeding schoolkids eggs

### DEPARTMENTS

- President's Message** Page 2  
Embracing Real Food
- Letters** Page 3
- Caustic Commentary** Page 7  
Sally Fallon Morell challenges the Diet Dictocrats
- Wise Traditions 2023** Page 10
- Reading Between the Lines** Page 44  
Merinda Teller explains why it's best to avoid manufactured citric acid
- Homeopathy Journal** Page 51  
Lynn Wagner of the National Center for Homeopathy outlines summertime remedies

- Wise Traditions Podcast Interview** Page 54  
Dr. Naomi Wolf describes what was revealed in the Pfizer documents about the Covid injections

- All Thumbs Book Reviews** Page 63  
*Unsettled*  
*The Bodies of Others*  
*Pfizer Documents Analysis Reports*  
*The Stevia Deception*  
*Healthy Mouth, Healthy You!*  
*For the Love of Soil*  
*The Moth in the Iron Lung*

- Tim's Video Reviews** Page 73

- Vaccination Updates** Page 75  
Kendall Nelson traces the history of vaccine awareness movements all the way back to smallpox

- Soy Alert!** Page 86  
Studies showing adverse effects of soy, 2015-2023

- Farm and Ranch** Page 89  
Should we worry about mRNA in livestock?  
Tom Cowan answers the question

- Raw Milk Updates** Page 92

- Healthy Baby Gallery** Page 93

- Local Chapters** Page 94

- Shop Heard 'Round the World** Page 107

- Membership** Page 124

**BOARD OF DIRECTORS**

Sally Fallon Morell, MA, President  
 Tom Cowan, MD, Vice President  
 Christine Muldoon, Secretary  
 Valerie Cury, Treasurer  
 Leslie J. Manookian, MLCHom, Health Freedom Defense Fund  
 Pete Kennedy, Esq., A Campaign for Real Milk  
 Carolyn Biggerstaff

**BOARD MEMBERS IN MEMORIAM**

Mary Enig, PhD, FACN, CNS  
 Jerry Brunetti  
 Fred Kummerow, PhD  
 Kim Schuette, CN  
 Cherie Calvert

**HONORARY BOARD**

Jen Allbritton, BS, CN  
 Naomi Baumslag, MD, MPH  
 Marie A. Bishop, CDC  
 Joette Calabrese, HMC, CCH, RSHom(NA)  
 Natasha Campbell-McBride, MD  
 Lee Clifford, MS, CCN  
 Christopher Cogswell, MA  
 Monica Corrado  
 Janice Curtin  
 Eric Davis, BDSc, DAc, DCN  
 Maureen Diaz  
 Sara Bachman Ducey, MS, CNS  
 Mike Fitzpatrick, PhD  
 Ruth Ann Foster, MA  
 Donna Gates, BS, Med  
 Joann S. Grohman  
 Laura Hayes, BA  
 Suzanne Humphries, MD  
 Mark A. Kastel  
 Felix Liao, DDS  
 Karen Lyke, BA, MS, DSc  
 Kilmer McCully, AB, MD, MA (hon)  
 Judith McGearry, Esq.  
 Leigh Merinoff  
 Carlos Monteiro  
 Kenneth Fielding Morehead, DOM  
 David Morris, BS, DC  
 Kendall Nelson  
 Ronda Nelson, PhD, MH, CNC  
 The Hon. Frank Niceley  
 Jill Nienhiser, BS, MA  
 Lawrence B Palevsky, MD  
 Symbria Patterson  
 Sandrine Perez  
 Kathryn Pirtle, BS, MA  
 Gerald Pollack, PhD  
 Jessica Prentice  
 Lawren Pulse, MS  
 Philip Ridley, MSc, PGDip.  
 Bruce Rind, MD  
 Sir Julian Rose, BT  
 Julia Ross, MA  
 Beverly Rubik, BS, PhD  
 Joel Salatin  
 Adrienne Samuels, PhD  
 Stephanie Seneff, BS, MS, EE, PhD  
 C. Edgar Sheaffer, VMD  
 Ted Spence, DDS, ND  
 Alana Sugar, CN  
 Beverly B. Teter, PhD, FACN, CNS  
 John Umlauf  
 Susun S. Weed  
 David Wetzel, BS  
 Louisa L. Williams, MS, DC, ND  
 Lindsea Willon, MS, NTP  
 Will Winter, DVM  
 Anke Zimmermann, BSc, FCAH

# President's Message

The articles in this issue remind us how important it is to eat real ancestral food.

In “Omega-6 Apocalypse” (page 14), Dr. Chris Knobbe summarizes the disastrous consequences of industrial seed oil consumption—from obesity to diabetes to heart disease to cancer. By stealth, these cheap oils have taken over the food supply from one end of the globe to the other. They are in all processed foods, and especially in fast foods like French fries, fried chicken and donuts. They are toxic. . . and to make matters worse, the most prevalent oil, soybean oil, is loaded with estrogens. One tablespoon of soybean oil contains the equivalent estrogenic load of at least one birth control pill (page 87).


For those who have decided to improve their diets but don't know where to start, our advice is: first get your fats right. That means avoiding anything containing industrial seed oils, including margarines, spreads, cooking oils, fast food and all processed food; and using natural traditional fats like butter, lard, tallow, coconut oil and real olive oil.

Merinda Teller provides us with another reason to avoid processed food: manufactured citric acid, the ubiquitous additive that shows up in everything from salad dressings to vitamins (page 44). Not only is citric acid a source of nasty molds in our food, but it also can contain MSG.

WAPF has provided wise advice since its founding and constantly stresses the fact that the most important thing you can do for your health is to eat only real food.

Real food will be the only kind of food served at Wise Traditions 2023, our upcoming annual conference in Kansas City, Missouri, October 19-23. We are delighted to feature Dr. Naomi Wolf as our keynote speaker. Dr. Wolf and team have dissected the Pfizer study documents and found shocking evidence of great harm and lack of effectiveness in the Covid-19 vaccines. She is a powerful speaker and not to be missed.

In addition to many perennial favorites (Dr. Natasha Campbell-McBride, Dr. Tom Cowan, Leslie Manookian, Beverly Rubik, PhD), we have many interesting new speakers including William Trebing, author of *Good-Bye Germ Theory*, Alex Zeck, founder of The Way Forward, Jim Stephenson on the dangers of vitamin D supplementation, and Doug and Stacy, off-the-grid specialists.

As always, we will offer a children's program, work scholarships, many interesting exhibitors, a Monday farm tour, and CEUs for nurses and chiropractors. We look forward to seeing you at another wonderful conference! 





# Letters



## DISAPPOINTED

I was very disappointed in James Kirkpatrick's "Technology as Servant" article about fracking in the Winter 2022 issue of *Wise Traditions*. He explains the history and process of fracking very well, and lauds the economic benefits to U.S. energy corporations and also to energy consumers. However, he barely mentions the environmental and health damage caused by this process, glossing over problems like the contamination of ground water that results in people—humans living in fracked areas—being able to light on fire the water coming out of their kitchen faucets. It's as if the human cost of this quite destructive industrial process is negligible compared to the great economic effect of the U.S. becoming an energy exporter rather than an importer.

He doesn't mention the negative health effects of venting and flaring gas at wellheads, which spew chemical pollution into the air all around and 24/7, nor the problems with the light and noise pollution from those flares. Similarly, he mentions the increased traffic that these industrial processes bring into rural areas without acknowledging the increased air, water and soil contamination that accompany the traffic and congestion.

In the section titled "Water Challenges," Mr. Kirkpatrick grants that the use of massive quantities of mostly fresh water "in the drilling process leads to the second main engineering-environmental challenge with the hydraulic fracturing process." (It wasn't clear to me what the first challenge was.) He goes on to describe a number of ways

in which this water is "managed" after the fracking process, including storage in open pits, which pollutes the air and ground water; injecting the used water into disposal wells, which can lead to minor earthquakes and pollution of ground water; and what he calls a "closed recycle loop." This process removes the contaminants from the water (and puts them where? he doesn't say), so that the same water can be used again for fracking. He reports that at present only 40 to 50 percent of fracking water is processed this way.

Mr. Kirkpatrick refers to the pollution problems from fracking as being "in small numbers relative to the number of wells drilled." And the number of wells is huge, as this process needs many small, short-lived wells, in contrast to the older types of wells that could extract hydrocarbons for much longer. He calls it a "trade-off" of water for gas and oil, and deplores fracking critics for missing "the widespread benefits. . . from the doubling of domestic hydrocarbon production."

You don't have to be a climate alarmist or a carbon-phobe to recognize that trading water (absolutely essential for human and all life) for hydrocarbon fuels (extremely important for modern industrial society, but by no means essential for life) is not a minor thing. The fact that presidents are likely to embrace such a trade-off "without blinking" is not a very comforting thought for all us non-presidents. We are faced with the unfortunate reality that any source of energy sufficient to power the necessities of life for the billions of people now living on earth comes with major environmental and health costs,

especially for those who live near or work in the extractive industries that supply the raw materials. That goes for the so-called renewable energy sources as well as the "legacy" sources: coal, oil, gas, nuclear and even the oldest of all, burning wood or other biomass.

Fracking technology is a "servant" of the hydrocarbon industry, and in the sense that we all use the products of that industry, one could call it a "servant" to us consumers, too. But we're still waiting for the technology that can serve to make the extractive processes necessary for this and all energy products more compatible with the health of humans and all of the earth's inhabitants and biomes.

I direct readers' attention to [www.dr-rath-foundation.org/2022/09/fracking-the-scientific-evidence-of-adverse-health-effects-that-governments-arent-telling-you-about/](http://www.dr-rath-foundation.org/2022/09/fracking-the-scientific-evidence-of-adverse-health-effects-that-governments-arent-telling-you-about/).

Rose Bohmann  
Madison, Wisconsin

## FOSSIL FUELS

A big thank you for the 2022 Winter WAPF journal. It was full of very important timely information. It's so sad to hear people blaming our children for problems with their sexuality, when it's not their fault. Most of us are made sick and confused before we can walk and it's not us, it's living in this toxic, greed-based culture!

One department I disagree with is about the benefits of fracking for oil, as well as views on other technologies written about by James Kirkpatrick. There's nothing good about oil or other fossil fuels and what's remaining in the ground should stay in the ground. Our

# Letters

planet is overheating, destroying our ecology, and fossil fuel is the problem. True, I appreciate James's knowledge but I wish he had a different view about the negative effect of most technology that hurts all of us, especially the poor!

Jon Butts  
Ecofarm Florida

## MY OWN FRACKED NATURAL GAS WELL

I was glad to see a sensible article on fracking in the pages of *Wise Traditions*.

I am a farmer in western Pennsylvania and have a fracked gas well on my land. This well brings me five hundred dollars per day in revenue and has saved my farm. I no longer have any pressure to sell to developers and I have been able to put in needed infrastructure such as fences and a new barn. For the first time, I am enjoying prosperity.

Sure, there were a bunch of trucks and equipment involved when the well went in but now all is calm. The well is inconspicuous, surrounded by trees and green fields. I can drink our well water and there are no flames coming out of our taps. Our air is clean here and plants are thriving. I know there were environmental problems in the early days of fracking, but fortunately these had all been solved by the time my well went in.

There are almost thirteen thousand fracked wells (and almost one hundred thousand conventional wells)

in western Pennsylvania. They are not causing poverty but adding greatly to the prosperity of the state and creating many good jobs.

It's a shame that knee-jerk reactions to fracking have led to laws against it in New York and Maryland. Landowners there are prohibited from benefiting from the natural gas under their land, and many will eventually

People who say we should not be drilling for and using oil and natural gas have not thought things through. It's obvious that wind and solar can only supply a fraction of our energy needs; coal is dirty; and we could keep ourselves warm and clean with wood (which, like coal, is highly polluting) for only a few years until all our trees were cut down.

The fact is that the use of oil and gas has made life comfortable and clean for billions of people, and continued drilling will make that possible for many more. Today we live better than royalty did in the past because we have "fossil" fuel to heat and light our houses, wash our clothes, run our refrigerators, cook our food, provide clean transportation (yes, clean, with modern reformulated gasoline, especially compared to transportation by horse and mule), and manufacture an infinite variety of goods including telephones and computers. "Fossil" fuel has allowed us to build roads, buildings and infrastructure without resorting to forced labor and freed all of us from the drudgery of hard physical labor.

As for the idea that use of oil and gas is contributing to climate change, the evidence shows that the climate of the Earth goes through cycles of warm and cool that have nothing to do with our energy use.

I put "fossil" in quotation marks



A fracked natural gas well on a farm.



Coal extraction by mountaintop removal.

see their farms turned into subdivisions—or maybe polluted with wind or solar farms.





# Letters



because geologists are realizing that oil and gas are constantly being renewed in the depths of the earth. Just look up “abiotic” oil on your computer.

Joshua Miller  
Meadville, Pennsylvania

## NOT A MACHINE!

I just received the Spring 2023 *Wise Traditions* and read both Tom Cowan’s and Andrew Kaufman’s articles. They are of great interest to me and well written. Several things struck me and I decided to comment.

First, Dr. Kaufman states that “the body is a self-healing machine.” I suggest this describes the major limit facing science (and the culture) today, particularly researchers in any aspect of health. The body is not a machine. We realize now that living systems are self-organizing on all levels, including the healing process; but developing the language and ideas to express nonlinear concepts and observations, and freeing ourselves from the machine model of reality takes time. A machine can be fixed by removing and reinstalling parts, a sort of “plug and play” model. Living systems do not behave this way. Self-organization is very different.

A new, very different view of anatomy is currently emerging. Old ideas of bones, muscles and organs being separate are now seen as too limited. Robert Schleip (researcher and practitioner at the University of Munich at Ulm) and Tomas Myers (author and movement therapist) are among the workers who now view human anatomy as a continuous structural system from the interior of cell nuclei outward to the skin, including organs and bones,

held and supported by the architecture of fascia—the old term is “connective tissue.”

Fascia is structured in a nonlinear fashion called “biotensegrity.” Classical anatomy separates muscles, nerves, blood vessels, organs and the like. The new view indicates these structures exist in a tensegral system, never separate, and form in response to local conditions. They are supported and interpenetrated by a 3-D living network of non-cellular elements of fascia. I believe it would be valuable to visit the work of both authors. One consequence is that genes are not “plug and play,” nor is any other part of this very complex, nonlinear system. A major structural factor is the “fourth phase” of water, as Dr. Cowan mentions.

This new view of anatomy might facilitate the discussion, and perhaps further the understanding of how nonlinear living systems carry out life processes. Appropriate research methods like biochemistry and live microscopy are profoundly altering the old view, as is the work with nutrition, which might “cross-pollinate” with Weston A. Price’s view.

Another statement that caught my attention was the “necessity of cause and effect.” I suggest the authors consider the Buddhist concept of “causes and conditions” as different from “cause and effect,” which suggests a direct linear association and can be limiting.

A final point struck me in Dr. Kaufman’s discussion of human extrasensory abilities. The culturally defined acceptance of human abilities is a consequence of the machine model,

which also underlies science. But we have far more capabilities. I knew two colleagues who were very gifted with remote viewing. But they did so to stay in touch with their families while living or studying far away from home, and were very quiet about their skill. These abilities are probably quite common, but scientifically unaccepted, and suppressed by cultural reliance on a machine model of reality.

The area of fascia research is incredibly exciting, and I believe opens a long closed door to understanding the awesome capacities we have as living beings.

Of course, there is lots more about this to be found on the Internet. I was delighted to read the two articles, grateful to see this information publicly available. The idea that much of our cell biology information is based on lab artifact is quite interesting. And of course, Weston A. Price has changed my life. My gratitude to you for continuing the work.

Pat Howe  
Sausalito, California

## REVISITING X-RAYS

The article by Merinda Teller in the Spring 2023 journal (“Medical Tests: Whose Interests Do They Really Serve?”). It contained helpful insights into TB testing that I did not know before, so thank you! I would add, however, that the section on overutilization of X-rays may be less serious than previously thought. Good research over the last several years has been chipping away at the antiquated, linear no-threshold model of radiation exposure. This theory suggested that



# Letters



all radiation absorbed by the body was damaging and cumulative over time, inevitably leading to cancer and disease over a lifetime. Paul Oakley, Canadian clinician and researcher, has published several articles challenging this model in the highly rated journal *Dose Response* (see citations at the end of this letter). The Harvard paper referenced by Ms. Teller has no citations and is a carry-over from the decades-long radiation phobia that has easily been propagated with the visual and natural fear of nuclear explosions.

It may be more helpful to realize that, according to one researcher, in the absence of radiation we would all be dead. Radiation acts as a challenge to the body, like weight lifting. None is bad, some is great and excessive amounts can be a problem (emphasis on “excessive”).

I am a chiropractor by training and use X-rays regularly to improve patient outcomes. I had a couple of years without my own X-ray machine, and I wish I could have all of those patients back, so I could do a better job. My care is more accurate and safer when I see exactly what I am treating. Not only are some tests low-risk, but the benefits far outweigh the risks, if there are any. My advice would be not to avoid all tests for the sake of avoiding all tests, and definitely not avoid tests out of fear. Learn the risks versus the rewards, and simply make an educated decision.

For further information see the following articles by Oakley and colleagues in *Dose Response*: “Death of the ALARA radiation protection principle as used in the medical sector (2020 Apr-Jun;18(2):1559325820921641); “X-ray

imaging is essential for contemporary chiropractic and manual therapy spinal rehabilitation: radiography increases benefits and reduces risks (2018 Jun 19;16(2):1559325818781437); and “The scoliosis quandary: are radiation exposures from repeated X-rays harmful?” (2019 Jun 11;17(2):1559325819852810).

Jacob Robinson  
New Mexico

## TWINS THE WAPF WAY

Just wanted to report having had a successful home birth to twin boys this past October, born at thirty-eight weeks (full term for twins). These are babies number four and five for my husband and myself. All but my first son were Wise Traditions babies as my “conversion” happened between babies one and two. These pregnancies were relatively easy and all were carried to term—no surprise for many of you!

Labor was fast and “easy,” particularly with the twins at only two hours long. I attribute my ability to carry these babies to term one hundred percent to my diet as I have been following your guidelines for the past eleven years.

My family and husband are doing the same, of course. My midwives were extremely pleased with my health and endurance during the pregnancies as well as the health of the babies during and after gestation.

WAPF speaks the truth and I am forever grateful for the guidance.

Meg Covv

## FULLY VACCINATED


Senator Pan of the Sacramento Pharmaceutical District has retired and

sailed off into the Pfizer sunset after taking away the religious rights of parents. But that’s okay, because everyone is fully vaccinated.

As I write, California has wildfires burning out of control again, but that’s okay as everyone is fully vaccinated. Several California cities are virtually unlivable because of a severe crime problem that no one in government seems capable of stopping. But that’s okay because everyone is fully vaccinated. Tonight, California has several municipalities that may run out of water but that’s okay because everyone is fully vaccinated.

One of the most beautiful places on the planet, packed with wonderful, talented, creative and industrious people, is now often described as a failed state. But that’s okay because everyone is fully vaccinated.

I guess this is what happens when you run government for the interest of the pharmaceutical industry instead of in the interests of the people.

Name Withheld 

Gifts and bequests to the Weston A. Price Foundation will help ensure the gift of good health to future generations.



# Caustic Commentary

Sally Fallon Morell takes on the Diet Dictocrats

## THE ONE-HUNDRED-NINETY-TWO-COUNTRY STUDY

Advice to eat a lowfat, low-cholesterol diet accelerated in the late 1970s and early 1980s based on Ancel Keyes' Seven Countries Study, which created the impression that high cholesterol levels in the blood were associated with increased risk of heart disease. Keyes handpicked these studies to get the results he wanted—he left out France, for example. Some years ago, Zoë Harcombe analyzed all the data available for the one hundred ninety-two countries in the World Health Organization (WHO) database. What she found was that in both men and women, higher cholesterol levels had an inverse relationship with both heart disease and all-cause mortality, and in the latter category, the inverse relationship was statistically significant. As Harcombe concludes, “. . . the last thing we should be trying to do is lowering cholesterol—unless we're trying to lower life expectancy for some reason” (zoeharcombe.com, November 23, 2010). Since dietary policies have not changed since Harcombe's findings, we might in fact conclude that lowering life expectancy is the goal—another quiet way of reducing the world's population and getting rid of useless eaters.

## MASK-INDUCED EXHAUSTION SYNDROME

A systematic review and meta-analysis of over two thousand studies on adverse mask-wearing effects, published April 2023 in *Frontiers in Public Health* (and later, under pressure,

retracted), found many alarming effects of long-term mask wearing. These included increase in blood carbon dioxide, decrease in blood oxygen saturation, increase in heart rate, shortness of breath and difficulty breathing, headache, dizziness, drowsiness, decreased ability to concentrate, itching, acne, skin lesions and overall perceived fatigue

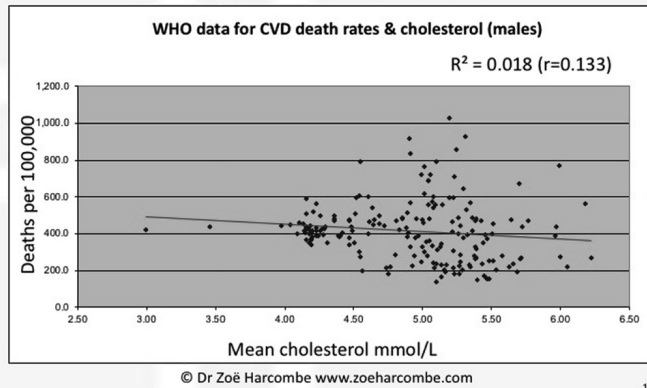
and exhaustion—hence the term mask-induced exhaustion syndrome (MIES). The study's authors suggest that “long Covid” symptoms might be the result of “long masking” instead. Long-Covid symptoms such as fatigue, dyspnea, confusion, anxiety, depression, rapid heartbeat, dizziness, and headache overlap with those of MIES. Seems like the first thing that long-Covid sufferers need to do is take off their masks and breathe!

## CAN CEREAL BOOST SLEEP?

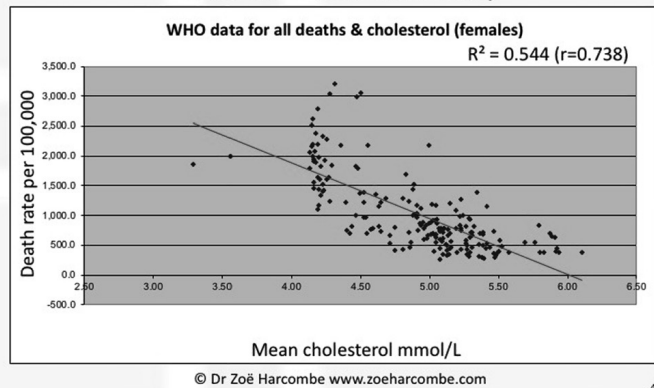
So many folks in our caffeine-addicted world can't sleep these days; now, the cereal companies have a solution for you. Post Consumer Brands, maker of Raisin Bran, Grape-Nuts and Fruity Pebbles breakfast cereals, has launched a line of cereals as “nutrient-dense before-bed snacks.” Called Sweet

Dreams, the cereals propose to “boost melatonin” with “notes of lavender and chamomile,” and added vitamins and minerals like zinc and iron. A cereal called Honey Moonglow contains extruded whole grains, almonds, cocoa, blueberry and carrot concentrates, canola and/or soybean oil, “natural flavors” and about thirteen grams—almost one tablespoon—of refined sweeteners, mostly as sugar and corn syrup. The

## CVD deaths & cholesterol The 192 Countries Study



## All deaths & cholesterol The 192 Countries Study



# Caustic Commentary

ingredients in Blueberry and Almonds are similar, with the addition of real blueberries, embalmed with invert sugar, glycerin, sunflower oil and natural flavor. Consumers can also buy “sleep-friendly” cookies and ice creams with added B6, magnesium and zinc; candy bars infused with melatonin; and PepsiCo’s Driftwell brand of bottled water containing L-theanine and magnesium. Reported in *The Washington Post* (March 21, 2023), an author fingers “diets high in sugar, saturated fat and simple carbohydrates” as contributing to poor sleep. Simple carbs and sugars will indeed keep you awake by stimulating the release of adrenalin, but the big secret is that the body uses saturated fats (and cholesterol) to make chill-out relaxing hormones that help you get to sleep.

## MAKING IT OK TO EAT CHIPS

Speaking of PepsiCo, try as it may to cultivate a healthy image with foods like hummus, yogurt, kombucha, vegetable crisps and fruit-and-nut bars, the company relies on junk food for the lion’s share of sales. According to a report in the business section of *The Wall Street Journal* (April 22-23, 2023), the company is “quietly working to make its snacks and drinks a little less bad for you. . . gradually lowering the amount of sodium, saturated fat and sugar in its products.”

PepsiCo is trying to “gradually reduce the sodium in Lay’s while keeping the snack brand tasty enough that consumers won’t notice. Experimental approaches include new salt crystals that deliver salty flavor faster to the taste receptors on the tongue, substitutes such as potassium chloride, different combinations of herbs and spices, and potato varieties developed at the company’s plant-breeding research station. . . that have a naturally saltier flavor without being higher in sodium.” The problem is that when people eat potato chips, they want a salty taste. Although it is not stated in the article, we surmise that a nasty little additive called Senomyx will be the main way that companies like PepsiCo achieve “sodium reduction.” Not listed on labels, but lurking as “natural flavors,” Senomyx tricks the taste buds into thinking they are tasting salt. But the body is not so easily fooled and might

just eat a lot more potato chips to get the salt it needs.

## HOW TO RUIN DINNER

A research and marketing website called factmr.com is predicting growth in reduced-fat meat products at a rate of 4.6 percent per year over the next ten years (December 21, 2022). Since “everybody knows” and the government keeps reminding us that saturated fat and cholesterol are bad for us, “reducing the total content of fat in processed meat is desirable as well as feasible.” Fat reduction will be accomplished with “combinations of various fat substitutes.” The problem is that folks don’t like these substitutes very much, so “. . . manufacturers are . . . trying to prepare meat that is similar to traditional meat based on taste, flavor, color, texture.” Companies expressing interest include vegetarian food producers like Amy’s Kitchen, the Vegetarian Butcher

and Beyond Meat, Inc., which begs the question of whether sales of vegetarian products are stagnant. Meanwhile, anti-fat propaganda has already resulted in the reduction of animal fat in our diets. You can’t buy seventy-three ground beef any more, nor a rib-eye surrounded by one-half inch of fat. As for pigs, they are leaner these days because of the addition of a chemical called ractopamine to their feed. Ractopamine is banned in one hundred sixty countries, but not in the U.S.

and Beyond Meat, Inc., which begs the question of whether sales of vegetarian products are stagnant. Meanwhile, anti-fat propaganda has already resulted in the reduction of animal fat in our diets. You can’t buy seventy-three ground beef any more, nor a rib-eye surrounded by one-half inch of fat. As for pigs, they are leaner these days because of the addition of a chemical called ractopamine to their feed. Ractopamine is banned in one hundred sixty countries, but not in the U.S.

## JAWS

Archeologists have found the remains of a Roman aristocrat woman in a cemetery near the city of Leeds, U.K., hailing the find as a “once-in-a-lifetime” discovery that bridges the gap between the ancient and medieval periods (NBC News, March 14, 2023). Artifacts found in her lead coffin will help investigators determine many things about the woman and how she lived, but what strikes us is the width of her jaw! The lower jaw is as wide as any Dr. Price photographed, and all her teeth are there! From this we can conclude that she grew up eating a nutrient-dense diet that probably included raw whole milk and cheese, butter and organ meats.





# Caustic Commentary

## NOT SAFE FOR RATS

The plant-based Impossible Burger contains a protein called soy leghemoglobin (SLH) derived from genetically modified yeast. After some hesitation, the U.S. Food and Drug Administration (FDA) allowed the addition of this novel protein in the burgers. Now it appears that the FDA's decision was premature. Even though the study lasted only twenty-eight days, and involved only a small number of animals, a number of adverse effects in the SLH-fed group appeared: decrease in weight gain, changes in blood chemistry, decreased reticulocyte (immature red blood cell) count, decreased blood clotting ability, decreased blood levels of alkaline phosphatase (an indication of malnutrition or celiac disease), increased blood albumin (indication of acute infection or tissue damage) and potassium values (a sign of kidney disease), decreased blood glucose, decreased blood chloride (another indication of kidney problems), increased blood globulin values (sign of inflammatory disease or even cancer) and, in females, disruption of the reproductive cycle. Impossible Foods dismissed all these effects as “non-adverse” and “transient” (because some did reverse themselves after a few days). However, a longer-term study that would have provided more solid conclusions was never done. Adding to concerns, in 2019 Impossible Foods added even more soy to their burger product, replacing the wheat protein with soy protein made from genetically engineered soy, a probable source of glyphosate, a “probable carcinogen” (gmwatch.com, September 20, 2022).

## CELL PHONES AND SMOKING: SAME PATTERN

A review of the most recent studies on the effects of electromagnetic radiation (EMR) and radio frequency (RF) radiation on various life forms, including humans, provides epidemiological evidence for cancer from cell phone use. The authors concluded that “substantial scientific evidence” indicates that “RF radiation causes cancer, endocrinological, neurological and other adverse health effects.” One of the authors, Devra Davis, PHD, MPH, declared, “This article is a clarion call for prevention and precaution.” Davis was particularly critical of the FDA, which commissioned a thirty-million-dollar National Toxicology Program (NTP) study on cell phone use in 2018. The study showed “clear evidence” that electromagnetic radiation is associated with cancer and DNA damage. The results were not what the FDA

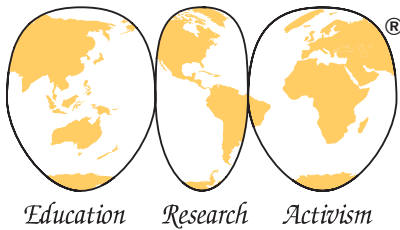
wanted, so the agency “began to trash talk their own study.” Davis describes the regulatory battle around RF radiation as similar to the scientific and regulatory battle around tobacco. Scientific debate “went on for years longer than it should have” about whether or not tobacco was safe for the environments of children, said Davis. The debate finally resulted in a ban on smoking in airplanes because “scientists and the public realized the studies suggesting tobacco was safe were ‘manufactured’ by the tobacco industry. . . and the same thing is happening now with RF radiation and the telecom industry” (childrenshealthdefense.org, March 3, 2023). Today we all accept the etiquette of not smoking around other people, and especially not in enclosed spaces such as airplanes, trains and buses. How long it will take before the public follows the same etiquette for cell phones and their use is banned on airplanes and other forms of public transportation?

## CELL PHONE ETIQUETTE

Speaking of cell phone etiquette (or lack thereof), the Centers for Disease Control (CDC) reports that over one hundred eighty people came down with Covid-19 after attending a conference of CDC's Epidemic Intelligence Service officers and alumni, April 24-27, held in Atlanta, Georgia. According to a report in *The Washington Post* (May 27, 2023), “The outbreak of Covid-19 cases at the conference underscores the persistence of an evolving and highly infectious virus.” About 70 percent of the eighteen hundred attendees were maskless as they gathered in small rooms and engaged in lots of socializing, and more than 99 percent had at least one dose of a coronavirus vaccine. We wonder whether anyone at all attending the conference suspects the saturation of Wi-Fi communicating with thousands of cell phones might have caused the outbreak. ☹️

## FOR SCIENTISTS AND LAY READERS

Please note that the mission of the Weston A. Price Foundation is to provide important information about diet and health to both scientists and the lay public. For this reason, some of the articles in *Wise Traditions* are necessarily technical. It is very important for us to describe the science that supports the legitimacy of our dietary principles. In articles aimed at scientists and practitioners, we provide a summary of the main points and also put the most technical information in sidebars. These articles are balanced by others that provide practical advice to our lay readers.



# Wise Traditions 2023

TWENTY-THIRD ANNUAL INTERNATIONAL CONFERENCE OF THE  
**WESTON A. PRICE FOUNDATION**

## THE CONFERENCE THAT NOURISHES YOU IN EVERY WAY



**Friday, October 20 – Sunday, October 22**

Real Milk Celebration Dinner on October 19 & Farm Visit October 23

### AMERICA'S PREMIER NUTRITION CONFERENCE

**Life-Changing Lectures • Practical Classes**

**Cutting-Edge Nutrition • Traditional Nutrient-Dense Meals**

**Wise Kids Program • WAPF-Friendly Vendors • Networking**

*For those interested in improving their health through food, farming & the healing arts.*

## CONFERENCE SPEAKERS

Hilary Boynton, founder of School of Lunch  
 Ellen Brown, founder of the Public Banking Institute  
 Paola Brown, founder of Americans for Homeopathy Choice  
 Steve Campbell, of Tailor Made Cattle  
 Natasha Campbell-McBride, author of GAPS  
 Martha Carlin, The BioCollective  
 Isaac Chilton, founder of Structural Elements  
 Tom Cowan, MD, author of *The Contagion Myth*  
 Josh del Sol, of Take Back Your Power: The Smart Meter Agenda  
 Maureen Diaz, of God's Good Table  
 Doug and Stacy, of Off Grid  
 Corey Dunn, of For Nutrients Sake  
 Dawn Ewing, Internat'l Academy of Biological Dentistry & Medicine  
 Sally Fallon Morell, MA, author of *Nourishing Traditions*  
 Blanche Grube, DMD, founder of Huggins-Grube Dental Center  
 Anthony Jay, PhD, author of *Estrogenation*  
 Patrick Jones, founder of Homegrown Herbalist School of Botanical Medicine  
 James Kirkpatrick, energy analyst  
 Celeste Longacre, author of *Celeste's Garden Delights*

Leslie Manookian, MBA, MLC, Hom, founder of Health Freedom Defense Fund  
 Alex Miller, of Lickskillet Farm  
 Christine Muldoon, of Nourishing the Littles  
 Courtney Queen, chef and author of *Butter For All*  
 Ken Rohla, natural solutions to radiation, chemtrails, GMO, EMFs  
 Beverly Rubik, PhD, biophysicist, Institute for Frontier Science  
 Mary Ruddick, researcher and medical nutritionist  
 Nina-Marie Rueda, ND, doula, perinatal minerals expert  
 Bill Schindler, PhD, & Christina Schindler, of *Eat Like a Human*  
 Pam Schoenfeld, RD, of Women and Family Nutrition  
 Leo Sharashkin, PhD, founder of Horizontal Hive  
 Mark Steffen, MD, physician, rancher, Kansas state senator  
 Jim Stephenson, "Vitamin D Deficiency" Deconstructing the Deception  
 William Trebing, DC, author of *Good-Bye Germ Theory*  
 Laura Villanti, of At Home with Wellness  
 Cal Washington, of InPower Movement  
 Will Winter, DVM, expert on pastured livestock  
 Naomi Wolf, author of *The Bodies of Others*  
 Alec Zeck, of The Way Forward

## LOCATION AND ACCOMMODATION

The conference will be held in the Kansas City Convention Center.

The conference hotel is the Kansas City Marriott Downtown 200 West 12th Street, Kansas City, Missouri 64105.

Special conference room rate is \$199 per night (plus taxes and fees).

You may book online (details at [wisetraditions.org](http://wisetraditions.org)) or call (888) 236-2427 and mention the Wise Traditions conference.

### One- and three-day passes. Exhibit hall and film open to the public.

Early Bird Discount • Monday Guided Farm Visit • Continuing Education Units • Volunteer Discounts • Children's Program

For more information, call (703) 820-3333 or visit [wisetraditions.org](http://wisetraditions.org)

## PRE-CONFERENCE AND POST-CONFERENCE ACTIVITIES

**THURSDAY, OCTOBER 19**

**6:00 – 9:00 pm**

**REAL MILK  
 CELEBRATION DINNER**

**MONDAY, OCTOBER 23**

**Will Winter DVM & Steve Campbell  
 Professionally Guided Farm Visit**

# WISE TRADITIONS 2023 REGISTRATION FORM

First Name \_\_\_\_\_

Last Name \_\_\_\_\_

Name for Badge \_\_\_\_\_

Organization/Affiliation \_\_\_\_\_

Check here if you are interested in donating food.

Address \_\_\_\_\_

This is my first Wise Traditions conference.

City \_\_\_\_\_

State \_\_\_\_\_

Zip Code \_\_\_\_\_

Country \_\_\_\_\_

Phone \_\_\_\_\_

Email \_\_\_\_\_

**NOTE:** Please fill out one form per adult. The registration packet with meal tickets will not be mailed but will be available at the registration desk at the conference.

**THREE DAY REGISTRATION** includes sessions and lunch each day, Friday dinner and Saturday banquet. **Please circle the price you are paying:**

	By July 21	After July 21	Age 20 & under
<input type="checkbox"/> Full registration with 5 meals (not breakfast)	\$440	\$490	\$250
<input type="checkbox"/> Full Registration No-Meal Option	\$340	\$390	\$150

**SINGLE DAY REGISTRATION** includes sessions and lunch (no dinner).

Pick day(s) attending:  Fri  Sat  Sun \$120/per day \$140/per day \$85/per day

Monday Guided Farm Visit 7 AM-6 PM (includes lunch) \$110

**EXTRA MEALS** – Thursday and Breakfast are NOT included in registration above.

- Thursday Real Milk Celebration Dinner \$60
- Farm-to-Consumer Fundraiser Breakfast: 1 day \$20:  Fri  Sat  Sun  \$55 three days
- Friday Dinner and Evening Sessions \$60
- Saturday Evening Awards Banquet \$75
- Lunch \$35/each Pick day(s):  Friday  Saturday  Sunday \$35

## DISCOUNTED ITEMS

Annual Membership: Renew or new with registration:  \$30 (regularly \$40/\$50)

Recordings with registration by Oct 18: \$126  Streaming OR

\$156 (regularly \$279) Select format:  USB  DVD-ROM

## CHAPTER LEADER DISCOUNT

\$50 discount for chapter leaders for three-day rate (not for the volunteer rate) -\$50

## CEUs FOR RNS & LACs

RN  LAc –  All 3 days \$65  or Friday \$25  Saturday \$25  Sunday \$25

Certificate of Attendance \$5 (for RD or nutritionist and anyone else)

## CHILDREN'S PROGRAM (For children 3-12 years old and potty trained.)

\_\_\_\_\_ @ \$250 per child for Friday - Sunday with conference meals except Saturday dinner is not the banquet.

\_\_\_\_\_ @ \$150 per child, includes no meals.

Child's Name(s) \_\_\_\_\_ Age(s) \_\_\_\_\_

## PAYMENT

Registration amount: \_\_\_\_\_ Additions \_\_\_\_\_ **Total Due: \$** \_\_\_\_\_

Credit Card  Check/Money Order (payable to WAPF)

Name on Card \_\_\_\_\_

Signature \_\_\_\_\_

Card Number \_\_\_\_\_

Exp. Date \_\_\_\_\_ CVW Code \_\_\_\_\_

## CHAPTER LEADERS

I'm a chapter leader. (\$50 discount on 3-day)

I plan to attend the Chapter Leader Meeting  
**Thursday, Oct. 19, 12:30-4:30 PM**

## How did you hear about the conference?

- WAPF journal  WAPF email
- Friend/colleague  WAPF flier
- WT podcast  Twitter or FB
- Web advertisement  WAPF website
- Print advertisement  Radio
- Another conference  Chapter
- Other, please specify \_\_\_\_\_

## LOCATION AND HOTEL

KANSAS CITY CONVENTION CENTER  
301 West 13th St, Kansas City, MO 64105

KANSAS CITY MARRIOTT DOWNTOWN  
200 West 12th St, Kansas City, MO 64105  
(888) 236-2427 or book online from our site

## VOLUNTEER SPOTS &

**ROOM & RIDE SHARE:** see wisetraditions.org

## REGISTRATION & INFORMATION

- ONLINE** wisetraditions.org
- PHONE** (703) 820-3333
- EMAIL** info@westonaprice.org
- FAX** (571) 777-8932
- MAIL** WAPF Conference  
4200 Wisconsin Ave, NW; PMB 106-380  
Washington, DC 20016

## CANCELLATIONS

Requests for refunds must be submitted by October 2, 2023. No refunds after October 3. A \$50 processing fee will be charged.

## EXHIBITING

wisetraditions.org/exhibit  
Contact Paul Frank (240) 481-3755  
paul@ptfassociates.com

By submitting this form, I authorize Wise Traditions to charge the applicable registration fees. If you cannot attend, substitutions will be permitted at any time.



# Wise Traditions 2023

## Kansas City Schedule

### THURSDAY, OCTOBER 19

~SCHEDULE IS SUBJECT TO CHANGE~

**12:30-4:30** Chapter Leader Meeting with Lunch (Free for current chapter leaders)  
**6:00-9:00 PM** Raw Milk Celebration Dinner (not included with conference registration)

### FRIDAY, OCTOBER 20

**7:15-8:45** Farm-to-Consumer Fundraiser Breakfast **8:00-5:30** Exhibit Hall Open  
**7:30-8:30** Movement

**9:00-10:15** Corey Dunn: Nourish Your Family with Popular Foods Cooked Right  
Blanche Grube: Mercury, Root Canals and Implants—Oh My!  
Natasha Campbell-McBride: GAPS Concept: What Causes All Disease, Part 1

10:15-11:00 *Break and Visit Exhibits*

**11:00-12:15** Bill Schindler: Making Home Nose-to-Tail Butchering and Cooking Accessible  
Laura Villanti: Parasites: Well Beyond a Gut Story  
Natasha Campbell-McBride: GAPS Concept: What Causes All Disease, Part 2

12:15-1:45 *Lunch and Visit Exhibits*

**1:45-3:00** Sally Fallon Morell: Got Real Milk? Safety, Health, Economic and Legal Issues  
Pam Schoenfeld: Vitamin A: Key to Fertility  
Ken Rohla: Protecting Yourself and the Environment from 5G and Geoengineering, Part 1

3:00-4:00 *Break and Visit Exhibits*

**4:00-5:15** TBD: Honey that's Different: Superfoods from the Hive  
Nina-Marie Rueda: Perinatal Nutrition and Minerals  
Ken Rohla: Protecting Yourself and the Environment from 5G and Geoengineering, Part 2

6:00-7:30 *Dinner*

**7:30-9:00**  
Panel Ask The Practitioner Panel with Natasha Campbell-McBride, Tom Cowan, Laura Villanti,  
Dawn Ewing and Pam Schoenfeld with moderator Sally Fallon Morell  
Talk William Trebing: Germ Theory Folklore: Why Such a Tight Grip on the Big Lie?  
Film To be determined.

### SATURDAY, OCTOBER 21

**7:15-8:45** Farm-to-Consumer Fundraiser Breakfast **8:00-5:45** Exhibit Hall Open  
**7:30-8:30** Movement **7:30-8:15** Sponsor Presentation

**9:00-10:15** Sally Fallon Morell: Nourishing Traditional Diets, Part 1  
Martha Carlin: The Microbiome: the Ultimate Information Superhighway  
Paola Brown: Introduction to Using Homeopathy at Home  
Anthony Jay: Gender Bender Chemicals

10:15-11:00 *Break and Visit Exhibits*

**11:00-12:15** Sally Fallon Morell: Nourishing Traditional Diets, Part 2  
Alex Miller: The Loss of Local Farms and What You Can Do About It  
Patrick Jones: Herbs  
Anthony Jay: Fluoride: A Story of Manipulation

# Wise Traditions 2023

## Kansas City Schedule

### SATURDAY, OCTOBER 21 (continued)

12:15-1:45 *Lunch and Visit Exhibits*

**1:45-3:00** Mary Ruddick: In Dr. Price's Footsteps  
Jim Stephenson: The Truth about Secosteroid Hormone D, Aka "Vitamin D"  
Dawn Ewing: Meridians and Root Canals  
Tom Cowan: TBD, Part 1

3:00-4:00 *Break and Visit Exhibits*

**4:00-5:15** Bill & Christina Schindler: Modern Stone Age Household: Making an Ancestral Diet  
Work in Today's World  
Sally Fallon Morell: The Contagion Myth  
Josh del Sol: Opting Out of 'The Internet of Bodies': The Link Between EMFs/5G and 'Vaccines'  
Tom Cowan: TBD, Part 2

5:15-5:45 *Break and Visit Exhibits*

**6:30-9:30** **Awards Banquet Keynote:** Naomi Wolf: The Bodies of Others

### SUNDAY, OCTOBER 22

**7:15-8:45** Farm-to-Consumer Fundraiser Breakfast  
**7:30-8:30** Movement

**8:00-1:30** Exhibit Hall Open  
**7:30-8:15** Sponsor Presentation

**8:45-10:00** Panel: A Wise Traditions Home with Sally Fallon Morell, Maureen Diaz, Christine Muldoon  
and Hilary Boynton  
Isaac Chilton: Natural Movement Training: An Anthropological Approach to Movement and  
How to Do It on Your Own!  
Cal Washington: Mass Action of Liability Regarding Vaccines, 5G and 'Smart' Meters  
Alec Zeck: Reframing the Infectious Disease Paradigm

10:00-10:45 *Break and Visit Exhibits*

**10:45-12:00** Courtney Queen: Making Sourdough Work for You  
Ellen Brown: Banking  
Beverly Rubik: EMFs and How They Affect You  
Doug and Stacy: How Being Dirty Keeps Us Healthy in a Sterile World

12:00-1:30 *Lunch and Visit Exhibits*

**1:30-2:45** Celeste Longacre: Preserving the Fruits of Your Garden through Fermentation and Other Means  
Natasha Campbell-McBride: Vegetarianism Explained  
James Kirkpatrick: Discussion on Climate Change, Biblical Apocalypse or More Hot Air?  
Leslie Manookian: Health, Law and Litigation: A Spiritual Battle at Heart

**3:00-4:00** **Closing Ceremony:** Sally Fallon Morell with Mark Steffen

### MONDAY, OCTOBER 23

**7:00 am-6:00 pm** Will Winter and Steve Campbell: Professionally Guided Farm Visit

# The Omega-6 Apocalypse

By Chris Knobbe, MD

**I**n the Western world over the past two centuries, chronic diseases, once rare, have become ubiquitous. The endless list of prevalent chronic diseases includes heart disease, hypertension, stroke, cancer, type 2 diabetes, metabolic syndrome, Alzheimer’s disease, Parkinson’s disease, autoimmune disorders and age-related macular degeneration. These conditions, largely unknown to nineteenth-century medical practitioners, have become so common that they now even affect our children.<sup>1</sup>

Concurrently, the Western world has seen a dramatic rise in processed food consumption and notably of industrial seed oils high in polyunsaturated fatty acids (PUFAs), especially omega-6 fatty acids. (The “parent” omega-6 fatty acid is eighteen-carbon linoleic acid or LA.)



Influential institutions like Harvard, Tufts, the Mayo Clinic, the American Heart Association, the World Health Organization (WHO) and many others all have been telling us since at least the 1960s to consume more of these oils, claiming they are “heart-healthy.” And when it comes to official dietary advice, we Americans tend to do as we are told; unfortunately, when it comes to health, we’re not doing so well. We are the most obese nation among the higher-income countries belonging to the OECD (Organisation for Economic Co-operation and Development), and we may be the unhealthiest nation in the world. We don’t rank anywhere near the top for any metric of health. The increased consumption of omega-6 fatty acids has set up a biological milieu that is pro-oxidative, pro-inflammatory, nutrient-deficient and toxic.

#### POISON, NOT FOOD

Seed oils go by numerous names: vegetable oils, edible oils, omega-6 oils and—the latest euphemism—“plant oils.” The aim is to make these oils sound healthy. The most dangerous ones are the high-PUFA oils from soybeans, corn, canola, cottonseed, rapeseed, grapeseed, sunflower, safflower and rice bran.

It should tell you something that seed oil refineries look a lot like petroleum refineries. These facilities take huge amounts of raw seed materials and crush them, heat them and run them through a hydraulic screw press. The oil from that mush is then treated in a petroleum-derived hexane solvent bath, followed by steaming, degumming, chemical alkalization using sodium hydroxide (also known as caustic soda) and chemical bleaching, typically using calcium sulfate dihydrate. At this point, the oil may look better, but it is terribly malodorous, so it also gets deodorized, which is accomplished with a steam distillation technique at very high temperature and pressure. The multiple rounds of heating and mechanical and chemical treatments produce oils that are highly oxidized—that is, the long fatty acids are broken down into segments with oxygen attached to free hydrogen atoms.

Once the oil is put into bottles or drums, the manufacturers send it out to restaurants (where it is heated yet again for cooking and frying) or to

factories that make processed foods. For people consuming any version of a standard American diet, one-fourth to one-third of their calories may be coming from these kinds of factories.

Hippocrates is credited with saying, “Let thy food be thy medicine and thy medicine be thy food.” Paracelsus (the father of toxicology) stated, “All that man needs for health and healing has been provided by God in nature. The challenge of science is to find it.” And Dr. Weston Price wrote in *Nutrition and Physical Degeneration*, “Life in all its fullness is Mother Nature obeyed.” But are we obeying Mother Nature when we consume industrial seed oils?

Industrial seed oils are the fat of choice that manufacturers add to processed foods; you will almost never find a processed food that includes animal fats like butter, lard or beef tallow. The same holds true not only for fast food restaurants but even for the finest restaurants—they all cook with high-PUFA oils which, in the U.S., are almost always either soybean or canola oil. I cannot emphasize enough; these seed oils are chronic metabolic and biological poisons.

#### THE RISE OF CHRONIC DISEASE

Over the last few decades, researchers have been sounding the alarm about the U.S. population getting heavier. Some now blame this trend on dietary changes that followed the 1980 U.S. Dietary Guidelines,<sup>2</sup> which led people to shift their macronutrient ratio—increasing their intake of carbohydrates (“carbs”) and lowering their intake of fat. As people got heavier, the pendulum later swung in the opposite direction, leading some experts to conclude that carbs are the problem, introducing the low-carb craze.

I don’t think macronutrient ratios have much to do with any of this, however, and I think Dr. Price would agree. In his research, he didn’t even address the topic, because it was obvious that macronutrient ratios among healthy people varied widely. What changed—and is still changing—was the composition of fats, with a continual displacement of animal fats by industrial seed oils.

In a 2012 paper on the shifting burden of disease published in the *New England Journal of Medicine*,<sup>3</sup> the authors noted that in 1900, the top three causes of death—influenza/pneumonia,

I cannot emphasize enough; these seed oils are chronic metabolic and biological poisons.

tuberculosis and gastrointestinal infections—were all of “infectious” origin, as were other top-ten conditions like diphtheria. Although heart disease was the fourth leading cause of death at that time, the article’s authors clarified that it was “chiefly infectious or valvular” in nature (for example, the result of rheumatic fever, syphilis, or infective endocarditis) “rather than atherosclerotic.” By 2010, however, most of the top ten causes of death had shifted to chronic diseases, with heart disease (coronary artery disease) at the top of the list, followed by cancer, chronic obstructive pulmonary disease, stroke, Alzheimer’s disease, diabetes and kidney disease. Altogether, “infectious” disease accounted for 60 to 65 percent of deaths in 1900 but just 2.3 percent of deaths by 2010. This represents a drastic change.

In the nineteenth century, as far as I know, the scientific literature produced only eight papers on heart disease, because heart disease was rare. Even in 1910, when Sir William Osler (one of the founders of Johns Hopkins Hospital)

reviewed thirty-four years of his own hospital practice, he reported having witnessed about two hundred cases of angina (chest pain) in the first decade of the new century but never saw a heart attack. It was in 1912 that Dr. James Herrick produced the first known U.S. paper on heart attack,<sup>4</sup> documented with autopsy evidence. Today, almost one in three deaths is due to coronary heart disease. The same patterns hold true for other chronic conditions (see sidebar below).

#### A GLOBAL EXPERIMENT

Processed foods—which are most of the foods filling grocery store aisles—include foods made with refined flours, added sugars, industrial seed oils and artificially produced trans fats (which themselves come from seed oils). In my view, the rise of these four foods amounts to a global human experiment, which has occurred in lockstep with the surge in chronic disease.

- Sugar intake has been rising for at least several hundred years. We know that between 1822 and 2012, consumption of sugar increased seventeen-fold.<sup>5</sup>
- In 1866, just after the Civil War, the U.S. introduced cottonseed oil, “known as America’s first vegetable oil.”<sup>6</sup>
- In the 1880s, roller mill technology replaced stone mill technology and gave us refined white flour, removing the wheat bran

#### RISING PREVALENCE OF CHRONIC DISEASE

**CANCER:** In 1900, eighty per one hundred thousand people died of cancer in the U.S.,<sup>3</sup> but by 2001, the cancer death rate was one hundred ninety-six per one hundred thousand.<sup>33</sup> An estimated one in three Americans will receive a cancer diagnosis during their lifetime.

**DIABETES:** Diabetes of any type was rare in the nineteenth century but began climbing steadily during the twentieth century, increasing thirty-fold between 1935 and 2020 (from 0.37 percent to 11.3 percent).<sup>34</sup> Moreover, those numbers do not account for prediabetics. In the U.S., we have seen a ten-fold rise in diabetes since 1961—from 1.05 percent to 10.5 percent.

**OBESITY:** In nineteenth-century male prisoners, according to University of Texas researcher Scott Alan Carson, the prevalence of obesity was 1.2 percent.<sup>35</sup> By 1960, the U.S. obesity rate had reached 13 percent—an eleven-fold increase—and that was when we still thought we were lean and healthy. By 2018, the prevalence of obesity had reached 42.4 percent,<sup>36</sup> representing a thirty-five-fold increase.

**METABOLIC SYNDROME:** Metabolic syndrome is a combination of high blood pressure, “high” cholesterol levels, insulin resistance, high blood sugar levels and visceral obesity. Swedish and Spanish physicians Eskil Kylin and Gregorio Marañón began describing this phenomenon in the early 1920s, with further descriptions emerging in the late 1940s.<sup>37</sup> Between the 1980s and 2012, the prevalence of metabolic syndrome increased by 35 percent (from roughly 25 to 34 percent).<sup>38</sup> By 2016, researchers were estimating that only 12.2 percent of Americans—one in eight—were “metabolically healthy” (that is, able to meet five criteria of metabolic health).<sup>39</sup>

**AGE-RELATED MACULAR DEGENERATION:** Worldwide, age-related macular degeneration is a leading cause of irreversible vision loss and blindness in people over age sixty-five. This condition was an extraordinary rarity between the mid-1850s and 1930, with no more than about fifty cases documented in the published literature.<sup>40</sup> By 2020, there were almost two hundred million cases globally, with that number projected to rise to almost three hundred million by 2040—a virtually infinite increase.<sup>41</sup>

**OSTEOARTHRITIS:** Osteoarthritis doubled in the twentieth century.<sup>42</sup>

**ALZHEIMER’S DISEASE:** The first known case of Alzheimer’s disease was published by Alois Alzheimer in 1907.<sup>43</sup> Twenty years later, there were still only thirteen reported cases. Today, the World Health Organization (WHO) estimates that there are fifty-five million people with dementia worldwide and nearly ten million new cases every year (or one new case every three seconds)—with Alzheimer’s representing 60 to 70 percent of those.<sup>44</sup>

and germ and leaving a nutrient-deficient food.<sup>7</sup>

- In 1899, the Hudnet Company offered the first corn oil, called Mazoil, to the American public.<sup>8</sup>
- In 1911, Procter & Gamble introduced cottonseed-oil-based Crisco, launching trans fats.<sup>9,10</sup>
- Other seed oils followed thereafter, with production of soybean oil taking off after World War Two.<sup>11</sup>

By 2009, U.S. Department of Agriculture (USDA) data showed that these four items made up 63 percent of the American diet—nearly two-thirds. That is a recipe for disaster! Combining my data with the USDA data suggests that the proportion of the four processed ingredients in the diet may even exceed 70 percent, with the share of the diet accounted for by industrial seed oils, sugar, refined wheat and trans-fat estimated at 32, 21, 17 and 1 percent, respectively, for a total of 71 percent (see Figure 1). That leaves very little room for whole foods.

As already mentioned, Americans did not consume seed oils before 1866, but by 2010, we were consuming eighty grams (over three table-spoons) per capita per day (see Figure 2). At the beginning of the twentieth century, 99 percent of added fats were still animal fats—lard, butter and beef tallow—but by 2005, 86 percent were industrial seed oils, which succeeded in almost completely replacing animal fats.

Initially, Americans did not take to cottonseed oil. Back in 1866, they knew cottonseed oil as an oil for machines and lamps—which is what seed oils ought to be used for! At the time, people would have been getting omega-6s as very small amounts of linoleic acid in butter, lard and beef tallow from traditionally raised animals pastured on grass and fed their native diet. (As I discuss later, when animals like pigs and chickens are fed GMO corn and soy, it is a much different story, with far higher percentages of LA.)

From 1866 on, seed oils began entering the food supply through adulteration, with cottonseed oil cut into fats like lard, butter and olive oil. In fact, starting in 1880 Europeans complained that 40 percent of what was supposed to be olive oil was adulterated with cottonseed oil. Italy stopped importing oils from the U.S. that year.<sup>6</sup> Unfortunately, many people today still don't realize they are consuming toxic seed oils because they are so well hidden in the food supply.

As a result of this shift, omega-6 LA consumption has gone through the roof, from roughly two grams in 1865 (about 1 percent of calories) to almost five grams in 1909 (about 2 percent of calories) to eighteen grams in 1999 (7 percent) to twenty-nine grams by 2008 (11.8 percent) (see Figure 3, next page). This represents a thirteen-fold increase over about a century and a half.

Note that all natural fats contain some LA, and it is essential; however, you do not need much. I think 0.5 percent of calories as linoleic acid is enough, with studies suggesting a maximum of 1 to 2 percent of calories.<sup>12</sup> Now, let's go back to Paracelsus, who said, "All things are poison and nothing is without poison; only the dose makes a thing not a poison."<sup>13</sup> We often hear this paraphrased as, "The dose makes the poison"—and it always does! So, if our "dose" of omega-6 linoleic acid in 1865 represented about one-hundredth of our calories, whereas by 2008 it constituted more than one-eighth of our calories, in my opinion, our twenty-first century "dose" makes it a poison.

Omega-6 fatty acids accumulate in our body fat (adipose tissue). In a systematic review published in 2015, when researchers reviewed thirty-seven studies that reported LA concentration in adipose tissue, they found a statistically significant linear increase between 1959 and 2008—from 9.1 to 21.5 percent—amounting to a 136 percent increase.<sup>14</sup> Note that there is a mathematical relationship between the percentage of LA in your diet and the percentage in your body fat. If it is 5 or 10 percent of your diet, it will be around 10 or 20 percent—or maybe even

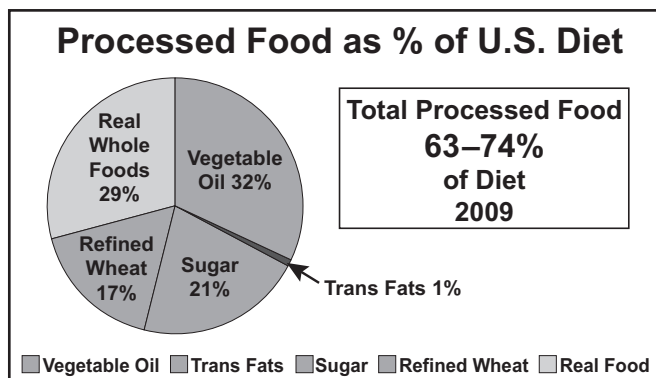


FIGURE 1: Processed Food as a Percentage of the U.S. Diet

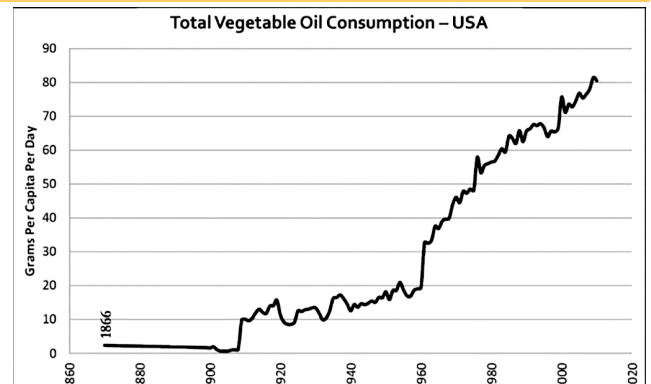


FIGURE 2. U.S. Vegetable Oil Consumption (1866-2010)



Collectively, then, high-PUFA oils are poisons that are cytotoxic, genotoxic, mutagenic, carcinogenic, atherogenic, thrombogenic and obesogenic.

higher—in your body fat. For omega-6 LA, its half-life in your fat is anywhere from six hundred to six hundred eighty days, meaning that it remains there for a couple of years. I estimate that it actually could be six years or more before someone who had been consuming a high omega-6 diet would be able to bring the level in their body fat back down to where it should be.

If you consider seemingly disparate chronic conditions like cancer, heart disease, stroke and obesity, one thing that ties them all together is mitochondrial dysfunction—and mitochondrial dysfunction begins with an omega-6 excess. Again, this sets up a pro-oxidative, pro-inflammatory and toxic milieu. Essentially, when you have omega-6 in excess, your electron transport chain—which enables many metabolic processes—falls apart. Omega-6 is attacked by superoxide and hydroxyl radicals (“free radicals”) and broken down into lipid hydroperoxides, which then rapidly degenerate into advanced lipid oxidation end products. These inflammatory pathways are well established. Collectively, then, high-PUFA oils are poisons that are cytotoxic, genotoxic, mutagenic, carcinogenic, atherogenic, thrombogenic and obesogenic—and this is how we end up with all the metabolic diseases and physical degeneration that we are seeing.

#### THE FAT-SOLUBLE VITAMINS

From the early 1900s through the 1920s, a nutrition researcher named Elmer V. McCollum carried out numerous studies in animals—research that likely influenced Dr. Price. In one study, two sets of similar rats, after weaning at day twenty-six, were raised on identical di-

ets with one exception: the source of fat. One group of rats got 5 percent cottonseed oil, while a second group got 1.5 percent butterfat. The cottonseed oil group survived five hundred fifty-five days, on average, but the rats only grew to 60 percent of normal size and were weak, sickly and fragile. The rats that got the butterfat lived about twice as long (one thousand twenty days) and grew to normal size (that is, almost twice the size of the first group) and were infinitely healthier.

What made the difference? The answer has to do with what we know today as the fat-soluble vitamins A, D and K<sub>2</sub>. In a 1918 book, McCollum could refer only to “as yet unidentified substances or groups of substances” because scientists did not yet understand and had not yet isolated vitamins (although Casimir Funk had theorized the concept of vitamins in 1912). McCollum nevertheless observed that there was something especially abundant in butterfat, egg yolks and glandular organs such as liver and kidney that was not found in any fats or oils of vegetable origin. McCollum clearly established that vegetable oils as the sole source of fat could not support growth or maintain health and were ultimately fatal; animals put on a vegetable oil diet would ultimately sicken and die an early death.

Dr. Price, of course, understood all this, even before he began traveling to study traditional diets around the world. Remember that his definition of the “displacing foods of modern commerce” included refined flour, sugars, canned goods, sweets, confectionery and *vegetable oils*. In addition to dental decay, he found that these foods led to arthritis (even in youngsters), many types of cancer, susceptibility to conditions like tuberculosis and birth defects of all sorts, even when the parents were normal. He established the fact that these outcomes could be accounted for by deficiencies of vitamins, minerals and other essential nutrients. The ancestral diets he documented contained ten times the levels of fat-soluble vitamins, four times the levels of water-soluble vitamins and up to ten times the levels of various minerals than did the American diets of his day—and that was in the 1930s, well before the flood of processed foods.

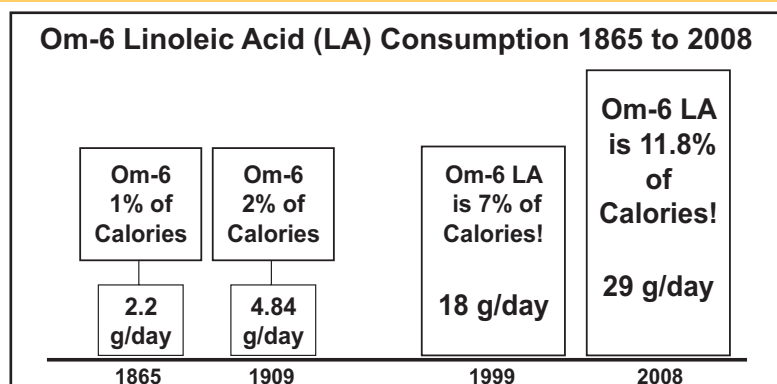


FIGURE 3. U.S. Consumption of Omega-6 Linoleic Acid (1865-2008)

On page five of *Nutrition and Physical Degeneration*, Dr. Price wrote, “Search for controls among remnants of primitive racial stocks has been resorted to as a result of failure to find them in our modernized groups. . . .” He continued, “Only the primitive groups have been able to provide adequate normal controls.” In other words, he had already determined by the late 1920s and early 1930s that there were no controls in the United States. Americans were already consuming so much processed food that he couldn’t establish what he referred to as “standards of excellence.” He had to leave the U.S. to accomplish that.

### SLEIGHT OF HAND

In a 2009 paper by a British statistician titled “Modern statistics: the myth and the magic,” the author describes his “personal exploration of the puzzling contradiction between the fundamental excitement of statistics and its poor public image.”<sup>15</sup> Although we need statistics, I think many of us have grown weary of analyses that use statistical sleight of hand to reach dubious conclusions. I’m thinking, for example, of the well-known 2008 study of U.S. nurses by researchers at Brigham and Women’s Hospital in Boston, titled “Adherence to a DASH-style diet and risk of coronary heart disease and stroke in women,”<sup>16</sup> which—without any control group—used its results to promote a diet that severely restricts saturated fat and sodium while recommending multiple daily servings of fats like soft margarine, vegetable oil, mayonnaise and salad dressing.<sup>17</sup> And the published literature includes tens of thousands—if not hundreds of thousands—of studies with similar statistical flaws.

Some of the problems with statistics go back to Ronald A. Fisher, known as the father of modern statistics, who argued vehemently in multiple papers in the 1950s that smoking did not cause lung cancer. (He may have been a bit biased because he liked to smoke himself.) However, consider that in roughly that same time period (the early 1960s), 42 percent of American adults smoked, with the average American smoking eleven cigarettes a day. If you look at how many Americans smoked and

then how many were exposed to secondhand smoke, you’ve got well over half the population who were either smokers or were exposed to significant secondhand smoke. This raises the question, what if everyone in your study group is exposed to the noxious agent? How do you determine what the problem is, if they are all exposed?

This is the way I see the studies of today. Processed food consumption is ubiquitous globally, with processed foods representing more than 75 percent of the foods sold. Moreover, nearly 60 percent of the foods consumed in the U.S.—and 48 percent and 57 percent in Canada and the UK, respectively—are ultra-processed foods featuring sugar, refined flour, seed oils and trans fats. When trying to figure out the cause of a disease, why would we draw from populations where everyone is consuming the hypothesized noxious agents and where no one is getting the presumed protective agents (vitamins and minerals) either? This goes back to why Dr. Price left the U.S. to do his research. In my view, research on individuals drawn entirely from Western and westernized populations merely compares the sick to the sicker.

### THE NO-SEED-OIL TRADITIONAL DIET

Fortunately, even after Dr. Price’s time, there were and are still a few populations around the world eating traditional diets, groups that don’t consume processed foods loaded with sugars, refined flour, seed oils and trans fats—and don’t have heart disease. They include the Maasai of Kenya and Tanzania, the Tokelauans of Polynesia, the Papua New Guineans of Tukisenta and Kitava, the Tsimane of Bolivia and the Aché of Paraguay.

Consider the Maasai, whose diet consists almost exclusively of raw milk, meat and blood, with very small amounts of fruits and vegetables. George Mann and colleagues, who studied the Maasai back in the 1960s and 1970s,<sup>18</sup> showed that of the Maasai’s three thousand daily calories, 66 percent came from animal fats (40 to 60 percent of which are saturated<sup>19</sup>); their omega-6 level was 1.7 percent. They had no heart disease, yet the American Heart Association continues to tell us to limit saturated fat intake to 5 to 6 percent of our calories and no higher.



FIGURE 4. Inhabitants of Tokalau Islands (1876)

What about the Tokelauans of the South Pacific? When Prior and colleagues studied the Tokelauans in the late 1970s and early 1980s, the researchers found no heart disease and virtually no obesity or diabetes.<sup>20</sup> Old photos show them to be a healthy-looking bunch (Figure 4). In their diet of coconut, fish, starchy tubers and fruit—quite different from the diet of the Maasai—about 54 to 62 percent of calories came from coconut, including coconut oil containing 91 to 95 percent saturated fat. Overall, 53 percent of their diet was fat, and 48 percent of their total calories was saturated fat. Whereas the Maasai have the diet highest in animal-origin saturated fat of any population known, I believe the Tokelauans have the highest level of saturated fat from a plant source. Their omega-6 level was around 1 percent, with a total PUFA level (omega-6 and omega-3 combined) of 2 percent; this is where we should all be.

The Papua New Guineans of Tukisenta have yet another dietary profile. When Australian researchers Sinnett and Whyte published epidemiological research in 1973, they reported that sweet potatoes accounted for more than 90 percent of the diet, with occasional feasting on pork and chicken.<sup>21</sup> Although the macronutrient ratio was heavily skewed toward carbs (94.6 percent) with only 3 percent fat and 2.4 percent protein, their omega-6 level—0.6 percent—is telling. Among seven hundred seventy-nine persons over the age of fifteen, the population was lean, physically fit and in a good nutritional state, with no obesity, hypertension, diabetes, gout, ischemic heart disease or macular degeneration.

#### JAPAN'S CAUTIONARY TALE

Now, let's look at Japan, whose residents once enjoyed similarly good health. Of course, Japan is home to the Okinawans, the longest-lived people on the planet—or at least they once were. In 1976, obesity in Japanese adults was about 1.1 percent. (Note: Japan once used a body-mass index [BMI] threshold of thirty, but in more recent decades they have lowered it to twenty-five, which affects the numbers a little bit.) Back in the 1950s, as published by Yerushalmy and Hilleboe, their rate of heart disease was among the lowest in the world.<sup>22</sup>

Unfortunately, more recent decades have revealed a decline in the health of Japan's population. In men, overweight and obesity have been climbing in every age category since 1980. (For complex reasons, the pattern is somewhat different for women.) As of 2019, a third (32 percent) of Japanese men age twenty and up were overweight, as were 22 percent of women in that age group. Average diastolic blood pressure went from 73.5 in 1958 to 82 by 1999, with a corresponding increase in use of hypertensive medications, despite significant declines in smoking. Cancers of the lung, liver, colon and breast have also been markedly rising in Japan since the 1950s.<sup>23-26</sup>

As for the famed Okinawans, researchers found the prevalence of metabolic syndrome in men to be 30.2 percent as of 2003–2004 (and 10.3 percent in women), and fully half of Okinawan men aged forty and up were obese.<sup>27</sup> Studies also have revealed alarming levels of type 2 diabetes in Japanese children—a condition that shouldn't ever be a disease of children.<sup>28</sup> In 2009, researchers described Japan as “one of the nations most affected by the worldwide diabetes epidemic.”<sup>29</sup> The number

of diabetics in Japan has increased seven-fold as a percentage of their population since 1970.

What happened to the Japanese? You know the answer—they westernized their diet. In 1970, Japan opened its first fast food restaurant, Kentucky Fried Chicken (KFC), followed by the first McDonald's in 1971. At the time, McDonald's Japanese partner Den Fujita said, “The reason Japanese people are so short and have yellow skins is because they have eaten nothing but fish and rice for two thousand years.” By 2007, there were almost four thousand McDonald's restaurants in Japan, and by 2012, over eleven hundred KFCs. Japan also has its own hamburger chain, MOS Burger, along with other leading chains like Subway and Krispy Kreme.<sup>30</sup> (My guess is that these chains serve fries soaked in soybean oil; they certainly are not using tallow.) And in Okinawa—with a population of just one hundred twenty-eight thousand—there were eighteen McDonald's and ten KFCs as of 2020. Between 2010 and 2020, fast food sales in Japan rose by 38 percent.

Interestingly, the average total daily energy intake in Japan has been falling, going from roughly twenty-eight hundred calories in 1958 to twenty-two hundred calories in 1999. The percentage of total daily energy from carbohydrates also decreased markedly over this time period, from 84 percent in 1958 to 62 percent in 1999. Sugar intake has also been falling over the same time period in which diabetes rates have gone through the roof. So, diabetes and obesity are increasing while caloric consumption and sugar intake are decreasing.

Some may think this is impossible, but it's not. There are numerous studies in animals showing that animals getting seed oils gain twice as much weight and become morbidly obese compared to animals with the same caloric intake not getting seed oils. Moreover, it happens within a matter of a few weeks or months.

The Japanese have the lowest fat consumption of any developed nation in the world, at 20 percent, and their saturated fat intake is only 7 percent. But between 1960 and 2004, their seed oil consumption rose 333 percent, and omega-6 intake was up 520 percent. In short, Japan was fantastically healthy in 1960 when their seed



oil intake was nine grams a day (about two teaspoons, which is tolerable), but by 2004, with seed oil consumption at thirty-nine grams per day, they had gotten sicker and heavier. By 1999, 76 percent of their fat calories were coming from seed oils. Again, that is a recipe for disaster.

I also have data showing an eighty-two-fold increase in macular degeneration in Japan, from 0.2 percent in the 1970s to 16.37 percent in 2013, which I can attribute only to seed oil and processed food consumption. Again, while calories and carbs went down, there was more than a four-fold increase in seed oil consumption—with marked increases in pre-obesity and obesity, four major cancers, hypertension, diabetes, metabolic syndrome and macular degeneration and a reduction in longevity.

### THE ELEPHANT IN THE ROOM

I would argue that macronutrient ratios have little to do with the explosion of chronic disease. If you consider the traditional groups with excellent health that I reviewed, carb ratios ranged from a low of 17 percent in the Maasai to 85 percent in the 1968 Okinawans to almost 95 percent in the Papua New Guineans of Tukisenta. Globally, carb consumption, according to the United Nations Food and Agriculture Organization (FAO), remained almost completely flat between 1964 and 2007, at around 63 to 64 percent, yet in 1964, the whole world was significantly healthier. You can also argue that sugar is not the culprit; in the U.S. as in Japan, consumption of sugar has not changed all that much since 1961, with U.S. sugar consumption falling since 2004. As for fat ratios, the research I cited showed that fat ranged from a high of 66 percent in the Maasai to a low of 3 percent in the Tukisenta residents. If you want to make the case that health is about macronutrient ratios—whether low-carb or lowfat—you have to address this.

I have little doubt that the elephant in the room—not much discussed until the last few years—are the high-PUFA omega-6 seed oils. In traditional populations, omega-6 levels are 0.6 to 1.7 percent, whereas in westernized diets it is 7 to 12 percent. Remember, too, that vegetable oil consumption does not even need to go up very much because the omega-6s accumulate

in body fat where they continue to exert their destructive effects.

My unpublished data for the 1961–2018 period show that in the U.S., vegetable oil consumption increased more than three-fold (and is still rising), with obesity rising in lockstep, going from 13 percent of the adult population in 1961 to 42.4 percent by 2018 (see Figure 5). Just since 1999, severe obesity has gone from 4.7 percent to 9.2 percent in 2018—an approximately two-fold increase. Worldwide, obesity was at one in twenty people in 1975, and today, it’s almost one in seven, representing a three-fold increase. Again, seed oil consumption in 1865 was zero, whereas by 1961, the world was at almost sixteen grams per day per person, and over sixty-five grams per day by 2014. This represents an almost infinite increase in edible oil consumption—with a correspondingly infinite increase in chronic disease.

### LOWERING OMEGA-6 LEVELS

In my case, I began waking up to the dangers of seed oils and omega-6s in 2011. I had suffered with arthritis from the time I was about thirty-three until I was fifty. When I made minor changes to my diet in 2011, I was shocked by how much better I felt after just ten days! I began reading and eventually discovered Dr. Price’s book and the Weston A. Price Foundation.

As an ophthalmologist, when I began to understand that all this processed food and seed oil-heavy westernized diets were driving chronic disease, I also had a lightbulb moment that macular degeneration might be driven by the same thing. People think that I came at this from the angle of exploring what’s causing macular degeneration, but it was exactly the opposite—I had to understand the big picture first and then look at macular degeneration. Macular degeneration is complex, and at a certain stage, does appear to be irreversible. However, I now have many anecdotal reports from people who stopped their macular degeneration progression in its tracks after switching to an ancestral diet.

So, how do we get our omega-6 levels down to around 1 percent? I suggest preparing almost all your meals at home and using extreme caution when eating away from home. Obviously, a major step is to eliminate

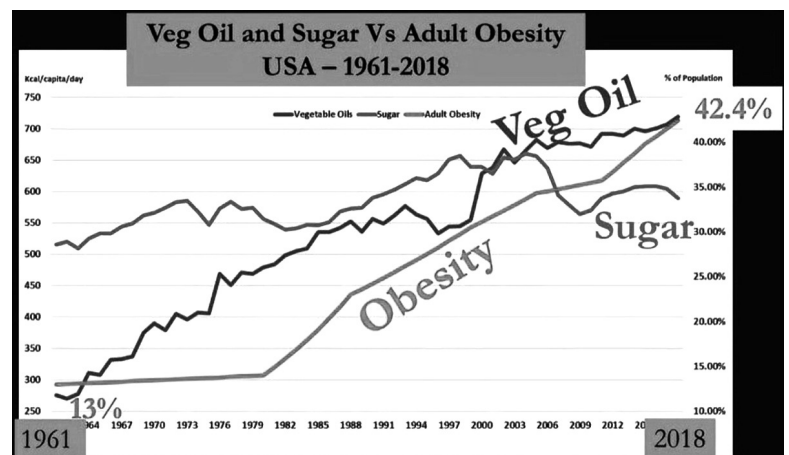


FIGURE 5. Adult Obesity Trends and Sugar and Vegetable Oil Consumption, United States (1961-2018)

seed oils from the diet. That is accomplished by not adding them yourself, not cooking in them, not consuming processed foods and being very careful about restaurant foods, because most restaurants (particularly in the U.S.) are cooking in soybean and canola oils. I also recommend consuming nuts and seeds in extreme moderation, as they and nut oils are very high in omega-6s. Anecdotally, I have seen some bad outcomes in people trying to obtain a lot of their fat from nuts.

There seems to be a collective obsession with using oils, and I often get questions about what oils to use for cooking. I don't understand why people don't just go back to butter or ghee or other traditional fats like lard or beef tallow from healthy animals, which are fantastic and safe fats for cooking. If you tolerate butter, I recommend cooking everything in butter. If you are recovering from high omega-6 in your body, foods that are naturally high in vitamin E are beneficial, notably meat and offal.

Coconut oil can be a safe and healthy cooking fat if you are not using butter or an animal fat like lard or tallow. So far, I don't think coconut oil is being adulterated. Olive oil and avocado oil are highly adulterated. There is no avenue to verify that an "extra-virgin cold-pressed" olive oil is authentic, nor is there a way to ascertain what the LA level is, and LA levels can vary batch to batch. I don't eat olive oil. I also do not recommend palm oil, which is about 10 percent LA and is subjected to heat extraction. Palm kernel oil, extracted through cold pressing and with around 2 percent LA, is acceptable, however.

Many seed oils are more than 50 percent omega-6 linoleic acid, versus under 3 percent LA for animal fats—assuming the animals are eating a traditional species-appropriate diet. Interestingly, cows are a bit of a special case; as "polygastric" animals, their digestive system can hydrogenate polyunsaturated fats into monounsaturated and saturated fats, which allows them to maintain very low levels of omega-6 linoleic acid in their body fat. Thus, while LA in pastured, 100 percent grass-fed cattle may be as low as 2 to 3.4 percent, it is only a little bit higher (2.4 to 3.9 percent) in grain-fed cows raised on corn and soy in concentrated animal feeding operations (CAFOs). Of course, there

are many other reasons to choose beef from 100 percent grass-fed cattle that are cared for properly.

The difference in chicken meat is much starker. Whereas the LA level in pastured chickens is around 2.5 percent, in CAFO-raised chickens fed corn and soy it is 18 percent and perhaps even higher. This difference carries over to eggs. Angel Acres Farm in Michigan provided me with information about their low PUFA pasture-raised eggs,<sup>31</sup> showing that in cage-free chickens fed a diet of peas, barley, alfalfa, beef tallow, fresh grass, worms and insects, the linoleic acid is one hundred seventy-six milligrams per egg. In pasture-raised chickens fed non-GMO corn and soy, the number rises to four hundred sixty-five milligrams of LA. In cage-free chickens fed GMO corn and soy, it is five hundred eighty-five milligrams, and in typical store-bought CAFO eggs, it is seven hundred thirty-four milligrams. If you look at these as ratios, the LA in one CAFO egg is over four-fold higher than in one ancestral egg. Stated another way, and given that I recommend daily LA consumption of four grams or less, four ancestral eggs per day would give you just 17.5 percent of that amount, versus 73 percent in four CAFO eggs.

With pigs, similarly, LA levels in pork from pastured animals will be around 2 percent versus 20 percent in CAFO-raised pigs fed corn and soy. We can also compare the linoleic acid in burgers from beef (around 2.6 percent) versus in plant-based burgers (15.7 percent). That alone is a reason to reject fake burgers.

I like to show people one of the earliest bits of film footage ever recorded in the U.S., filmed on the streets of New York City in 1911.<sup>32</sup> Those people did not know anything about nutrition or vitamins or saturated fat or omega-6s, and they were not taking supplements, but you will not see a single person who is overweight or obese. This also preceded the advent of widespread home refrigeration. The diet was meat-heavy, and people consumed foods that could be stored, including a lot of potatoes and a lot of bread—in fact, they consumed about twice as much bread as we eat today. However, their diet included only about one gram of omega-6 oils, and half of that likely would have been from olive oil. One hundred-plus years later, 86 percent of added fats are industrial seed oils, and nearly 43 percent of us are overweight or obese.

People in 1911 just ate what was in the food supply, and that is what people are doing today—eating the vegetable oils urged on them by food corporations and the "diet dictocrats." The people filling up cancer and cardiac wards—many of them young—are the victims of a dangerous food supply. Seed oils are leaving a trail of destruction and killing us, and it is time to convict them as chronic metabolic biological poisons. ☯

*Dr. Chris Knobbe is an ophthalmologist, certified by the American Board of Ophthalmology since 1997. He is associate clinical professor emeritus of the Department of Ophthalmology at the University of Texas Southwestern Medical Center. In recent years, Dr. Knobbe's research has been devoted to the devastating effects of seed oils and their unequalled contributions to westernized diseases. He is known primarily for his hypothesis and published research connecting westernized diets to the potentially blinding eye disease, age-related macular degenera-*

tion, and is the author of the book, *Ancestral Dietary Strategy to Prevent and Treat Macular Degeneration*. He is also the founder-director of the *Ancestral Health Foundation* and the *Cure AMD Foundation*; neither receives any financial support from industry. His 2023 book, coauthored with Suzanne Alexander, is titled *The Ancestral Diet Revolution: How Vegetable Oils and Processed Foods Destroy Our Health – and How to Recover!*

## REFERENCES

- Bethell CD, Kogan MD, Strickland B et al. A national and state profile of leading health problems and health care quality for US children: key insurance disparities and across-state variations. *Acad Pediatr*. 2011;11(3 Suppl):S22-S33.
- <https://www.dietaryguidelines.gov/sites/default/files/2019-05/1980%20DGA.pdf>
- Jones DS, Podolsky SH, Greene JA. The burden of disease and the changing task of medicine. *N Engl J Med*. 2012;366:2333-2338.
- Roberts CS. Herrick and heart disease. In Walker HK et al. (eds.), *Clinical Methods: The History, Physical, and Laboratory Examinations*, 3rd edition. Boston: Butterworths; 1990.
- Lehnardt K. 66 sweet facts about sugar [fact #7]. Fact Retriever, Oct. 3, 2016.
- Jennings B. Dr. Otto's amazing oil. Pennsylvania State University, 2021. <https://pabook.libraries.psu.edu/literary-cultural-heritage-map-pa/feature-articles/dr-ottos-amazing-oil>
- Kirsch H. Stone-milled vs. roller-milled flour: what's the difference? *TastingTable*, Nov. 17, 2022.
- McCormick M. Hudnut corn oil pioneer. *Terre Haute Tribune Star*, Jan. 28, 1996.
- Walker C. The hidden history of why vegetable oil is in your kitchen will shock you. *UMZU*, Mar. 31, 2020.
- Ramsey D, Graham T. How vegetable oils replaced animal fats in the American diet. *The Atlantic*, Apr. 26, 2012.
- Shurtleff W, Aoyagi A. *History of Soybean Crushing: Soy Oil and Soybean Meal* (1980-2016). Lafayette, CA: Soyinfo Center; 2016.
- Brown DE. It's linoleic acid intake that matters. Rapid response to: Nutrition matters. *BMJ*. 2014;349:g7255.
- <https://www.chemicalsafetyfacts.org/health-and-safety/the-dose-makes-the-poison/>
- Guyenet SJ, Carlson SE. Increase in adipose tissue linoleic acid of US adults in the last half century. *Adv Nutr*. 2015;6(6):660-664.
- Hand DJ. Modern statistics: the myth and the magic. *J R Stat Soc Ser A Stat Soc*. 2009;172(2):287-306.
- Fung TT, Chiuve SE, McCullough ML et al. Adherence to a DASH-style diet and risk of coronary heart disease and stroke in women. *Arch Intern Med*. 2008;168(7):713-720.
- DASH diet: healthy eating to lower your blood pressure. Mayo Clinic, Jun. 25, 2021.
- Mann GV, Shaffer RD, Anderson RS et al. Cardiovascular disease in the Masai. *J Atheroscler Res*. 1964;4:289-312.
- Fallon S, Enig MG. The skinny on fats. Weston A. Price Foundation, Jan. 1, 2000.
- Prior IA, Davidson F, Salmond CE et al. Cholesterol, coconuts, and diet on Polynesian atolls: a natural experiment: the Pukapuka and Tokelau island studies. *Am J Clin Nutr*. 1981;34(8):1552-1561.
- Sinnett PF, Whyte HM. Epidemiological studies in a total highland population, Tukisenta, New Guinea: cardiovascular disease and relevant clinical, electrocardiographic, radiological and biochemical findings. *J Chronic Dis*. 1973;26(5):265-290.
- Yerushalmy J, Hilleboe HE. Fat in the diet and mortality from heart disease; a methodologic note. *N Y State J Med*. 1957;57(14):2343-2354.
- Phillips M. How Aflac built an empire on Japan's unspeakable nightmare. *Quartz*, Oct. 8, 2013.
- Tanaka H, Uera F, Tsukuma H et al. Distinctive change in male liver cancer incidence rate between the 1970s and 1990s in Japan: comparison with Japanese-Americans and US whites. *Jpn J Clin Oncol*. 2007;37(3):193-196.
- Minami Y, Nishino Y, Tsubono Y et al. Increase of colon and rectal cancer incidence rates in Japan: trends in incidence rates in Miyagi Prefecture, 1959-1997. *J Epidemiol*. 2006;16(6):240-248.
- Yako-Suketomo H, Katanoda K. Time trends in breast cancer mortality between 1950 and 2008 in Japan, USA and Europe base on the WHO mortality database. *Jpn J Clin Oncol*. 2011;41(10):1240.
- Tanaka H, Shimabukuro T, Shimabukuro M. High prevalence of metabolic syndrome among men in Okinawa. *J Atheroscler Thromb*. 2005;12(5):284-8.
- Urakami T, Miyata M, Yoshida K et al. Changes in annual incidence of school children with type 2 diabetes in the Tokyo Metropolitan Area during 1975-2015. *Pediatr Diabetes*. 2018;19(8):1385-1392.
- Neville SE, Boye KS, Montgomery WS et al. Diabetes in Japan: a review of disease burden and approaches to treatment. *Diabetes Metab Res Rev*. 2009;25(8):705-716.
- Dinh ML. The top 8 fast food chains in Japan. *Japan Today*, Sep. 17, 2013.
- <https://angel-acresfarm.com/pages/about>
- Shiryayev D. *A Trip Through New York City in 1911*. [https://www.youtube.com/watch?v=hZ1OgQL9\\_Cw](https://www.youtube.com/watch?v=hZ1OgQL9_Cw)
- Centers for Disease Control and Prevention. An Update on Cancer Deaths in the United States. Atlanta, GA: US Department of Health and Human Services, CDC, Division of Cancer Prevention and Control; 2022.
- Centers for Disease Control and Prevention. By the numbers: diabetes in America. Reviewed Oct. 25, 2022.
- Carson SA. Racial differences in body mass indices of men imprisoned in 19th century Texas. *Econ Hum Biol*. 2009;7(1):121-127.
- Hales CM, Carroll MD, Fryar CD et al. Prevalence of obesity and severe obesity among adults: United States, 2017-2018. *NCHS Data Brief*, No. 360. Hyattsville, MD: National Center for Health Statistics; 2020.
- Sarafidis PA, Nilsson PM. The metabolic syndrome: a glance at its history. *J Hypertens*. 2006;24(4):621-626.
- Swarup S, Goyal A, Grigороva Y et al. *Metabolic syndrome*. Treasure Island, FL: StatPearls Publishing; 2023 Jan-.
- Araújo J, Cai J, Stevens J. Prevalence of optimal metabolic health in American adults: National Health and Nutrition Examination Survey 2009-2016. *Metab Syndr Relat Disord*. 2019;17(1):46-52.
- Knobbe CA. Was age-related macular degeneration rare in the 19th century because we didn't live as long? Cure AMD Foundation, n.d.
- Wong WL, Su X, Li X et al. Global prevalence of age-related macular degeneration and disease burden projection for 2020 and 2040: a systematic review and meta-analysis. *Lancet*. 2014;2(2):E106-E116.
- Wallace IJ, Worthington S, Felson DT et al. Knee osteoarthritis has doubled in prevalence since the mid-20th century. *Proc Natl Acad Sci U S A*. 2017;114(35):9332-9336.
- Drouin E, Drouin G. The first report of Alzheimer's disease. *Lancet Neurol*. 2017;16(9):687.
- World Health Organization. Dementia. Mar. 15, 2023.

# Why We Need a High-Lysine Diet

By Joan McGovern Tandler, M.Arch

**D**o you have joint pain? Have you tried going gluten-free but still get bloated? Do you suffer from candida, inflammation, colds or allergies? Do you suffer from shingles or cold sores? Are you low in calcium and iron? Do you have high blood pressure or high blood sugar? Are you experiencing hair loss? Do you have anxiety, depression or low energy? Are you inattentive or suffering from poor short-term memory? A diet that is low in the amino acid lysine and high in the amino acid arginine can lead to all these problems—and more.

Many amino acids, including arginine, are “nonessential,” meaning they are not diet-dependent but are made in the body out of other amino acids. Lysine, on the other hand, is an “essential” amino acid—we must get it from our diet. Notably, lysine is one of only two amino acids (the other being leucine) that breaks down into ketones rather than glucose, whereas arginine converts to glucose. Dietary arginine competes with lysine for absorption; thus, it interferes with the actions of lysine. Lysine and arginine also have different effects on the digestive system, weight and blood sugar control.



In this article, I explain why lysine is so important for good health and why too much dietary or supplemental arginine is problematic. Traditional diets that emphasize meat, fish, dairy and eggs are higher in lysine than arginine, while the standard American diet not only tends to be deficient in lysine but oversupplies arginine. Unfortunately, toxins worsen the problem by depleting lysine (see “Toxins and Lysine Impairment”).

#### BENEFITS OF A HIGH-LYSINE/LOW-ARGININE DIET

Adequate lysine is so fundamental to health that one 2016 study had as its title, “Why always lysine?”<sup>12</sup> Lysine is important for absorption of important minerals (calcium, iron and zinc), digestive health,<sup>13,14</sup> hormone production, growth and development, healthy sexual development, fertility (see “Lysine and Fertility”), organ health and immune health. The body also needs lysine for the production of strong and stable collagen, antioxidant activity, methylation and detoxification, and pain relief. Given these many functions, it is not surprising that lysine is “the most well conserved” amino acid in the body—meaning the last to be broken down.<sup>15</sup>

We need enough essential amino acids—including enough lysine in the diet—to make proteins such as enzymes, receptors, hormones, antibodies and neurotransmitters. However, the actions of many of these other proteins vary depending on how the lysine contained in them is acted upon. Because of this, researchers argue, lysine “may be the major means by which signalling pathways modify protein behaviour.”<sup>12</sup>

Whereas a high-lysine diet is protective, lysine deficiency is linked to a wide variety of serious health problems. These range from asthma, kidney stone formation and low thyroid hormone production to abnormal growth and development and some disorders of the reproductive system. Lysine deficiency can also cause nausea, fatigue, dizziness and loss of appetite. A low iron level (anemia)—and the fatigue that it causes—can be a marker of lysine deficiency due to lysine’s role in iron absorption.

Excessive arginine, for its part, provides a “terrain” that supports pathogens as well as cancer. Arginine releases nitric oxide (NO) into the

blood, and in an inflammatory situation, excessive arginine increases inflammatory NO. NO (composed of one nitrogen atom and one oxygen atom) plays many important functions in the body, but inflammatory NO, with its harmful and reactive free radical peroxynitrite (including in the brain), can cause kidney damage, high homocysteine, low glutathione and even death.<sup>16</sup>

#### MY “HEALTHY” VEGETARIAN DIET

I was a vegetarian for thirty-five years, and at the time, I assumed I was eating a healthy diet. I ate organically grown peanut butter, sprouted my almonds, soaked my oatmeal, ate only whole-grain sprouted bread and cooked chickpeas for hours to make hummus. I also faithfully followed the recommendation to have one to two ounces of 80 percent cacao per day, even carrying a large bar in my purse.

Despite this diet, I seemed to have no energy, had bad dental health, was depressed and had trouble sleeping. Going through a stressful time certainly contributed to these problems, but stress can’t be avoided. At a certain point, I got compression fractures in my spine while doing normal movements and was diagnosed with adrenal fatigue and osteoporosis. At times, I even fainted and often woke up with a rapid heartbeat. Finally, I developed hip, back, shoulder and neck pain to the point of being disabled. I literally felt like I was falling apart.

Though a staunch vegetarian, I tried adding

#### TOXINS AND LYSINE IMPAIRMENT

Lysine is present at the catalytic (or regulating) site of many receptors, including nuclear receptors for the hormones that affect and manage hundreds of bodily processes. Unfortunately, many chemicals specifically bind to lysine in these receptors and cause problems, including pyrethroid insecticides,<sup>1</sup> organophosphate pesticides (such as Roundup and its active ingredient glyphosate),<sup>2</sup> bisphenol A (BPA)<sup>3</sup> and the ubiquitous solvent trichloroethylene (present, for example, in degreasers and aerosol sprays used for crafts).<sup>4</sup> Through their action on specific receptors, these chemicals have been linked to birth defects, cancer, diabetes, fatty liver, heart disease, kidney disease, mental illness, miscarriage and infertility, multiple sclerosis, obesity and Parkinson’s disease.<sup>5</sup>

When chemicals impair the catalytic lysine on the insulin receptor, for example, the impairment causes insulin resistance.<sup>6</sup> Insulin resistance is the fundamental problem underlying metabolic syndrome, which includes hypertension, diabetes, heart disease, kidney disease and obesity.<sup>7</sup> (For this reason, these chemicals are called “obesogens.”<sup>8</sup>) When estrogenic chemicals or endocrine disruptors bind to lysine on the estrogen receptor, they can cause breast cancer and infertility.<sup>9</sup> The latter group of chemicals includes “compounds to which the human population is exposed in daily life through their use in pesticides/herbicides, industrial and household products, plastics, detergents, flame retardants and as ingredients in personal care products.”<sup>10</sup>

A poison in cottonseed oil, called gossypol, also depletes lysine; gossypol may be present in cheap hamburgers from industrial dairy cows and in farmed fish, as both are commonly fed cottonseed meal. This poison “has a strong tendency to accumulate in animal tissues and is not easily cleared from the animal body.”<sup>11</sup> Gossypol binds to lysine in the cholesterol transporter, causing atherosclerosis, dementia, fatty liver and low hemoglobin.

fish to my diet, but that step alone did not seem to lead to any improvement. Next, I looked into ways to increase calcium for the osteoporosis. Calcium is needed for tooth enameling, too, so I figured more would also help with my dental health. I learned that lysine increases calcium absorption and decreases calcium loss in urine, meaning that it might help both prevent and treat osteoporosis.<sup>22</sup> Lysine also helps with problems of excessive calcification, such as a torn rotator cuff, calcified arteries and kidney calcium-oxalate crystals,<sup>23,24</sup> by dissolving oxalate crystals and preventing their formation.<sup>25</sup> Oxalate crystals in muscles and joints cause pain. I had been eating a lot of the foods that are highest in oxalates, such as spinach, almonds and sweet potatoes, as well as green tea.<sup>26</sup>

One way lysine regulates calcium is through the cholesterol transporter NPC1, which also is needed for autophagy—the clearing away of damaged cells to be replaced with new cells.<sup>27</sup> I knew I needed that! However, uncontrolled autophagy causes continual breakdown, such as the muscle atrophy I was experiencing; lysine is needed to terminate autophagy and begin the regeneration process.

Something else that increases calcium absorption is vitamin D<sub>3</sub>, but I discovered that D<sub>3</sub> needs to be activated

by lysine in the vitamin D receptor. (Other co-factors for D<sub>3</sub> are vitamins A and K<sub>2</sub>.) Is inadequate lysine one reason why people seem to need so much D<sub>3</sub> these days? In addition, bone marrow cells that differentiate into bone, cartilage and elastin can also differentiate into fat cells—and people with osteoporosis have more fat cells in their bones.<sup>28</sup> This differentiation into fat cells occurs with induction of a receptor called PPAR gamma, which regulates fatty acid storage and glucose metabolism. Insulin (from carbohydrates), linoleic acid, flaxseed oil, olive oil and pigments in fruits and vegetables called anthocyanins (which pretty much describes my diet at the time) all induce PPAR gamma. In contrast, ketogenesis—as

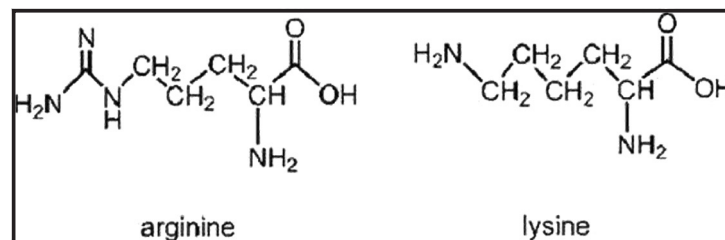
induced by lysine via another receptor called PPAR alpha—prevents differentiation into fat, thus increasing bone mass.<sup>29,30</sup>

Following my initial investigation into lysine, I gave it a try one night. After having gotten progressively worse for years, I noticed a very slight positive effect—the next morning, I felt a little more “together.” This prompted me to dive into further research about lysine. The first thing I discovered was that the foods highest in lysine are meat, fish, dairy and eggs (see Table 1, opposite page). Not only were most of the foods that I was eating very poor sources of lysine, but they were high in arginine. I remembered that several of my grandparents

and great-grandparents had lived long, healthy and active lives eating high-lysine animal foods. After a great deal of research, I was convinced. I completely changed my diet to a high-lysine diet—substituting meat for

peanut butter and nuts and cutting way back on legumes and bread—and I’m happy to say that I’ve recovered from most of my health problems.

Lysine’s role in building stable and strong collagen and flexible but strong elastin powerfully illustrates its relative importance in the diet compared to arginine.<sup>31</sup> As components of skin, joints (cartilage), tendons, bone, hair, nails, muscles, the heart and the lining of the cardiovascular system (endothelium), collagen



Arginine has twice the nitrogen molecules as lysine

#### LYSINE AND FERTILITY

Adequate lysine is required for synthesis and the actions of sex hormones. Lysine is so important for fertility that it was featured in the movie *Jurassic Park*—the dinosaurs were infertile without lysine. One way that lysine determines fertility is that, in females, lysine is a catalytic amino acid in the enzyme aromatase, which converts testosterone into estradiol.<sup>17</sup> Low aromatase activity causes high testosterone in females, with androgen-related polycystic ovarian syndrome (PCOS) symptoms of infertility, insulin resistance, facial hair and increased muscle mass.<sup>18</sup> Lysine helps with these symptoms, perhaps by regulating aromatase.

Another of lysine’s roles in fertility is that it is the precursor to carnitine with its ketogenic effects,<sup>19</sup> which has immense capabilities regarding fertility. Carnitine is low in male as well as female infertility and has been shown to help with both.<sup>20</sup>

Toxins that bind to lysine—including the cottonseed oil poison gossypol—cause infertility by inhibiting steroid synthesis.<sup>21</sup> Farm animals are given lysine supplements to increase fertility, possibly needed because of the cottonseed meal they are fed. When given to cows, lysine also increases milk production, probably due to its role in producing oxytocin. Oxytocin is also needed for erections, orgasm and childbirth. Women have more oxytocin receptors than men. It seems likely that a high-lysine diet, especially as a ketogenic diet, would help humans with fertility problems and other male and female sexual disorders.

and elastin heal the body and literally hold the body together.<sup>32</sup> The eyes, ears, gums, stomach lining and lungs also need collagen and elastin. However, when there is more arginine than lysine in the diet, arginine can use the lysine transporter if it is unoccupied by lysine. As a result, the cell wall will no longer have lysine's stabilizing function; it will become thin and "dramatically" deformed due to the "special role played by [arginine] as an amino acid to bind to, disrupt and permeabilize lipid membranes."<sup>33</sup> These facts could explain why I had the distinct feeling of "falling apart" on a low-lysine, high-arginine diet!

### ARGININE IS HIGH-NITROGEN

Arginine's "special role" in disrupting cell membranes is due to its high nitrogen content. Whereas most amino acids have only one molecule of nitrogen and lysine has two, arginine has four. The high nitrogen content is what gives arginine the bitterness that we taste in unroasted nuts, seeds, chocolate and grains. Importantly, the body identifies bitterness as poison—perhaps our taste buds can sense that too much arginine relative to lysine is a problem. Lysine, on the other hand, tastes slightly sweet.

When lysine is adequate in the diet, the high amount of nitrogen in arginine is beneficial rather than harmful. For example, it facilitates proper blood flow (via endothelial NO), including to the brain (via neuronal NO). Endothelial NO is one of the most important molecules for blood vessel health, causing healthy relaxation of arteries and preventing blood clots.

Nitrogen is also a powerful growth factor, so the arginine that we

make is used for growth hormone—especially needed for development. Premature infants, who cannot synthesize arginine, need slightly more arginine than lysine in order to produce growth hormone, whereas full-term infants need more lysine (mother's milk is higher in lysine than arginine). In one study, lysine improved appetite in infants who were failing to thrive.<sup>34</sup>

Most of the arginine present in the body is produced in the body (endogenous arginine)—with the help of lysine. Lysine provides healthful blood flow from endogenous arginine, as well as a strong immune response when needed. Lysine recycles arginine's nitrogen by blocking the enzyme arginase, redirecting endogenous arginine to healthful constitutive NO and the amino acid citrulline—which then becomes arginine again (see Figure 1, next page). Arginine is produced from citrulline directly in the arteries and capillaries, which then produces the low level of NO needed for proper blood flow.

If lysine is unavailable to block arginase and maintain endothelial function—when, for example, toxins bind to lysine—the inflammatory peptide bradykinin induces inflammatory NO. Dietary arginine also increases inflammatory NO.

TABLE 1. High-Lysine and High-Arginine Foods

FOODS HIGHER IN LYSINE Relative to Arginine (in descending order)	FOODS HIGHER IN ARGININE Relative to Lysine (in descending order)
Whey	Tahini
Other dairy foods	Orange juice
Brewer's yeast	Nuts
Fish	Peanuts
Avocado	Berries and grapes
Pork	Coconut
Poultry	Seeds
Potato	Rice
Beef	Corn
Eggs	Chocolate
Shellfish	Gelatin/bone broth
White beans	Wheat
Red beans	Oats
Black beans	Rye
	Peas
	Barley
	Chickpeas
	Soy isolate
	Quinoa
	Lentils*
	Tofu*

\* Lentils and tofu are close to equal in both amino acids.

### AMMONIA AND THE UREA CYCLE

Excess nitrogen from other amino acids and from the breakdown of bodily proteins produces ammonia. Arginine is involved in the urea cycle (see Figure 2, next page), the series of biochemical reactions that help the body detoxify ammonia, converting it into urea, which is excreted in the urine after filtering by the kidneys. In the final step of the urea cycle, arginase catalyzes the formation of urea and ornithine from arginine.

When the urea cycle isn't functioning properly, ammonia builds up in the muscles and brain. Elevated blood ammonia is found with smoking, high blood sugar, heavy exercise and stress (raised cortisol). Elevated ammonia leads to a wide range of mental and physical symptoms, including insomnia, headaches, confusion, inability to concentrate, low body temperature, drowsiness, lack of coordination, shortness of breath, combativeness, muscle weakness and stiffness, lethargy, low serotonin,

enlarged liver, tremor and blurry vision.<sup>35</sup> High ammonia levels also are characteristic of alcoholism, Alzheimer's, amyotrophic lateral sclerosis (ALS), anorexia, attention-deficit/hyperactivity disorder (ADHD), autism, congestive heart failure, diabetes, Lyme disease, multiple sclerosis, obsessive-compulsive disorder (OCD), Parkinson's disease, poorly functioning liver, rheumatoid arthritis and schizophrenia.

During the inflammatory immune response, excess ammonia increases production of inflammatory NO by contributing more nitrogen.<sup>36</sup> This is illustrated in the example of rheumatoid arthritis, in which arginase is overactive.<sup>37</sup> Arginase breaks down both endogenous and dietary arginine, causing low constitutive NO, but at the same time, inflammatory NO and bradykinin are high, creating a favorable situation for severe inflammatory diseases.<sup>38,39</sup>

Although it's often claimed that dietary arginine is necessary for detoxifying ammonia, researchers in 2008 found that ammonia was adequately detoxified with endogenous arginine and without any dietary arginine.<sup>40</sup> In fact, studies with healthy adults have revealed that production of arginine in the body remains unchanged even if arginine and arginine precursors like glutamate are eliminated from the diet.<sup>41</sup> Importantly, the 2008 study showed that in the absence of dietary arginine, degradation of arginine and oxidation of arginine to potentially harmful inflammatory NO were "markedly reduced."<sup>40</sup> Dietary arginine actually adds disproportionately to the amount of nitrogen

needing detoxification.

A high-arginine diet may interfere with the kidneys' disposal of uric acid in the urea cycle. Long-term supplementation with arginine increases a protein called mTOR (which regulates cell growth and aging); increased mTOR ages the kidney and causes functional decline.<sup>42</sup> Research shows that arginine supplementation also causes kidney fibrosis (which occurs with end-stage kidney disease) and shortens life span in mice with lupus.<sup>43</sup>

### LYSINE AND IMMUNE FUNCTION

A high-lysine diet is important for immune function. Lysine increases natural killer (NK) cell activity and regulates the inflammatory immune response. It is needed, for example, to inhibit inflammatory tumor necrosis factor (TNF) and interferon.

Studies have found that pretty much all pathogens are dependent on arginine because pathogens degrade arginine into polyamines and also convert arginine into growth hormone. The excessive polyamines from a high-arginine diet serve as building blocks for cancer cells—in fact, "arginine is the most consumed amino acid in the inner necrotic core of tumor mass, indicating its high demand for the survival of tumor cells"<sup>44</sup>—and for the brain parasite *Toxoplasma gondii*,<sup>45</sup> which has been linked to mental and neurological disorders, vision problems, rheumatoid arthritis, cancer, diabetes and more. Pneumonia-causing streptococcus, too, is arginine-dependent.<sup>46</sup> I used to get bad colds several times a year and had pneumonia twice—conditions in which *Streptococcus pneumoniae* bacteria are abundant.

Excessive dietary arginine encourages herpes.<sup>47</sup> The foods that have the highest arginine-to-lysine ratio—chocolate, peanut butter, nuts, seeds and coconut—often trigger cold sores.<sup>48</sup> Two people who did not even know that they had herpes told me that they took arginine supplements one night, and woke up the next morning with cold sores! Researchers advise that "patients prone to herpetic lesions" abstain from "arginine excess" and consider adding supplemental lysine to their diet,<sup>49</sup> "particularly during periods of stress."<sup>47</sup>

One of lysine's critical immune functions is its inhibition of the

FIGURE 1. Arginine Metabolism

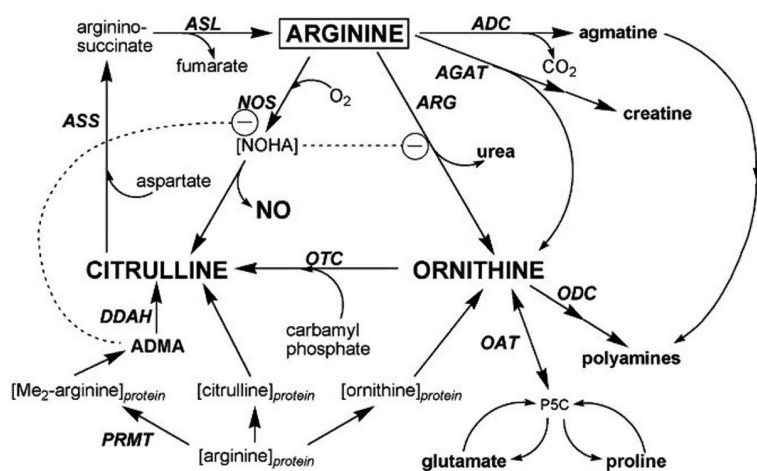
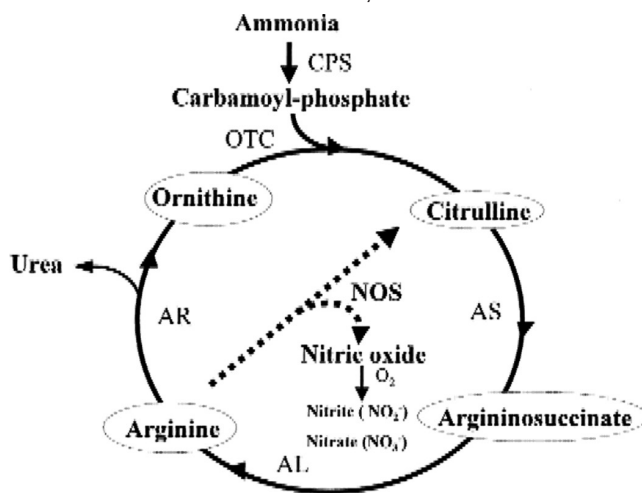


FIGURE 2. The Urea Cycle





enzyme arginase (see “Lysine’s Inhibition of Arginase”). *H. pylori*, associated with diseases such as gastritis, ulcers and gastric cancer, furnishes an illustration of the problem of excess dietary arginine without lysine to inhibit arginase. As one study explains, arginine metabolism—through “polyamine-mediated oxidative stress and impairment of antimicrobial NO synthesis”—“leads to *H. pylori*-induced DNA damage and immune dysregulation.”<sup>50</sup> Notably, the old-fashioned remedy for an ulcer was to drink milk (high in lysine).

Histamine is particularly high in nitrogen. Normally, histamine induces NO for a very short while, but NO can become excessive, causing symptoms such as breathing difficulties, anaphylaxis, hives, angioedema, eczema, sinus congestion and headache.<sup>52</sup> Medications given to relieve allergy symptoms (such as epinephrine, Benadryl and corticosteroids) either increase endothelial NO or inhibit nitric oxide synthase (NOS), both of which lower inflammatory NO.<sup>53-55</sup> Lysine, too, increases healthful NO as well as lowering adrenal stress hormones, which in turn lowers histamine release.<sup>56</sup> Interestingly, I used to get eczema on my hands every time I had cow’s milk in any form, but after several years on a high-lysine ketogenic diet plus lysine supplementation (as well as elimination of sugar), the eczema disappeared.

## METABOLIC HEALTH

Metabolic health is our ability to convert food into energy, including our ability to make ketones for heart energy. Insulin resistance,

which lowers the ability to make energy, is an important cause of metabolic syndrome. The major manifestation of metabolic syndrome is coronary artery disease,<sup>57</sup> but it also includes diabetes, fatty liver, kidney disease and often hypothyroidism.<sup>58</sup> Lysine deficiency is characteristic with metabolic syndrome.

As previously mentioned, lysine is one of only two amino acids that are degraded exclusively into ketones instead of glucose. In addition, lysine is the catalytic amino acid for activating PPAR alpha, which induces ketogenesis. When supplemented, lysine rapidly turns into carnitine, a potent inducer of ketosis, which is important for maintaining a healthy weight. In contrast, because arginine becomes glucose rather than ketones, it raises insulin (which signals for fat storage) more than other amino acids. As a result, arginine decreases satiety, thus increasing meal frequency.<sup>59</sup> On my ketogenic diet, I often eat a Wasa cracker covered with two tablespoons of butter two hours before a meal, along with a ketogenic tea, producing increased ketones that give me plenty of energy until the meal. As an experiment, I tried instead eating a high-arginine “fat bomb” of MCT oil, peanuts and chocolate totaling six grams of fat. Not only did my ketone level not budge, but I was hungry in forty-five minutes!

Lysine has shown promise as a therapy for diabetes (see “Wonder Drug or Wonder Lysine?”). One study found that lysine increased diabetics’ insulin receptor enzyme activity, which lowered their blood sugar by 27 percent.<sup>60</sup> Another group of researchers discovered that

Lysine is one of only two amino acids that are degraded exclusively into ketones instead of glucose.

### LYSINE’S INHIBITION OF ARGINASE

Lysine’s inhibition of the enzyme arginase serves a number of important purposes:

1. Inhibiting arginase recycles the nitrogen in arginine to become healthful NO rather than being expelled and wasted as urine via arginase. As mentioned elsewhere, it also makes citrulline to form arginine again, which avoids formation of polyamines, cell proliferation and excessive glutamate via arginase.
2. In the case of an infection, arginine becomes inflammatory NO to destroy the pathogen, rather than being degraded into polyamines, which feed the infection instead! As soon as the pathogen is destroyed, lysine signals for debris clean-up by macrophages via an enzyme called OAT (ornithine aminotransferase), which degrades arginine into ornithine. For wound healing and regeneration, lysine doesn’t inhibit arginase but instead uses ornithine to make proline for collagen, again via OAT.
3. Lysine-generated inflammatory NO is controlled, whereas with excessive dietary arginine, inflammatory NO reacts with superoxide to form peroxynitrite, which interferes with energy generation, damages DNA and is found with many (if not all) serious diseases.<sup>51</sup>
4. Recalling that lysine is a ketogenic amino acid, it is also noteworthy that one function of ketones is to inhibit arginase.

when healthy volunteers ingested lysine along with glucose, the lysine “dramatically attenuated the glucose-stimulated glucose response.”<sup>61</sup>

Hemoglobin detoxifies inflammatory NO, but when it isn’t detoxified quickly enough due to inadequate functional hemoglobin, the free radical peroxynitrite is formed.<sup>62</sup> With both type 1 and type 2 diabetes, this causes considerable damage, leading to complications for 50 percent of diabetics.<sup>63</sup> One problem with diabetes is that hemoglobin becomes glycated (covered with sugar from high blood sugar). Lysine maintains functional hemoglobin by preventing hemoglobin glycation (high HbA1c). (Interestingly, an elevated HbA1c score and hypertension are two of the highest risk factors for Covid-19 severity<sup>64</sup>—see “Covid-19 and Bradykinin.”) In one study with type 2 diabetics, three grams of lysine per day inhibited hemoglobin glycation, improved glycemic control and increased antioxidant markers.<sup>65</sup> Lysine also appears beneficial for numerous other complications of diabetes, including fatty liver,<sup>66</sup> cataracts (and potentially diabetic retinopathy)<sup>67,68</sup> and diabetic neuropathy.<sup>69</sup>

## LYSINE AND HEART HEALTH

Ketones are the primary energy source for the heart. In one study, researchers gave heart patients (fifty-eight years old on average) lysine, carnitine and other supplements to treat arrhythmia by generating ketones; after six months,

70 percent experienced some improvement, including 43 percent who became entirely free of arrhythmia episodes.<sup>80</sup>

Lysine is needed for the longevity protein SIRT1, which is low in both obesity and heart disease;<sup>81</sup> increasing SIRT1 by a high-lysine ketogenic diet is a tool used for managing both metabolic syndrome and heart disease.<sup>82</sup>

Adrenal stress hormones raise blood pressure, and lysine is needed to keep these hormones at a healthy level. In 2017, French researchers reported that lysine normalized blood pressure (as increased by the adrenal hormone aldosterone),<sup>83</sup> while researchers in Ghana described how just one gram of lysine per day normalized blood pressure in men and women who had a “suboptimal lysine intake” due to a high-grain diet—a diet possibly similar to that of many U.S. residents.<sup>84</sup> Vegetarians eating a high-arginine, low-lysine diet are often deficient in heart-protective carnitine (abundant in animal foods and also endogenously synthesized from lysine and methionine), increasing their risk of stroke.<sup>85</sup> In contrast, lysine decreases risk for stroke.

Lysine also plays a heart-protective role where LDL cholesterol is concerned. “Sticky” lipoprotein(a), or Lp(a), is considered “an independent risk factor for cardiovascular disease”—elevating risk by 70 percent<sup>86</sup>—but when lysine is absorbed into Lp(a)’s lysine-binding site, it becomes normal LDL. Furthermore, lysine converts cholesterol into bile, thus controlling LDL cholesterol and preventing fatty liver.<sup>22</sup>

Lysine, as noted, is essential for endothelial function and, therefore, cardiovascular health. Endothelial permeability and dysfunction represent early markers for heart disease and causes of blood clots, hypertension and angina.<sup>87,88</sup> The recommendation to take lysine supplements for heart disease dates as far back as the 1970s; Linus Pauling found, for example, that taking six grams of lysine with three to eighteen grams of vitamin C gave quick relief from angina.<sup>89</sup> In a study that gave people with heart failure a multinutrient treatment that included lysine, participants experienced improvement in symptoms of fatigue, shortness of breath

## WONDER DRUG OR WONDER LYSINE?

Metformin is the most widely prescribed diabetic drug in the world—prescribed to more than one hundred fifty million people—and also the most-prescribed drug in the U.S. It is called a “wonder drug.”<sup>70</sup> In addition to being the first-line medication for type 2 diabetes, it is also prescribed for prediabetes, PCOS and schizophrenia. It is also viewed as helpful for asthma, several cancers (breast, colon and prostate), dementia, psoriasis, stroke and life span. It’s even given to children as young as six years old!

Metformin does three major things—which lysine happens to do as well. First, it induces ketosis, which reduces the post-meal production of glucose and supplies the energy that diabetics can’t produce from glucose.<sup>71</sup> Second, metformin blocks arginase, so it improves blood flow.<sup>72</sup> Third, metformin blocks the enzyme that degrades dietary arginine into polyamines. Many pathogens also have this enzyme, so the reduction in polyamines lowers pathogen “load” and helps with cancer.<sup>72</sup>

Metformin has a major side effect—stomach upset—which often leads to poor compliance. Diabetics also commonly develop moderate chronic kidney disease, and the actions of metformin damage the kidneys further.<sup>73</sup> This may be because, like arginine, metformin is very high in nitrogen. Another metformin side effect is increased nitrogen in urine; a high blood urea nitrogen (BUN) test normally indicates kidney damage. Lysine, on the other hand, “diminish[es] development of hypertension and kidney injury” in rats through protective mechanisms that include “diuresis, further acceleration of lysine conjugate formation, and inhibition of tubular albumin uptake.”<sup>74</sup> Thus, even the reported benefits of the “wonder drug” metformin end up illustrating the wonders of lysine, especially as part of a high-lysine ketogenic diet—and lysine has only good side effects!

and swollen ankles; the researchers called attention to lysine's collagen-making role as crucial for the protection of the endothelium of the artery walls.<sup>90</sup> Loss of elastin in arteries increases risk for hypertension, heart attack, heart failure and stroke.

In a contrasting study, researchers tested whether nine grams of arginine per day would help people who had already had a heart attack. The premise that taking arginine could prevent another heart attack seemed to make sense because blood pressure is elevated during a heart attack, and supplemental arginine lowers blood pressure by dilating blood vessels.<sup>91</sup> Uncontrolled high blood pressure also causes heart attacks. However, this study ended tragically because six people in the arginine group (and none in the placebo group) had another heart attack and died!<sup>92</sup> (The study closed enrollment after this finding.)

There are several factors that could explain the study's unexpectedly fatal outcomes. First, the blood-pressure-lowering effect of supplemental arginine is brought about via bradykinin and inflammatory NO, when healthful NO is low. Bradykinin stimulates a "rapid increase in L-arginine uptake and NO release,"<sup>93</sup> which would explain the subsequent heart attacks since inflammatory NO in that context "is obligatory for local and systemic inflammatory activation and cardiac remodeling."<sup>94</sup> Stated another way, inflammatory NO lowers blood pressure in a destructive way—by causing blood vessels and capillaries to become permeable.<sup>76,93</sup> This causes veins to constrict and capillaries to leak, and leaky capillaries can cause swelling. Edema is a known side effect of arginine supplementation.<sup>95,96</sup>

Another possible effect of supplementary arginine is an increase in the action of the "antidiuretic hormone" arginine vasopressin (AVP), which raises blood pressure by retaining water. Diuretics are often recommended to lower blood pressure, so perhaps excessive arginine could have opposite and excessive antidiuretic effects. In fact, people who are already taking diuretics or blood-pressure-lowering medications that increase bradykinin—such as ACE inhibitors, losartan or the diabetes medication metformin—are warned against taking arginine.<sup>97</sup>

A third factor has to do with the difference in how dietary arginine and endogenous arginine produce NO—which is so confusing that it's been labeled the "arginine paradox." The paradox is that when someone

is healthy, taking supplemental arginine doesn't increase the steady-state, constitutive NO supplied by arginine made in the body (which is what body builders look for when taking arginine). Supplemental arginine *does* increase it in unhealthy people—which is why the researchers did the study—but it helps only on a short-term basis, whereas, as shown in this longer study of six months, it also increases inflammatory NO via bradykinin.

## THE CANCER CONNECTION

Methylation of lysine activates the major cancer-fighting protein p53, which some creative writers have dubbed the "Guardian of the Genome."<sup>98</sup> P53 blocks inflammatory NO and its mitochondrial and DNA damage.<sup>99</sup> Lysine in p53 also stabilizes DNA for correct reading, silences cancer genes and repairs DNA, preventing development of cancer.<sup>100,101</sup>

As discussed, lysine is needed for ketogenesis (as induced by carnitine), and ketogenesis fights cancer in many ways,<sup>102</sup> including through "inhibition of [cell] proliferation, induction of cell differentiation and induction or repression of gene expression."<sup>103</sup> Lysine is the active site for the cholesterol transporter NPC1, which regulates the mTOR protein. Unregulated or dysregulated mTOR is found with cancer as well as many other diseases<sup>104</sup>—and arginine induces mTOR!<sup>105</sup>

As the site for NPC1, lysine is needed both to activate and terminate the clearing away of dysfunctional cells like cancer cells (autophagy). As I noted earlier, this process needs to be regulated so that it won't break down the body

## COVID-19 AND BRADYKININ

A confusing thing about Covid-19, according to Anthony Fauci, was that hypertension was by far the most common comorbidity in hospitalized Covid-19 patients, almost double that of patients with diabetes.<sup>75</sup> According to Fauci, just having high blood pressure should not have increased risk for acute respiratory distress syndrome.

Inflammatory NO as caused by bradykinin offers an important clue. In individuals with Covid-19, the ACE2 enzyme is dysfunctional—and ACE2 is needed to degrade bradykinin and block the bradykinin inflammatory receptor (BK1) that produces inflammatory NO. If a person already had elevated bradykinin and developed Covid-19, blocking ACE2, this could lead to low arterial blood pressure, constricted veins and leaky capillaries in the lung, causing acute respiratory distress syndrome.<sup>76</sup> The most prescribed medications for high blood pressure, ACE-inhibitors, do just that—they elevate bradykinin! In short, the reason Covid-19 is a problem for people with high blood pressure may be that many are taking ACE inhibitors<sup>77</sup> and that the illness further elevates bradykinin and promotes inflammatory NO. Some, therefore, recommend lysine to both prevent and treat Covid-19 symptoms.<sup>78</sup> (*Editor's note: See the article, "Questioning Covid" by Ilana Nurpi in the Summer 2021 issue of Wise Traditions for a fascinating discussion of Covid mortality and the role of ACE inhibitors and other medications inhibitory to the sympathetic nervous system.*<sup>79</sup>)

Without adequate lysine, autophagy is uncontrolled, causing atrophy and “many disease states.”

excessively. Without adequate lysine, autophagy is uncontrolled, causing atrophy and “many disease states.”<sup>106</sup> Lysine marks cancer and other dysfunctional cells for destruction—and then terminates autophagy—by binding to a protein called ubiquitin (a name derived from its ubiquitous presence in the body and more support for the question, “why always lysine?”). This function of lysine is critically important; faulty ubiquitination is linked to the development of “cancer, metabolic syndromes, neurodegenerative diseases, autoimmunity, inflammatory disorders, infection and muscle dystrophies.”<sup>107</sup> With many chemicals binding to lysine residues and thereby limiting their availability, extra lysine is likely needed for these diseases.

In stark contrast, polyamines from excessive dietary arginine feed cancer cells, promote cancer cell proliferation and enhance tumor growth.<sup>108,109</sup> Nitrosamines—strong carcinogens formed specifically from arginine—have been linked to cancers in a variety of organs and tissues.<sup>110</sup> Most cancer cells can’t reproduce without dietary arginine. Healthy cells are able to get the arginine they need for normal growth by converting arginine precursors like glutamine (the most abundant amino acid in the body) into arginine, but cancer cells aren’t able to do this. As a result, investigators are interested in arginine deprivation as a strategy for shrinking tumors because it decreases inflammatory NO, insulin-like growth factor 1 (IGF-1) and mTOR.<sup>44</sup>

The process of making ornithine from endogenous arginine also makes creatine for muscles, but this uses up 70 percent of the body’s methyl groups. Methylation is extremely important for cancer prevention and numerous other functions. Even though dietary arginine doesn’t increase creatine, a 2009 study found that nine grams of arginine per day lowered methyl groups, impairing vital methylation.<sup>111</sup> The researchers concluded, “L-arginine has the potential to paradoxically impair endothelial function.” Lowering methyl groups may thus relate to arginine’s role in cancer.

The arginine dose in the 2009 study also affected the “homocysteine cycle,” which produces the powerful antioxidant glutathione (far more necessary than the highly praised an-

tioxidants in nuts and chocolate) that is critical for detoxification. Vegans’ high-arginine diet may partly explain why they often have low glutathione.<sup>112,113</sup> Notably, glutathione recycles the antioxidant vitamin C, which is needed to detoxify peroxynitrite and form collagen. Furthermore, lysine is needed to activate the critical antioxidant of our mitochondria.<sup>114</sup> Lysine also forms glycine when it is converted to carnitine, and glycine plays major roles in the entire homocysteine cycle that has glutathione as a major end product.<sup>115</sup>

## MENTAL HEALTH AND NEUROLOGICAL DISORDERS

Inflammatory NO is a major factor with mental illnesses and neurological disorders.<sup>116</sup> Its involvement in neuroinflammation is thought to be “due to its free radical properties, which compromise cellular integrity and viability via mitochondrial damage.”<sup>117</sup> One problem is that it prevents adequate blood flow, with its vital supply of oxygen, to the brain. Excess arginine is also converted into glutamate, and excessive glutamate is neurotoxic.

In contrast, by controlling arginine actions, lysine protects the brain and nervous system, preventing neuronal NO from “uncoupling” and becoming inflammatory. It also prevents seizures by a “barbiturate-like” action.<sup>118</sup> Notably, lysine (as acetyl coenzyme A) is a component of acetylcholine, the primary neurotransmitter of the normal, steady-state nervous system. Acetylcholine induces the “in-the-flow” alpha state of the brain needed for memory and learning as well as proper vasodilation in the circulatory system. In people with anxiety who are low in lysine, lysine has calming effects and regulates the adrenal stress hormones.<sup>13</sup> In a study of people in Syria who ate mainly wheat,<sup>119</sup> lysine fortification of flour lowered the cortisol response to stress and reduced chronic anxiety; in a related study in rats, lysine alleviated stress-induced anxiety and diarrhea-type intestinal dysfunctions.<sup>120,121</sup>

The arginine hormone AVP (arginine vasopressin) stimulates release of cortisol.<sup>122</sup> This is probably because AVP stimulates the amygdala—the fear center of the brain. In contrast, oxytocin, which is the calming lysine



counterpart to AVP, inhibits neurons in the amygdala.<sup>123</sup> Oxytocin and AVP have the same structure, except that AVP has two additional amino acids—one of which is arginine. Males have more AVP receptors, and AVP is needed for male sexual arousal and long-term memory. Interestingly, caffeine, alcohol, marijuana and lithium all inhibit AVP.

Lysine is also needed for the calming neurotransmitter GABA, which is made from glutamate. In schizophrenia, GABA is low, while arginase activity is increased. The lysine enzyme OAT, which prevents production of polyamines, is also deficient. As a result, polyamine production is increased with schizophrenia as well as mood disorders, anxiety, suicidality, depression and bipolar disorder. As previously mentioned, polyamines feed the brain parasite *Toxoplasma gondii*, which is linked to all of these disorders.<sup>124</sup> Lysine has been shown to improve schizophrenia symptoms through maintenance of proper levels of serotonin.<sup>125</sup>

Lysine is needed to activate myelin repair, and impaired myelin is found with both mental and neurological disorders. When given to mice, lysine has been shown to reduce multiple sclerosis symptoms and suppress disease progression.<sup>126,127</sup> Debris is a basic driver of autoimmune diseases and with multiple sclerosis, substantial inflammatory NO blocks debris clean-up by M2 macrophages. Lysine's role in lowering inflammatory NO thus helps there as well.

Inflammatory NO is found with many other mental and neurological disorders: ALS, Alzheimer's, autism spectrum disorders, bipolar disorders, OCD, Parkinson's, schizophrenia, suicidality, and traumatic brain injury.<sup>117,128</sup> In animal models of traumatic brain injury, inflammatory NO blockers have been shown to improve cortical thickness needed for memory, attention, speech and learning.<sup>116</sup>

#### BEWARE ARGININE SUPPLEMENTATION

In the recent past, supplemental arginine was heavily promoted as a “fountain of youth” for older people—with claims that its effects on growth hormone could help extend life and increase bone density and muscle mass. However, studies have found that arginine supplements raise growth hormone only in young people.

Another unsupported premise, as we have seen, is the claim that supplemental arginine improves cardiovascular health. A 2014 study reported that taking arginine on a long-term basis actually caused “endothelial senescence,” meaning age-related deterioration!<sup>129</sup>

For many years, arginine was highly recommended for increased athletic performance because of arginine's role in making creatine. However, it's now known that only endogenous arginine—and not dietary arginine—is involved in making creatine. Athletes also supposed that arginine supplementation would produce more endothelial NO, but “numerous studies have shown that orally supplemented L-arginine . . . even when dosed as high as 6g/day, has no benefit on nitric oxide production or athletic performance.”<sup>130</sup>

As we have seen, endogenous arginine converts to citrulline plus healthful NO. Citrulline supplements actually increase arginine in the blood more than arginine itself, although this does not appear to increase NO production in healthy people with low but normal NO.<sup>131</sup>

There is a more solid rationale for recommending lysine for “peak performance.”<sup>132</sup> Notably, carnitine from lysine improves exercise performance, even in healthy people, and there is a rapid conversion of lysine to carnitine. Carnitine is a form of the ketone beta-hydroxybutyrate, and ketones power not only the heart but the muscles. The lysine-to-carnitine conversion also yields glycine, which is needed for collagen and muscle. Researchers report that supplemental lysine “is rapidly transported into muscle tissue and that lysine concentrations in muscle exceed those of other amino acids, especially at five to seven hours after ingestion.”<sup>133</sup>

Two case reports describe body builders who developed pancreatitis from taking arginine.<sup>134,135</sup> Chronic pancreatitis damages insulin-producing beta cells, so it can lead to diabetes. Arginine is even given to mice to study necrotizing pancreatitis, and in one study, they cured the mice with lysine!<sup>136</sup> In that study, lysine also increased glutathione as well as catalase (low catalase causes grey hair) and the vital antioxidant superoxide dismutase. This suggests that lysine is important for the most important antioxidants—those made in the body.

A 2014 study reported that taking arginine on a long-term basis actually caused “endothelial senescence,” meaning age-related deterioration!

Some of the biggest triggers of anaphylaxis are peanuts, tree nuts, sesame seeds and chickpeas—which just happen to have the highest arginine content of all the foods that are higher in arginine than lysine.

Arginine is still recommended for erectile dysfunction and for increasing testosterone. However, while it does cause erections, it doesn't increase testosterone in the long term.<sup>137</sup> Moreover, arginine increases and sustains high IGF-1, which is linked to development of prostate cancer.<sup>138</sup> On the other hand, studies have found that inhibiting inflammatory NO—which is what lysine does, whereas arginine supplements counterproductively increase it—improves erectile dysfunction.<sup>139</sup>

Despite the clearly negative long-term results regarding arginine, erectile dysfunction and prostate health, arginine and high-arginine nuts and seeds are still promoted as “superfoods” for both. Based on one 2016 study, nuts are even recommended for prostate cancer survival. However, funding for the study came from the International Tree Nut Council Nutrition Research & Education Foundation, and one of its lead investigators was avid vegan and nut promoter Walter Willett, so the diagnostics may be questionable.<sup>140</sup>

In addition to the side effects already mentioned, arginine supplementation is associated with a wide range of other unpleasant symptoms: heart palpitations, dizziness, light-headedness, irritability, depression, anxiety, dehydration, headache, restless legs, indigestion, swollen legs, chest pain, low blood sugar, lower back pain, blood abnormalities, breathing problems, worsened asthma, elevated homocysteine and worsened kidney disease and sickle cell disease. The aggravation of allergies and asthma linked

to arginine supplementation comes from increased histamine release from mast cells, with its accompanying NO.<sup>141,142</sup> Of note, some of the biggest triggers of anaphylaxis in the U.S. and other countries are peanuts, tree nuts, sesame seeds and chickpeas—which just happen to have the highest arginine content of all the foods that are higher in arginine than lysine.

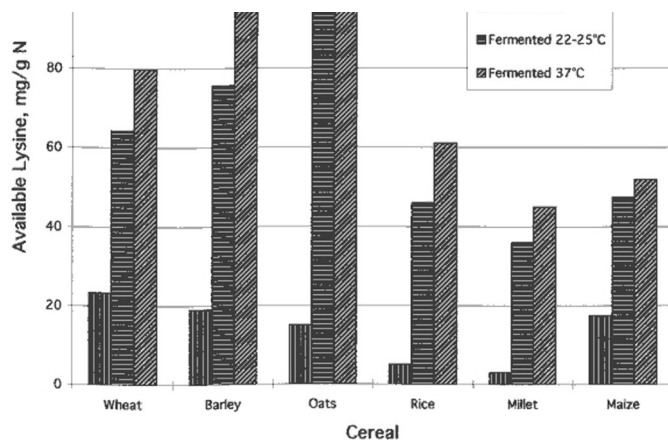
When I was eating my high-arginine diet, I suffered from many of these side effects and experienced a lot of pain. In fact, though arginine supplements are said to help with the extreme pain called “complex regional pain syndrome,” excessive arginine (as a precursor to inflammatory NO) is known to aggravate pain in a number of ways. For example, the formation of the free radical peroxynitrite from inflammatory NO activates pain receptors and is responsible for the delayed muscle soreness that follows exercise.<sup>143</sup> Mouse studies indicate that sensitivity to pain is blocked by inhibiting NO formation.<sup>144</sup> Such studies have found that inhibitors of inflammatory NO help with pain ranging from arthritis to nerve pain; however, no NO inhibitor has been developed for humans.<sup>145</sup> The complex involvement of NO “and its derivatives” in the experience of pain is thought to contribute to the functional disability of osteoarthritis.<sup>146</sup>

#### TRADITIONAL DIET = HIGH-LYSINE

Because lysine is readily available in meat, fish and dairy products, it may seem easy to get enough. Yet for a number of reasons, a person may still not be consuming adequate lysine—defined as twelve (or even thirty) milligrams per kilogram of body weight daily for people aged thirteen years and above.<sup>19</sup> Given the many toxins that bind to lysine, even thirty milligrams per kilogram of body weight may be too low.

Dairy products and fish are the foods highest in lysine, but both foods are eaten far more in Europe than in the U.S. In Japan, where they eat little dairy but a lot of grains, fish consumption is three times higher than in the U.S. In recent times, with the American dietary establishment's emphasis on whole grains, legumes, nuts, seeds, peanut butter and dark chocolate—and its concurrent advice to cut back on meat and dairy products—many Americans are eating far more high-arginine foods and fewer high-lysine

FIGURE 3. Availability of Lysine in Unfermented and Fermented Grains



foods than in the past.

Some legumes—such as red, black and white beans—are higher in lysine than arginine, and lentils are about even. Fermentation of high-arginine grains also increases lysine in the diet (see Figure 3, opposite page). Traditionally, wheat, rye, millet, rice and quinoa were ground to a flour and then fermented for many hours, resulting in items like sourdough bread, South Indian rice pancakes and African teff or millet breads. In modern times, however, the wheat and other grains used to make bread, crackers, pizza, pasta and desserts undergo little or no fermentation.

Legumes and grains contain trypsin inhibitors, which block absorption of lysine, and modern wheat has been bred to have even more trypsin inhibitors to protect against insects. Again, fermentation is the answer; trypsin inhibitors are broken down during traditional fermentation, making lysine more available for digestion. Fermenting bacteria also produce lysine, so lysine is increased over five-fold in oats when fermented at 98.6 degrees F! It's no wonder that people traditionally have prepared their low-lysine foods in this way.

Danish foods provide a good illustration of traditional dietary practices with regard to lysine and arginine, also showing that a high-lysine diet is as delicious as it is nutritious. For example, because split peas are much higher in arginine than lysine, the Danes take three days to soak and cook their split pea soup! They cook the peas with a ham bone for some high-arginine collagen but then add plenty of ham for a beautifully balanced soup. For many Danes, it is also still a highly revered tradition to make sourdough rye bread at home—and rye has the best lysine-to-arginine ratio of any grain. The Danes ferment their bread for about twelve hours. They then slice it thin and spread it with enough butter to reveal your teeth marks (*tandsmør*) in it! This bread is the basis for open-face sandwiches,

called *smørrebrød*, that are served with a large variety of high-lysine toppings like ham, shrimp, beef or their favorite—liver paté and beet pickles. More evidence for high-lysine Nordic diets with few plant foods comes from a paleolithic site in Sweden, which uncovered a diet of mainly fish with some meat; mushrooms, berries and nuts made up a “meagre” 3 percent of their intake.<sup>147</sup>

Given the importance of lysine, together with the potential harms of too much arginine, it makes sense to me that high-lysine protein foods, including potatoes, were the basic foods of my Northern European great-grandparents. Even the foods I grew up with—such as chicken soup, which is the national soup in many countries around the world—were either high in lysine or at least balanced equally. Chicken is high in lysine, while the gelatin in broth is high in arginine, making for a balanced dish. Notably, in countries like Russia and India, where they consume a lot of grains, they eat fermented dairy foods at every meal.

## TURNING THE TIDE

Over the past century-plus, there has been a sea change in the American diet, which has shifted away from relying on high-lysine foods like seafood, meat soups and stews, potatoes, sourdough bread and dairy products to heavily emphasizing high-arginine foods like unfermented wheat, soybeans, peanuts, nuts, seeds (see “Eschew the Seeds”), chocolate and berries, along with added sugar. The high-arginine diet, together with widespread exposure to chemicals that bind to (and thus deplete) lysine—including toxins in livestock and fish fed cottonseed meal—has likely led to widespread lysine deficiency, contributing in important ways to the health problems that have plagued Americans since the early 1900s.

This dire situation can be helped by reverting to a high-lysine, low-arginine traditional diet consisting primarily of meat and milk products from pastured animals, wild-caught seafood, a small amount of fermented lower-arginine rye bread, low-carb roots and seasonal nuts and berries—along with careful avoidance of chemicals. For individuals who have been eating a high-arginine diet or who have any of the disorders described in this article, it may be a good idea also to ask one's health care provider about possible L-lysine supplementation, including the appropriate dosage and duration of intake.

Nowadays, I avoid trendy “superfoods” and thank God that I was finally led to trust the wisdom of my ancestors, who over many centuries learned how to be strong, healthy and happy by eating a high-lysine diet. Although I made other changes to my diet as well, my experience of shifting from a high-arginine to a high-lysine diet, as well as supplementing lysine, illustrates the amazing power of this one amino acid. My disability seems like a long-ago dream or, I should say, nightmare. I have learned

## ESCHEW THE SEEDS

Understanding the importance of lysine and the problems of arginine begs the question, are seeds a natural, healthy food for humans? Seeds of every sort are high in nitrogen. The only mammals who eat seeds in the wild are small rodents who have a very different digestive system, one equipped with extra gut bacteria to break down the seeds. Squirrels ferment their nuts in their cheeks and by hiding them over the winter. Birds—the other major consumers of seeds—have no ability even to make arginine! It may be best to leave the seeds to these creatures, at least for the most part, while we make sure that we as humans have a high-lysine diet.

first-hand that the benefits of lysine are considerable!



Joan McGovern Tendler, M.Arch., is chapter leader for the Weston A. Price Foundation's Milwaukee chapter. You can check out the wealth of information she has assembled about a high-lysine diet at [tendler5.wixsite.com/highlysinediet](https://wixsite.com/highlysinediet).

## REFERENCES

1. Du Y, Nomura Y, Luo N et al. Molecular determinants on the insect sodium channel for the specific action of type II pyrethroid insecticides. *Toxicol Appl Pharmacol*. 2009;234(2):266-272.
2. Lockridge O, Schopfer LM. Review of tyrosine and lysine as new motifs for organophosphate binding to proteins that have no active site serine. *Chem Biol Interact*. 2010;187(1-3):344-348.
3. Chen Z, Zuo X, He D et al. Long-term exposure to a "safe" dose of bisphenol A reduced protein acetylation in adult rat testes. *Sci Rep*. 2017;7:40337.
4. Cai H, Guengerich FP. Acylation of protein lysines by trichloroethylene oxide. *Chem Res Toxicol*. 2000;13(9):327-335.
5. Berg ZK, Rodriguez B, Davis J et al. Association between occupational exposure to pesticides and cardiovascular disease incidence: the Kuakini Honolulu Heart Program. *J Am Heart Assoc*. 2019;8(19):e012569.
6. Kadowaki H, Kadowaki T, Cama A et al. Mutagenesis of lysine 460 in the human insulin receptor: effects upon receptor recycling and cooperative interactions among binding sites. *J Biol Chem*. 1990;265(34):21285-21296.
7. Gluvic Z, Zaric B, Resanovic I et al. Link between metabolic syndrome and insulin resistance. *Curr Vasc Pharmacol*. 2017;15(1):30-39.
8. Collaborative for Health & Environment. "Obesogens and the obesity pandemic: a focus on prevention." May 20, 2022. [https://www.youtube.com/watch?v=huTmXzeCvI0&ab\\_channel=CollaborativeforHealth%26Environment](https://www.youtube.com/watch?v=huTmXzeCvI0&ab_channel=CollaborativeforHealth%26Environment)
9. Popov VM, Wang C, Shirley LA et al. The functional significance of nuclear receptor acetylation. *Steroids*. 2007;72(2):221-230.
10. Darbre PD. Endocrine disruptors and obesity. *Curr Obes Rep*. 2017;6(1):18-27.
11. Zeng QF, Bai P, Wang JP et al. The response of meat ducks from 15 to 35 d of age to gossypol from cottonseed meal. *Poult Sci*. 2015;94(6):1277-1286.
12. Azevedo C, Saiardi A. Why always lysine? The ongoing tale of one of the most modified amino acids. *Adv Biol Regul*. 2016;60:144-150.
13. Ghosh S, Smriga M, Vuvor F et al. Effect of lysine supplementation on health and morbidity in subjects belonging to poor peri-urban households in Accra, Ghana. *Am J Clin Nutr*. 2010;92(4):928-939.
14. Mine Y, Zhang H. Anti-inflammatory effects of poly-L-lysine in intestinal mucosal system mediated by calcium-sensing receptor activation. *J Agric Food Chem*. 2015;63(48):10437-10447.
15. Patel K. Lysine. [Examine.com](https://www.examine.com/supplements/lysine/research/), updated Sep. 28, 2022. <https://www.examine.com/supplements/lysine/research/>
16. Kone BC. Nitric oxide in renal health and disease. *Am J Kidney Dis*. 1997;30(3):311-333.
17. Molehin D, Castro-Piedras I, Sharma M et al. Aromatase acetylation patterns and altered activity in response to sirtuin inhibition. *Mol Cancer Res*. 2018;16(10):1530-1542.
18. Jakimiuk AJ, Weitsman SR, Brzechffa PR et al. Aromatase mRNA expression in individual follicles from polycystic ovaries. *Mol Hum Reprod*. 1998;4(1):1-8.
19. Benefits of L-lysine & ways to avoid its deficiency. [MDhealth.com](https://www.md-health.com/L-Lysine-Benefits.html), n.d. <https://www.md-health.com/L-Lysine-Benefits.html>
20. Office of Dietary Supplements. "Carnitine." National Institutes of Health, updated Feb. 7, 2023. <https://ods.od.nih.gov/factsheets/carnitine-HealthProfessional/>
21. [https://www.askjpc.org/vspo/show\\_page.php?id=cjhNcjZWbkN5L3UxQTdl dzRER3TZz09](https://www.askjpc.org/vspo/show_page.php?id=cjhNcjZWbkN5L3UxQTdl dzRER3TZz09)
22. Civitelli R, Villareal DT, Agnusdei D et al. Dietary L-lysine and calcium metabolism in humans. *Nutrition*. 1992;8(6):400-405.
23. Chianca V, Albano D, Messina C et al. Rotator cuff calcific tendinopathy: from diagnosis to treatment. *Acta Biomed*. 2018;89(Suppl 1):186-196.
24. Shimomura A, Matsui I, Hamano T et al. Dietary L-lysine prevents arterial calcification in adenine-induced uremic rats. *J Am Soc Nephrol*. 2014;25(9):1954-1965.
25. Atanassova SS. Influence of the lysine on the calcium oxalate renal calculi. *Int Urol Nephrol*. 2014;46(3):593-597.
26. Tatta J. Ouch! Oxalates and pain. Integrative Pain Science Institute, n.d. <https://integrativepain-scienceinstitute.com/ouch-oxalates-and-pain/>
27. Cavounidis A, Uhlir HH. Crohn's disease in Niemann-Pick disease type C1: caught in the cross-fire of host-microbial interactions. *Dig Dis Sci*. 2018;63(4):811-813.
28. Justesen J, Stenderup K, Ebbesen EN et al. Adipocyte tissue volume in bone marrow is increased with aging and in patients with osteoporosis. *Biogerontology*. 2001;2(3):165-171.
29. Bull AW, Steffensen KR, Leers J et al. Activation of PPAR gamma in colon tumor cell lines by oxidized metabolites of linoleic acid, endogenous ligands for PPAR gamma. *Carcinogenesis*. 2003;24(11):1717-1722.
30. Da Costa Brum IS, Mafra D, Moreira LSG et al. Consumption of oils and anthocyanins may positively modulate PPAR-γ expression in chronic noncommunicable diseases: a systematic review. *Nutr Res*. 2022;105:66-76.
31. Wong AP, Mohamed AL, Niedzwiecki A. The effect of multiple micronutrient supplementation on quality of life in patients with symptomatic heart failure secondary to ischemic heart disease: a prospective case series clinical study. *Am J Cardiovasc Dis*. 2015;5(3):146-152.
32. Collagen and wound healing. Human BioSciences, n.d. <https://humanbiosciences.com/collagen-and-wound-healing/#:~:text=Collagen%20helps%20the%20body%20heal%20itself%20by%20preparing,to%20wound%20healing%2C%20and%20ultimately%20to%20wound%20closure>
33. Li L, Vorobyov I, Allen TW. The different interactions of lysine and arginine side chains with lipid membranes. *J Phys Chem B*. 2013;117(40):11906-11920.
34. Lysine. [Drugs.com](https://www.drugs.com/npp/lysine.html), updated Mar. 22, 2023. <https://www.drugs.com/npp/lysine.html>
35. Ammonia toxicity: Part 1. NutriStart Naturally, Aug. 28, 2013. <https://nutrystart.com/ammonia-toxicity-part-1/>
36. Swamy M, Zakaria AZ, Govindasamy C et al. Effects of acute ammonia toxicity on nitric oxide (NO), citrulline-NO cycle enzymes, arginase and related metabolites in different regions of rat



- brain. *Neurosci Res.* 2005;53(2):116-122.
37. Huang LW, Chang KL, Chen CJ et al. Arginine levels are increased in patients with rheumatoid arthritis. *Kaohsiung J Med Sci.* 2001;17(7):358-363.
  38. Luczak A, Madej M, Kasprzyk A et al. Role of the eNOS uncoupling and the nitric oxide metabolic pathway in the pathogenesis of autoimmune rheumatic diseases. *Oxid Med Cell Longev.* 2020;2020:1417981.
  39. Tsou PS, Lu C, Gurrea-Rubio M et al. Soluble CD13 induces inflammatory arthritis by activating the bradykinin receptor B1. *J Clin Invest.* 2022;132(11):e151827.
  40. Tharakan JF, Yu YM, Zurakowski D et al. Adaptation to a long term (4 weeks) arginine- and precursor (glutamate, proline and aspartate)-free diet. *Clin Nutr.* 2008;27(4):513-522.
  41. Castillo L, Chapman TE, Sanchez M et al. Plasma arginine and citrulline kinetics in adults given adequate and arginine-free diets. *Proc Natl Acad Sci U S A.* 1993;90(16):7749-7753.
  42. Huang J, Ladeiras D, Yu Y et al. Detrimental effects of chronic L-arginine rich food on aging kidney. *Front Pharmacol.* 2021;11:582155.
  43. Peters H, Border WA, Rückert M et al. L-arginine supplementation accelerates renal fibrosis and shortens life span in experimental lupus nephritis. *Kidney Int.* 2003;63(4):1382-1392.
  44. Chen CL, Hsu SC, Ann DK et al. Arginine signaling and cancer metabolism. *Cancers (Basel).* 2021;13(14):3541.
  45. Fox BA, Gigley JP, Bzik DJ. *Toxoplasma gondii* lacks the enzymes required for de novo arginine biosynthesis and arginine starvation triggers cyst formation. *Int J Parasitol.* 2004;34(3):323-331.
  46. Kloosterman TG, Kuipers OP. Regulation of arginine acquisition and virulence gene expression in the human pathogen *Streptococcus pneumoniae* by transcription regulators ArgR1 and AhrC. *J Biol Chem.* 2011;286(52):44594-44605.
  47. Griffith RS, DeLong DC, Nelson JD. Relation of arginine-lysine antagonism to herpes simplex growth in tissue culture. *Chemotherapy.* 1981;27(3):209-213.
  48. Meyer B. Best and worst foods for herpes. *On Diet and Health*, n.d. <https://www.ondietandhealth.com/best-and-worst-foods-for-herpes/>
  49. Gaby AR. Natural remedies for Herpes simplex. *Altern Med Rev.* 2006;11(2):93-101.
  50. Chaturvedi R, de Sablet T, Coburn LA et al. Arginine and polyamines in *Helicobacter pylori*-induced immune dysregulation and gastric carcinogenesis. *Amino Acids.* 2012;42(2-3):627-640.
  51. Maeda H, Akaike T. Nitric oxide and oxygen radicals in infection, inflammation, and cancer. *Biochemistry (Mosc).* 1998;63(7):854-865.
  52. Li H, Burkhardt C, Heinrich UR et al. Histamine upregulates gene expression of endothelial nitric oxide synthase in human vascular endothelial cells. *Circulation.* 2003;107(18):2348-2354.
  53. Kou R, Michel T. Epinephrine regulation of the endothelial nitric-oxide synthase: roles of RAC1 and beta3-adrenergic receptors in endothelial NO signaling. *J Biol Chem.* 2007;282(45):32719-32729.
  54. Kuek LE, McMahon D, Ma RZ et al. Cilia stimulatory and antibacterial activities of T2R bitter taste receptor agonist diphenhydramine: insights into repurposing bitter drugs for nasal infections. *Pharmaceuticals (Basel).* 2022;15(4):452.
  55. Bécherel PA, Chosidow O, Le Goff L et al. Inducible nitric oxide synthase and proinflammatory cytokine expression by human keratinocytes during acute urticaria. *Mol Med.* 1997;3(10):686-694.
  56. Coleman JW. Nitric oxide: a regulator of mast cell activation and mast cell-mediated inflammation. *Clin Exp Immunol.* 2002;129(1):4-10.
  57. Roberts CK, Hevener AL, Barnard RJ. Metabolic syndrome and insulin resistance: underlying causes and modification by exercise training. *Compr Physiol.* 2013;3(1):1-58.
  58. Yezovit A. This essential lysine. <http://healing.fit-leader.com/articles/lysine.shtml>
  59. Ayaso R, Ghattas H, Abiad M et al. Meal pattern of male rats maintained on amino acid supplemented diets: the effect of tryptophan, lysine, arginine, proline and threonine. *Nutrients.* 2014;6(7):2509-2522.
  60. Sulochana KN, Rajesh M, Ramakrishnan S. Insulin receptor tyrosine kinase activity in monocytes of type 2 diabetes mellitus patients receiving oral L-lysine. *Indian J Biochem Biophys.* 2001;38(5):331-334.
  61. Kalogeropoulou D, LaFave L, Schweim K et al. Lysine ingestion markedly attenuates the glucose response to ingested glucose without a change in insulin response. *Am J Clin Nutr.* 2009;90(2):314-320.
  62. Romero N, Radi R, Linares E et al. Reaction of human hemoglobin with peroxynitrite. Isomerization to nitrate and secondary formation of protein radicals. *J Biol Chem.* 2003;278(45):44049-44057.
  63. Stadler K. Peroxynitrite-driven mechanisms in diabetes and insulin resistance – the latest advances. *Curr Med Chem.* 2011;18(2):280-290.
  64. Merzon E, Green I, Shpigelman M et al. Haemoglobin A1c is a predictor of COVID-19 severity in patients with diabetes. *Diabetes Metab Res Rev.* 2021;37(5):e3398.
  65. Mirmiranpour H, Bathaie SZ, Khaghani S et al. L-lysine supplementation improved glycemic control, decreased protein glycation, and insulin resistance in type 2 diabetic patients. *Int J Diabetes Dev Ctries.* 2021;41:634-643.
  66. Lin HY, Chen CC, Chen YJ et al. Enhanced amelioration of high-fat diet-induced fatty liver by docosahexaenoic acid and lysine supplementations. *Biomed Res Int.* 2014;2014:310981.
  67. Sulochana KN, Punitham R, Ramakrishnan S. Beneficial effect of lysine and amino acids on cataractogenesis in experimental diabetes through possible antiglycation of lens proteins. *Exp Eye Res.* 1998;67(5):597-601.
  68. Elevated arginase levels contribute to vascular eye disease such as diabetic retinopathy. *ScienceDaily*, Aug. 24, 2009.
  69. Yu JX, Yin XX, Shen JP et al. Protective effects of bendazac lysine on diabetic peripheral neuropathy in streptozotocin-induced diabetic rats. *Clin Exp Pharmacol Physiol.* 2006;33(12):1231-1238.
  70. Shmerling RH. Is metformin a wonder drug? *Harvard Health Blog*, Sep. 29, 2021. <https://www.health.harvard.edu/blog/is-metformin-a-wonder-drug-202109222605>
  71. Arruda AC, Perilhão MS, Santos WA et al. PPAR $\alpha$ -dependent modulation by metformin of the expression of OCT-2 and MATE-1 in the kidney of mice. *Molecules.* 2020;25(2):392.
  72. Zhang T, Hu L, Tang JF et al. Metformin inhibits the urea cycle and reduces putrescine generation in colorectal cancer cell lines. *Molecules.* 2021;26(7):1990.
  73. Hsu WH, Hsiao PJ, Lin PC et al. Effect of metformin on kidney function in patients with type 2 diabetes mellitus and moderate chronic kidney disease. *Oncotarget.* 2018;9(4):5416-5423.

74. Rinschen MM, Palygin O, El-Meanawy A et al. Accelerated lysine metabolism conveys kidney protection in salt-sensitive hypertension. *Nat Commun.* 2022;13(1):4099.
75. Venkata VRS, Gupta R, Aedma SK. Abstract P135: Covid-19 and hypertension: pooled analysis of observational studies. *Hypertension.* 2020;76:AP135.
76. Van de Veerdonk FL, Netea MG, van Deuren M et al. Kallikrein-kinin blockade in patients with COVID-19 to prevent acute respiratory distress syndrome. *eLife.* 2020;9:e57555.
77. Davie AP, Dargie HJ, McMurray JJ. Role of bradykinin in the vasodilator effects of losartan and enalapril in patients with heart failure. *Circulation.* 1999;100(3):268-273.
78. Passwater RA. Lysine reported to halt coronaviruses: an interview with Bill Sardi. *Whole-Foods Magazine*, Mar. 18, 2021. <https://www.wholefoodsmagazine.com/articles/8667-lysine-reported-to-halt-coronaviruses-an-interview-with-bill-sardi>
79. Nurpi I. Questioning Covid. *Wise Traditions.* Summer 2021;22(2):14-23. <https://www.westona-price.org/journal-summer-2021-questioning-covid/#gsc.tab=0>
80. Rath M, Kalinovsky T, Niedzwiecki. Reduction in the frequency of arrhythmic episodes in patients with paroxysmal atrial arrhythmia with a vitamin/essential nutrient supplementation program. *Journal of the American Nutraceutical Association.* 2005;8(3):19-25.
81. Akieda-Asai S, Zaima N, Ikegami K et al. SIRT1 regulates thyroid-stimulating hormone release by enhancing PIP5K $\gamma$  activity through deacetylation of specific lysine residues in mammals. *PLoS One.* 2010;5(7):e11755.
82. Abduraman MA, Azizan NA, Teoh SH et al. Ketogenesis and SIRT1 as a tool in managing obesity. *Obes Res Clin Pract.* 2021;15(1):10-18.
83. Duparc C, André C, Ménard J et al. L-Lysine acts as a serotonin type 4 receptor antagonist to counteract in vitro and in vivo the stimulatory effect of serotonergic agents on aldosterone secretion in man. *Horm Metab Res.* 2017;49(4):269-275.
84. Vuvor F, Mohammed H, Ndanu T et al. Effect of lysine supplementation on hypertensive men and women in selected peri-urban community in Ghana. *BMC Nutr.* 2017;3:67.
85. Krajčovicová-Kudláčková M, Simoncic R, Bédárová A et al. Correlation of carnitine levels to methionine and lysine intake. *Physiol Res.* 2000;49(3):399-402.
86. Simó JM, Joven J, Vilella E et al. Impact of apolipoprotein(a) isoform size heterogeneity on the lysine binding function of lipoprotein(a) in early onset coronary artery disease. *Thromb Haemost.* 2001;85(3):412-417.
87. Robert Furchgott (1916–2009). Jewish Virtual Library, n.d. <https://www.jewishvirtuallibrary.org/robert-furchgott>
88. Ayyadurai S. How caffeine and L-Arginine combination affects your cardiovascular system. A CytoSolve Systems Biology Analysis. Vashiva, Jun. 23, 2021. <https://vashiva.com/how-caffeine-and-l-arginine-combination-affects-your-cardiovascular-system-a-cytosolve-systems-biology-analysis/>
89. Fonorow OR. The cure for heart disease: condensed. Vitamin C Foundation, 2004. <https://cardiacos.net/wp-content/uploads/ArticulosMedicos/20170813/2004---Heart-cure.pdf>
90. Wong AP, Mohamed AL, Niedzwiecki A. The effect of multiple micronutrient supplementation on quality of life in patients with symptomatic heart failure secondary to ischemic heart disease: a prospective case series clinical study. *Am J Cardiovasc Dis.* 2015;5(3):146-152.
91. Lopez-Jimenez F. L-arginine: does it lower blood pressure? Mayo Clinic, n.d. <https://www.mayoclinic.org/diseases-conditions/high-blood-pressure/expert-answers/l-arginine/faq-20058052>
92. Schulman SP, Becker LC, Kass DA et al. L-arginine therapy in acute myocardial infarction: the Vascular Interaction With Age in Myocardial Infarction (VINTAGE MI) randomized clinical trial. *JAMA.* 2006;295(1):58-64.
93. Bogle RG, Coade SB, Moncada S et al. Bradykinin and ATP stimulate L-arginine uptake and nitric oxide release in vascular endothelial cells. *Biochem Biophys Res Commun.* 1991;180(2):926-932.
94. Kingery JR, Hamid T, Lewis RK et al. Leukocyte iNOS is required for inflammation and pathological remodeling in ischemic heart failure. *Basic Res Cardiol.* 2017;112(2):19.
95. L-arginine side effects. Drugs.com, updated Jan. 11, 2023. <https://www.drugs.com/sfx/l-arginine-side-effects.html>
96. Arginine. *ScienceDirect.* <https://www.sciencedirect.com/topics/neuroscience/arginine>
97. Brownfoot FC, Hastie R, Hannan NJ et al. Metformin as a prevention and treatment for preeclampsia: effects on soluble fms-like tyrosine kinase 1 and soluble endoglin secretion and endothelial dysfunction. *Am J Obstet Gynecol.* 2016;214(3):356.e1-356.e15.
98. Tsvetkov P, Dekel S. Gene therapy: from the LabLit short story series. *LabLit*, Sep. 12, 2010. <http://www.lablit.com/article/621>
99. West LE, Gozani O. Regulation of p53 function by lysine methylation. *Epigenomics.* 2011;3(3):361-369.
100. Leung DC, Dong KB, Maksakova IA et al. Lysine methyltransferase G9a is required for de novo DNA methylation and the establishment, but not the maintenance, of proviral silencing. *Proc Natl Acad Sci U S A.* 2011;108(14):5718-5723.
101. Zur Hausen H. Papillomavirus and p53. *Nature.* 1998;393(6682):217.
102. Payen VL, Porporato PE, Danhier P et al. (+)-Catechin in a 1:2 complex with lysine inhibits cancer cell migration and metastatic take in mice. *Front Pharmacol.* 2017;8:869.
103. Davie JR. Inhibition of histone deacetylase activity by butyrate. *J Nutr.* 2003;133(7):2485S-2493S.
104. Zoncu R, Sabatini DM, Efeyan A. mTOR: from growth signal integration to cancer, diabetes and ageing. *Nat Rev Mol Cell Biol.* 2011;12(1):21-35. <https://pubchem.ncbi.nlm.nih.gov/compound/Arginine>
105. Chen RH, Chen YH, Huang TY. Ubiquitin-mediated regulation of autophagy. *J Biomed Sci.* 2019;26:80.
106. Popovic D, Vucic D, Dikic I. Ubiquitination in disease pathogenesis and treatment. *Nat Med.* 2014;20(11):1242-1253.
107. Oh HS, Oh SK, Lee JS et al. Effects of L-arginine on growth hormone and insulin-like growth factor 1. *Food Sci Biotechnol.* 2017;26(6):1749-1754.
108. Gianotti L, Maccario M, Lanfranco F et al. Arginine counteracts the inhibitory effect of recombinant human insulin-like growth factor I on the somatotroph responsiveness to growth hormone-releasing hormone in humans. *J Clin Endocrinol Metab.* 2000;85(10):3604-3608.
109. Ohshima H, Tsuda M, Adachi H et al. L-arginine-dependent formation of N-nitrosamines by the cytosol of macrophages activated with lipopolysaccharide and interferon-gamma. *Carcinogenesis.* 1991;12(7):1217-1220.

111. Jahangir E, Vita JA, Handy D et al. The effect of L-arginine and creatine on vascular function and homocysteine metabolism. *Vasc Med*. 2009;14(3):239-248.
112. Majchrzak D, Singer I, Männer M et al. B-vitamin status and concentrations of homocysteine in Austrian omnivores, vegetarians and vegans. *Ann Nutr Metab*. 2006;50(6):485-491.
113. Krajcovicová-Kudláčková M, Simoncic R, Béderová A et al. [Alternative nutrition and glutathione levels]. *Cas Lek Cesk*. 1999;138(17):528-531.
114. Ozden O, Park SH, Kim HS et al. Acetylation of MnSOD directs enzymatic activity responding to cellular nutrient status or oxidative stress. *Aging (Albany NY)*. 2011;3(2):102-107.
115. Tong TYN, Appleby PN, Bradbury KE et al. Risks of ischaemic heart disease and stroke in meat eaters, fish eaters, and vegetarians over 18 years of follow-up: results from the prospective EPIC-Oxford study. *BMJ*. 2019;366:14897.
116. Mader MMD, Czorlich P. The role of L-arginine metabolism in neurocritical care patients. *Neural Regen Res*. 2022;17(7):1446-1453.
117. Togo T, Katsuse O, Iseki E. Nitric oxide pathways in Alzheimer's disease and other neurodegenerative dementias. *Neurol Res*. 2004;26(5):563-566.
118. Chang YF, Gao XM. L-lysine is a barbiturate-like anticonvulsant and modulator of the benzodiazepine receptor. *Neurochem Res*. 1995;20(8):931-937.
119. Smriga M, Ghosh S, Mouneimne Y et al. Lysine fortification reduces anxiety and lessens stress in family members in economically weak communities in Northwest Syria. *Proc Natl Acad Sci U S A*. 2004;101(22):8285-8288.
120. Smriga M, Torii K. L-Lysine acts like a partial serotonin receptor 4 antagonist and inhibits serotonin-mediated intestinal pathologies and anxiety in rats. *Proc Natl Acad Sci U S A*. 2003;100(26):15370-15375.
121. Miyauchi S, Gopal E, Thakkar SV et al. Differential modulation of sodium- and chloride-dependent opioid peptide transport system by small nonopioid peptides and free amino acids. *J Pharmacol Exp Ther*. 2007;321(1):257-264.
122. Perraudin V, Delarue C, Lefebvre H et al. Vasopressin stimulates cortisol secretion from human adrenocortical tissue through activation of V1 receptors. *J Clin Endocrinol Metab*. 1993;76(6):1522-1528.
123. Raggenbass M. Overview of cellular electrophysiological actions of vasopressin. *Eur J Pharmacol*. 2008;583(2-3):243-254.
124. Fiori LM, Turecki G. Implication of the polyamine system in mental disorders. *J Psychiatry Neurosci*. 2008;33(2):102-110.
125. Wass C, Klamer D, Katsarogiannis E et al. L-lysine as adjunctive treatment in patients with schizophrenia: a single-blinded, randomized, cross-over pilot study. *BMC Med*. 2011;9:40.
126. Best C, Zaghoulani H. Oral lysine treatment of experimental autoimmune encephalomyelitis [abstract]. University of Missouri-Columbia, Office of Undergraduate Research, 2007. <https://mospace.umsystem.edu/xmlui/handle/10355/1565>
127. Ntranos A, Casaccia P. Bromodomains: translating the words of lysine acetylation into myelin injury and repair. *Neurosci Lett*. 2016;625:4-10.
128. Savaş HA, Herken H, Yürekli M et al. Possible role of nitric oxide and adrenomedullin in bipolar affective disorder. *Neuropsychobiology*. 2002;45(2):57-61.
129. Xiong Y, Fru MF, Yu Y et al. Long term exposure to L-arginine accelerates endothelial cell senescence through arginase-II and S6K1 signaling. *Aging (Albany NY)*. 2014;6(5):369-379.
130. Schinetsky R. Research report: current controversy: pre-workout supplements: L-arginine. Advanced Molecular Labs, Oct. 19, 2021. <https://advancedmolecularlabs.com/blogs/news/research-report-current-controversy-pre-workout-supplements>
131. Schwedhelm E, Maas R, Freese R et al. Pharmacokinetic and pharmacodynamic properties of oral L-citrulline and L-arginine: impact on nitric oxide metabolism. *Br J Clin Pharmacol*. 2008;65(1):51-59.
132. Why athletes should consider lysine supplementation. *Quantum Health*, Oct. 16, 2020. <https://quantumhealth.com/blog/post/why-athletes-should-consider-lysine-supplementation>
133. Tomblin FA Jr, Lucas KH. Lysine for management of herpes labialis. *Am J Health Syst Pharm*. 2001;58(4):298-300, 304.
134. Binet Q, Dufour I, Agneessens E et al. The second case of a young man with L-arginine-induced acute pancreatitis. *Clin J Gastroenterol*. 2018;11(5):424-427.
135. Saka M, Tüzün A, Ateş Y et al. Acute pancreatitis possibly due to arginine use: a case report. *Turk J Gastroenterol*. 2004;15(1):56-58.
136. Al-Malki AL. Suppression of acute pancreatitis by L-lysine in mice. *BMC Complement Altern Med*. 2015;15:193.
137. L-arginine for testosterone. *Supplements in Review*, Jul. 19, 2016. <https://supplementsinreview.com/testosterone/l-arginine-testosterone/#human-research>
138. Roberts CT Jr. IGF-1 and prostate cancer. *Novartis Found Symp*. 2004;262:193-199.
139. Liu L, Wang X, Liu K et al. Inhibition of inducible nitric oxide synthase improved erectile dysfunction in rats with type 1 diabetes. *Andrologia*. 2021;53(8):e14138.
140. Wang W, Yang M, Kenfield SA et al. Nut consumption and prostate cancer risk and mortality. *Br J Cancer*. 2016;115(3):371-374.
141. L-arginine. Mayo Clinic, Feb. 4, 2021. <https://www.mayoclinic.org/drugs-supplements-l-arginine/art-20364681>
142. Giraldele CMM, Zappellini A, Muscará MN et al. Effect of arginine analogues on rat hind paw oedema and mast cell activation in vitro. *Eur J Pharmacol*. 1994;257(1-2):87-93.
143. Radak Z, Naito H, Taylor AW et al. Nitric oxide: is it the cause of muscle soreness? *Nitric Oxide*. 2012;26(2):89-94.
144. Morgan CVJ, Babbedge RC, Gaffen Z et al. Synergistic anti-nociceptive effect of L-NG-nitro arginine methyl ester (L-NAME) and flurbiprofen in the mouse. *Br J Pharmacol*. 1992;106(2):493-497.
145. Cinelli MA, Do HT, Miley GP et al. Inducible nitric oxide synthase: regulation, structure, and inhibition. *Med Res Rev*. 2020;40(1):158-189.
146. Abramson SB. Nitric oxide in inflammation and pain associated with osteoarthritis. *Arthritis Res Ther*. 2008;10 Suppl 2(Suppl 2):S2.
147. Jakobsen SE. Nordic Stone Age diet was dominated by fish. *ScienceNordic*, Apr. 9, 2018. <https://sciencenordic.com/food-and-diet-forskningno-society—culture/nordic-stone-age-diet-was-dominated-by-fish/1455288>
148. Morris SM Jr. Arginine metabolism: boundaries of our knowledge. *J Nutr*. 2007;137(6 Suppl 2):1602S-1609S.

# Eggs in Midday Meal Scheme in Karnataka, India: The Science and the Propaganda

By Dr. Sylvia Karpagam

**P**roteins are the major structural component of muscle and other tissues, as well as compounds important for hormone, enzyme and hemoglobin synthesis. The building blocks of protein are amino acids; “essential” amino acids are those that the body cannot make—they must come from the diet.

Good-quality protein foods, such as eggs, contain all nine essential amino acids that are digestible as well as bioavailable.<sup>1</sup> The high-quality proteins in eggs and milk are often a reference to assess the protein quality of other foods. In comparison, proteins from plants are of poorer quality because they do not contain all the essential amino acids, unless used in the right combination, and they are less digestible and less bioavailable.



## NUTRITIONAL AND OTHER BENEFITS OF EGGS FOR CHILDREN

Children require more protein per unit of body weight than do adults. The new tissues like muscle and bone that are laid down during growth are largely built from amino acids drawn from dietary proteins. Of the twenty grams per day of protein recommended for children in the four- to six-year age group, one egg per day can provide almost 40 percent (eight grams) of the high-quality protein needed.

In addition, eggs are an excellent source of important micronutrients. For example, of the one hundred recommended micrograms ( $\mu\text{g}$ ) per day of total folate (vitamin B<sub>9</sub>), one daily egg can provide almost 47 percent, and of the recommended one microgram per day of vitamin B<sub>12</sub>, one sixty-gram egg can provide 110 percent (1.1  $\mu\text{g}$ ). One egg provides two hundred fifty-two micrograms (63 percent) of the recommended four hundred micrograms per day of vitamin A. Eggs also contain choline—important for brain development and cell function—as well as essential fatty acids that can reduce the risk of heart disease, depression and learning difficulties.

Randomized controlled trials have demonstrated the benefits of egg consumption beginning in infancy. In a 2015 study in Ecuador, published in the journal *Pediatrics*, infants ages six to nine months who consumed one egg per day for six months showed increased length-for-age and weight-for-age scores compared to a control group of children who did not consume daily eggs, as well as a reduced prevalence of stunting and underweight.<sup>2</sup> In another study with undernourished twelve- to eighteen-month-olds in Bangladesh, daily supplementation with one egg along with cow's milk improved linear growth in already stunted children and was also beneficial for children at risk of stunting.<sup>3</sup>

## AN EGG A DAY. . . IN SCHOOL

In certain states, school lunches in India date back to the mid-1920s.<sup>4</sup> In 1995, the government of India launched the first national primary school lunch program, renaming it in 2007 the National Programme of Mid Day Meal in Schools, or simply the “Mid-Day Meal (MDM) Scheme.” The current iteration of the program—

the largest such program in the world, serving nearly one hundred eighteen million children in 2021<sup>5</sup>—is mandated under the 2013 National Food Security Act (NFSA).<sup>6</sup> The act stipulates that every child in the six- to fourteen-year age group (classes I to VIII) who enrolls and attends school shall be provided with a hot cooked meal furnishing four hundred fifty calories and twelve grams of protein for primary school children, and seven hundred calories and twenty grams of protein for upper primary; the meals are to be provided free of charge and every day, except on school holidays.<sup>4</sup> The program has multiple educational and nutritional objectives, including “to increase school enrolment and attendance, decrease dropout rates, promote good health through nutritional foods and increas[e] learning ability of children.”<sup>7</sup>

Unfortunately, levels of stunting and malnutrition remain high in many states of India, reflecting widespread nutrient deficiencies, and the Covid pandemic and lockdowns aggravated these problems.<sup>8</sup> Fifteen percent of India's disease burden, according to one estimate, is due to child malnutrition.<sup>9</sup> Giving children a daily nutrient-dense food like eggs can address several of the deficiencies to which children are vulnerable. If, along with eggs, the program provides children with milk and other dairy products, meat, ghee or butter, sprouted legumes or pulses (as thick preparations in a one-to-three ratio with cereal grains or millets) and vegetables, it could go a long way toward addressing many nutritional deficiencies.

At the very least, there is a need to promote children's daily consumption of one or two full eggs. Studies like the clinical trials conducted in Ecuador and Bangladesh confirm that giving children even just one egg a day, whether in pre-school or primary school, makes both practical and nutritional sense. India's National Institute of Nutrition recommends “egg as a complete food for children.”<sup>9</sup> Eggs are easy to store and transport, less prone to adulteration, pilferage and corruption, and can be produced locally in the communities where the schools are located. An egg also has the virtue of having a small volume, which means children can readily eat it whole as a boiled egg—ideally with good-quality salt—or prepared in other ways such as in an

Giving children a daily nutrient-dense food like eggs can address several of the deficiencies to which children are vulnerable.

When eggs are provided as part of a school's midday meal, school attendance improves, and children enjoy their food more and eat more.

omelette. Even if a child eats small portions, a large part of their nutritional needs will be met if eggs are added to the diet. Moreover, there is evidence that when eggs are provided as part of a school's midday meal, school attendance improves, and children enjoy their food more and eat more. As one researcher puts it, eggs are “a very efficient way of packing a lot of protein into something that is small, affordable, easy to transport and cook,” making it “a perfect little package of nutrients.”<sup>5</sup>

According to the fifth round of the National Family Health Survey (NFHS) conducted from 2019 through 2021,<sup>10</sup> in the state of Karnataka, many children are not reaching their ideal height and weight. In children under age five (that is, before they start their school life at six years of age), the Karnataka survey documented a prevalence of stunting (lower height for age) of 35.4 percent and a prevalence of underweight (lower weight for age) of 32.9 percent.<sup>11</sup> These problems are even more pronounced in children from vulnerable communities.

In 2021-22, the Government of Karnataka's Department of Public Instruction contracted with the Karnataka State Rural Development and Panchayat Raj University-Gadag to conduct an impact assessment to study the provision of supplementary nutrition in Yadgir district (with Gadag district serving as the control). Yadgir's students were given eggs and bananas on alternate days as part of the midday meal scheme. The assessment found that 98 percent of schoolchildren in Yadgir consumed the eggs and showed an overall increase in weight.<sup>12,13</sup>

#### OPPOSITION TO EGGS IN THE MIDDAY MEAL SCHEME

Eggs, already eaten by a majority of children in India's government schools, are a very well-accepted food culturally. Students, parents and grandparents—especially in traditionally marginalized communities—are aware of the benefits of eggs, and since they themselves may not be able to afford eggs every day, they strongly value distribution of eggs as part of schools' midday meal.<sup>14</sup>

In Karnataka, a survey showed that as early as 2006, more than 86 percent of children in government and government-aided schools wanted

eggs as part of the midday meal scheme, but this was put on hold because of opposition from religious leaders. The reasons for this resistance are based neither on science nor on tradition. Despite the known benefits of providing eggs and the fact that many children studying in government and government-aided schools already eat eggs at home, religious groups have continued to mount stiff opposition to the distribution of eggs in the school lunches since that time.<sup>15</sup>

Some religious groups, such as the International Society for Krishna Consciousness (ISKCON), promote *sattvic* foods (fresh fruits and vegetables, whole grains, legumes, nuts) and label nutrient-dense foods that are eaten by many marginalized communities in India—including meat, fish, eggs, onion, garlic and mushroom as well as milk products from the buffalo and goat—as inferior, forbidden or *tamasic*.<sup>16</sup> Underlying Ayurveda and Yoga, there are three principal concepts or *gunas*: *sattva* (“balance and harmony”), *rajas* (“activity and movement”) and *tamas* (“inertia, darkness and dullness”).<sup>17</sup>

The Akshaya Patra,<sup>18</sup> an initiative of ISKCON, has been given the contract for the midday meal scheme in many government and government-aided schools in the country.<sup>5</sup> Downplaying the fact that the organization receives government funds for the scheme, it projects itself as a charity that “feeds poor children,”<sup>19</sup> thus collecting huge donations that are largely unaccountable.

Other religious groups opposed to eggs claim that the school lunch program should not tamper with “traditional eating practices.” They also argue that providing eggs in the midday meal scheme is discriminatory toward those vegetarian children in the school who do not eat eggs, especially as they feel that there are several vegetarian alternatives available.


After the results of 2021-22 assessment in Yadgir district became known, with 98 percent of schoolchildren consuming the eggs provided in the district's midday meal, a circular was issued announcing the decision to provide eggs in schools in six additional districts that had severe nutritional deficiencies (Ballari, Bidar, Kalaburagi, Koppal, Raichur and Vijayapura).<sup>7</sup> Again, however, there was immediate opposi-

tion from leaders of religious communities such as the Rashtriya Basava Dal, Lingayat Dharma Mahasabha and Akkanagalambika Mahila Gana, which claimed that eggs would have “ill-effects on the well-being of a child” and argued that “[p]roviding non-vegetarian food in government schools affects the harmony in schools.”<sup>77</sup>

On the other hand, some religious leaders from these same groups do not oppose eggs in the scheme. Lingayat leader S.M. Jamdar of the Jagathika Lingayat Mahasabha (JLM) community stated, “[V]egetarian students will be provided bananas and non-vegetarian students will be provided eggs. There is nothing wrong in this, and I want to make it clear that the JLM is not opposed to this.”<sup>77</sup> Describing the written *vachanas* that form the basis of the Lingayat tradition, an author and activist stated, “From my reading of the *vachanas*, I have not discerned any opposition to meat-eating.”<sup>77</sup>

Understanding caste and “systemic inequality” in this context is important.<sup>5</sup> Those who claim to be vegetarian often have more power and influence over decision-making because they come from the dominant or oppressor caste groups. Many myths surround “vegetarianism” in India; although 39 percent of the population claim to be vegetarian, definitions of the practice vary widely.<sup>5,20</sup> Thus, the vegetarianism observed by the oppressor caste groups features diverse foods that include milk, butter, ghee, other dairy products, pulses, nuts, sprouts and vegetables, whereas the food-related policies pushed on the poor and oppressed caste groups often emphasize cheap vegetarianism, with a disproportionate focus on cereal grains and millets. Moreover, although most of those who identify as egg- and meat-eaters belong to the oppressed or marginalized caste groups, their actual consumption of those foods may be minimal due to economic reasons or political pressures, which make these foods more inaccessible and unaffordable. Thus, these groups are more likely to be poor and malnourished.

In short, it is important to understand the wider politics around the egg controversy in the school midday meal program. As one news account puts it, “The agenda of faith-based organizations and . . . groups imposing vegetarianism is antithetical to the objective of [the midday

meal] scheme, which is to deliver nutritious meals to students.”<sup>75</sup> Children in government and government-aided schools should be given the choice to consume eggs. This would be a crucial intervention given the growing malnutrition in the country. Science, and possibly tradition, should influence eating choices, not religion or propaganda. 

*Dr. Sylvia Karpagam is a public health doctor and researcher based in India who works on nutrition and other social determinants of health.*

## REFERENCES

1. Allbritton J. Eat your eggs and have your chickens, too! Motivation for having your own backyard flock. *Wise Traditions*. Summer 2008;9(2):70-76.
2. Iannotti LL, Lutter CK, Stewart CP et al. Eggs in early complementary feeding and child growth: a randomized controlled trial. *Pediatrics*. 2017;140(1):e20163459.
3. Mahfuz M, Alam MA, Das S et al. Daily supplementation with egg, cow milk, and multiple micronutrients increases linear growth of young children with short stature. *J Nutr*. 2020;150(2):394-403.
4. Mathur B. National nutrition month: 10 things to know about India’s Mid-Day Meal Scheme, world’s largest school feeding program. NDTV-Dettol, Sep. 13, 2019.
5. Jain M. Faith vs. nutrition: India’s school meals program walks on eggshells. *Devex*, Feb. 26, 2022.
6. National Food Security Act, (NFSA) 2013. Department of Food & Public Distribution, Government of India. <https://nfsa.gov.in/portal/NFSA-Act>
7. Sayeed VA. Vegetarian extremism in Karnataka: Lingayat groups against eggs in schools. *The Hindu/Frontline*, Dec. 31, 2021.
8. Mid-day meal plan struggles to feed India’s hungry students. BBC, Apr. 22, 2022.
9. Suri S. Caught in controversy, superfood eggs can help India fight stunting, malnutrition. News18, Dec. 14, 2021. [https://www.researchgate.net/publication/358532653\\_Caught\\_in\\_Controversy\\_Superfood\\_Eggs\\_Can\\_Help\\_India\\_Fight\\_Stunting\\_Malnutrition](https://www.researchgate.net/publication/358532653_Caught_in_Controversy_Superfood_Eggs_Can_Help_India_Fight_Stunting_Malnutrition)
10. National Family Survey 2019-2021. India, 2019 – 2021. The World Bank, May 12, 2022. <https://microdata.worldbank.org/index.php/catalog/4482>
11. International Institute for Population Sciences. National Family Health Survey (NFHS-5), India, 2019-20: Karnataka. Deonar, Mumbai (India): Ministry of Health and Family Welfare; March 2021, p. 22. <https://ruralindiaonline.org/en/library/resource/national-family-health-survey-nfhs-5-2019-21-karnataka/>
12. Badshahi R. Karnataka: Study notes weight gain in students of Yadgir after having eggs or bananas in midday meal. *Edex Live*, May 26, 2022.
13. Gururaja BR. Make provision for eggs for classes 9, 10 in midday meals: study. *Deccan Herald*, Jul. 27, 2022.
14. Karnataka: When kids ask, eggs must be given, says Department of Public Instruction. *The New Indian Express*, Jan. 23, 2023.
15. Chatterjee S. Inclusion of eggs in Karnataka midday meals triggers political row. *The News Minute*, Dec. 3, 2021. <https://iskcondesiretree.com/page/bhoga-and-kitchen-standards>
16. A guide to sattvic foods. Hale Pule Ayurveda & Yoga, n.d. <https://www.halepule.com/guides/ayurveda/sattvic-foods>
17. Akshaya Patra. ISKCON Bangalore. <https://www.iskconbangalore.org/akshaya-patra/>
18. Support Food and Education of 2 Million Children. Akshaya Patra. [https://www.akshayapatra.org/donate-to-midday-meal-programme?utm\\_source=Search-Brand&utm\\_medium=MDM-2Million&utm\\_campaign=GDN-TAPF&utm\\_content=+%&gclid=CjwKCAiA3pugBhAwEiwAWFzwdFHRsNEVIqHe4ISn480XDbV47v\\_Pi2f9E81q7KwaWB6F6411fzRxBoCd9IQAvD\\_BwE](https://www.akshayapatra.org/donate-to-midday-meal-programme?utm_source=Search-Brand&utm_medium=MDM-2Million&utm_campaign=GDN-TAPF&utm_content=+%&gclid=CjwKCAiA3pugBhAwEiwAWFzwdFHRsNEVIqHe4ISn480XDbV47v_Pi2f9E81q7KwaWB6F6411fzRxBoCd9IQAvD_BwE)
19. Corichi M. Eight-in-ten Indians limit meat in their diets, and four-in-ten consider themselves vegetarian. Pew Research Center, Jul. 8, 2021.

---

## Reading Between the Lines

---

By Merinda Teller

---

### Manufactured Citric Acid: Ubiquitous but Not Innocuous

---

This “key chemical” has never undergone any safety studies.

Every good cook knows that delicious and satisfying food involves both chemistry and artistry. Michael Pollan alludes to both in his foreword to Sandor Katz’s wonderfully encyclopedic 2012 book, *The Art of Fermentation*, describing the Korean concepts of “tongue taste” versus “hand taste.” The former refers to “the kind of cheap and easy flavors any food scientist or food corporation can produce,” while “hand taste” is “the far more complex experience of a food that bears the indelible mark—the care and sometimes even the love—of the person who made it.”<sup>1</sup>

“Tongue taste” predominates, of course, on the industrial food scene, where a scary new wave of synthetic foods is now entering the market.<sup>2</sup> Many of these newfangled lab concoctions are the result of technologies perfected by the twenty-first-century biopharmaceutical industry,<sup>3</sup> but they also build on decades of food science focused on chemical food additives that confer “cheap and easy flavors” and help products stay on shelves longer. To allay possible consumer concerns, the U.S. Food and Drug Administration (FDA) touts the “many technological, aesthetic and convenient benefits” of food additives, telling the public not to worry if they see “long, unfamiliar names” and “complex chemical compounds” on food labels.<sup>4</sup>

The innocuous-sounding “citric acid” is an additive that may fly under the radar of even the most attentive consumer. As researchers observed in *Toxicology Reports* in 2018, the “average consumer is under the impression that the added citric acid listed in the ingredients of prepared foods, beverages and vitamins is derived from natural sources such as lemons and limes,” but nothing could be further from the truth.<sup>5</sup> More accurate labeling, the writers argued, would require using the term “*manufactured* citric acid” (MCA)—but even “*manufactured*” doesn’t convey the full picture of an

additive derived from industrial-scale microbial fermentation involving degradation of carbohydrate substrates (such as corn byproducts or molasses) by a common black mold called *Aspergillus niger*. *A. niger* and its “cousins” *A. fumigatus* and *A. flavus* can be harmful to humans, especially in individuals who are mold-allergic or in suboptimal health.<sup>5</sup>

As of 2022, global production of MCA had reached over 2.8 million tons,<sup>6</sup> with 70 percent going to food and beverage applications. MCA functions as “an acidulant, preservative, emulsifier, flavorant, sequestrant [or] buffering agent”<sup>7</sup> and appears in everything from baby food to items like “pre-packaged fruits and veggies, canned or jarred foods, hummus, salsa, chicken stock, some yogurts and cheeses [and] baked goods and desserts,”<sup>8</sup> as well as in nutraceuticals and in beverages ranging from juices to soft drinks to wine. Another 20 percent of the global supply goes to the pharmaceutical industry and to cosmetic and personal care products, which makes MCA available for absorption by the skin.<sup>9</sup> “Novel pharmaceutical and biomedical applications” are fueling further “significant growth” of the citric acid market—expected to reach 3.3 million tons by 2028.<sup>6</sup> With expansion to sectors such as the “feed, electrical, textile [and] plastics industries,”<sup>10</sup> enthusiasts predict that MCA “will become a key chemical in the emerging bioeconomy.”<sup>7</sup>

This “key chemical” has never undergone any safety studies. In 1958, the FDA adopted a Food Additives Amendment to the 1938 Federal Food, Drug, and Cosmetic Act, with the amendment specifying that “any substance intentionally added to food is a food additive and is subject to pre-market approval by FDA *unless the use of the substance is generally recognized as safe* (GRAS)” [emphasis added].<sup>11</sup> Manufactured citric acid, which had been in use well before 1958, was among the additives “grandfathered” in as



GRAS, which allowed the nation's lead regulatory agency to dispense with any evaluation of MCA safety "when ingested in substantial amounts and with chronic exposure."<sup>5</sup> GRAS substances, moreover, generally come with "no quantitative restrictions as to use."<sup>12</sup>

#### FROM LEMONS TO MOLD. . . BY WAY OF PFIZER

History credits Muslim alchemist Jābir Ibn Ḥayyān—known as "the father of Arabic chemistry"—with discovering natural citric acid in the eighth century.<sup>13</sup> In the late 1700s, Swedish chemist Carl Wilhelm Scheele was the first to actually isolate citric acid from lemon juice, developing a method soon adopted in other countries for commercial production.<sup>14</sup> In the early twentieth century, however, food scientists were interested in lowering the cost of citric acid and turned their attention from citrus fruit to synthetic options.<sup>15</sup>

Pfizer brags on its website about its pioneer-

ing 1919 role in developing a process to mass-produce citric acid through mold fermentation, jubilantly stating that this achievement freed Pfizer "from dependency on European citrus growers."<sup>16</sup> Career Pfizer chemist Joseph G. Lombardino explained the breakthrough in a cheerful paper titled "A Brief History of Pfizer Central Research" published in 2000:

"From 1917 to 1929 James Currie, Pfizer's first research chemist, developed a process for producing citric acid by fermentation of sugar. Currie came from the Department of Agriculture, where he was trying to produce an American brand of Roquefort cheese by fermentation. He was not successful. He then tried to ferment sugar to produce oxalic acid but again failed. However, he noticed an interesting byproduct in this fermentation: citric acid. Currie contacted Pfizer, related his finding, was hired, and, with his assistant Jasper Kane, eventually developed a large-scale fermentation process for citric acid."<sup>17</sup>

Kane made an additional discovery in 1923, finding that less expensive molasses worked just as well as refined sugar as the substrate for microbial fermentation. By 1929, Pfizer was making ten million pounds of citric acid, "with the product taking over almost the whole market at that time"<sup>17</sup> and also becoming Pfizer's main product.<sup>18</sup> As one enthusi-

#### AND THEN THERE'S LACTIC ACID

Like citric acid, commercial "lactic acid" sounds deceptively benign—but probably isn't. Natural lactic acid is, of course, the wondrous and time-honored preservative created by bacteria during lacto-fermentation. Lactobacilli convert the starches and sugars in vegetables and fruits, and lactose in milk, into lactic acid, producing delicious ferments that make the foods more digestible and promote the growth of healthy gut flora. Manufactured lactic acid—though classified by FDA as GRAS<sup>30</sup>—is a different story. The food industry accounts for about 35 percent of global lactic acid use.

Historically, the same Swedish chemist who first isolated citric acid from lemons, Carl Wilhelm Scheele, also isolated lactic acid from sour milk. Initial attempts at industrial production of lactic acid began around the same time as for citric acid, in the late 1880s,<sup>31</sup> but with somewhat mixed results. In 1944, for example, a food scientist complained about the problem of equipment corrosion, stating "None of the materials in commercial use is entirely satisfactory."<sup>32</sup> In more recent times, as new manufacturing processes have come online, including biotech processes, production of lactic acid and its derivatives has taken off, becoming of "earnest importance" not just for the food industry but also for the pharmaceutical, cosmetics, textile and even electronics industries, among others.<sup>33</sup> For example, lactic acid is the precursor for polylactic acid (PLA), a synthetic plastic that is currently all the rage for orthopedic, dermatological and other medical applications, including implants.<sup>34</sup>

Commercial lactic acid production generally relies on one of two broad approaches: industrial fermentation or chemical synthesis. In the early 1960s, Monsanto met 40 percent of the U.S. demand for lactic acid after becoming the first company to focus in a big way on chemical synthesis.<sup>35</sup> Chemical synthesis uses substances like the synthetic additive propylene glycol (a type of antifreeze and solvent) or acetaldehyde; in a blog post titled "3 Weird Things About Acetaldehyde," the CDC describes it as carcinogenic and damaging to DNA.<sup>36</sup>

Most manufacturers prefer the less expensive fermentation method, however, which makes use of either bacteria, fungi or yeast extracts and various "cheap raw materials" or "agricultural residues" from corn or other starchy materials.<sup>33</sup> Additional source materials being explored for lactic acid production include food wastes—considered advantageous for "environmental waste management"—and glycerol, a by-product of biodiesel production.<sup>35</sup> (Consumers with food allergies have noted the impossibility of knowing where the "lactic acid" in a given food comes from.<sup>37</sup>) ADM entered the lactic acid market using industrial fermentation in the early 1990s, but as of 2017, the top three producers were Cargill, the Dutch company Corbion (producer of Purac and related "lactic acid solutions") and the Chinese firm Henan Jindan Lactic Acid Technology Co. ("Jindan").<sup>35</sup> Citing opportunities for "accelerated development," Jindan celebrates its "self-developed strain breeding system" (buttressed by twenty-eight patents) as well as the "advantages of being located in [a] main corn production area" where it can avail itself of "rich local corn resources."<sup>38</sup>

Giving the lie to the FDA’s complacency about manufactured citric acid’s GRAS status, researchers outside the FDA orbit—as well as sickened consumers—have reported numerous problems.

astic group of authors later summed up Pfizer’s success, “Two years after Currie’s discovery, industrial-level production using *A. niger* began, the biochemical fermentation industry started to flourish, and industrial biotechnology was born”; a century later, citric acid production had become a multibillion dollar industry.<sup>19</sup> As of 2017, citric acid was the “single largest chemical obtained via biomass fermentation and the most widely employed organic acid.”<sup>7</sup>

#### CARTELS, CONSPIRACIES AND CORN

Among the features of the *A. niger* mold celebrated by food chemists are its ease of handling, its high yields and its versatility—that is, its ability to “ferment various cheap raw materials,”<sup>14</sup> including not just molasses from sugar cane or sugar beets but also other carbohydrate substrates such as those derived from corn.<sup>20,21</sup> Corn refining—also called “corn wet milling”—separates the outer bran or hull, the germ and the starch-containing endosperm, yielding “hundreds” of corn products and by-products, including corn syrup, cornstarch, corn oil and alcohol.<sup>22</sup>

Although Pfizer and a Bayer subsidiary dominated the American citric acid market through the 1980s as a “duopoly,” both companies had to buy their substrate externally, “a situation that added to their costs of production.”<sup>23</sup> In 1990, first Cargill and then Archer Daniels Midland (ADM) took advantage of their status as “corn biotech firms” to enter and build a new type of citric acid market, with their integrated production model providing “economies that reduced costs of production by 5 or 10% over the traditional system.” Cargill’s plant was “the first to be able to pipe in liquid feedstock directly to its citric acid facility.”<sup>23</sup> ADM, for its part, adopted a somewhat different tactic, buying up Pfizer’s “most modern plant” and, with updates and expansion, turning it into the largest citric acid plant in the world. As a result, by December 1990, Bayer was left as America’s only non-integrated citric acid manufacturer and Pfizer was no longer a player.<sup>23</sup>

As explained in a fascinating 1998 article by agricultural economist John Connor, titled “The Global Citric Acid Conspiracy: Legal-Economic Lessons,” the “complete makeover

of the structure of ownership and production in the US citric acid market” that began in 1990 soon encouraged less than savory corporate behavior.<sup>23</sup> The U.S. later indicted ADM, Bayer, and two major Swiss citric acid producers (Jungbunzlauer and Roche) for establishing a secret citric acid “cartel” that engaged in price-fixing and set limits on output; although Cargill was not indicted, there is evidence to suggest that it, too, was an influential cartel member, albeit a less visible one. Citric acid buyers involved in the federal class action eventually received millions in settlements, but the penalties amounted to “pennies on the dollar” and left companies like ADM “at most chastened, [but] not in any sense reformed.”

In 1998 when Connor recounted his story of corporate intrigue and back-room meetings in luxury hotels, he viewed the rise of citric acid production in other countries, and especially China, as a positive trend and potential check against cartel shenanigans. Fifteen years later, China’s citric acid production has come to represent 70 percent of the world’s total volume and accounts for 60 percent of global trading volume.<sup>10</sup> Outside of China, ADM and Cargill—but not Bayer—are still in the picture as well, along with a handful of British, Swiss, Belgian and Israeli companies.<sup>6</sup>

#### FALSE COMPLACENCY ABOUT MOLD

Giving the lie to the FDA’s complacency about manufactured citric acid’s GRAS status, researchers outside the FDA orbit—as well as sickened consumers—have reported numerous problems, linking MCA to inflammatory reactions like “acid reflux, nausea, stomach pain, cramps, and. . . hives”<sup>9</sup> involving the respiratory, gastrointestinal, neurological and musculoskeletal systems.

As already mentioned, one likely trigger, especially of allergic-type symptoms characteristic of mold reactions, has to do with *A. niger* itself. Describing the absolute dearth of research on MCA safety, in 2018 a University of Illinois researcher and her coauthor published what they described as “the first scientific report revealing the potential inflammatory reactions related to ingestion of MCA,” presenting four case reports of individuals prone to experiencing symptoms

within two to twelve hours of MCA ingestion via food, beverages or vitamins.<sup>5</sup> Noting the concurrent rise of MCA use and the growing epidemic of food allergies, they hypothesized that “the potential presence of impurities or fragments from the *Aspergillus niger* in MCA is a significant difference [from natural citric acid] that may trigger deleterious effects when ingested.”<sup>5</sup> In related research, a study documented occupational asthma as a hazard of an improperly ventilated biotech plant that manufactured citric acid, where *A. niger* spores averaged one hundred times those found in the outside air.<sup>24</sup>

In the first of the four case reports, a fifty-two year-old woman who developed “debilitating” symptoms in her late thirties experienced “severe diffuse joint and muscle pain in the upper and lower extremities with associated joint swelling, abdominal bloating with cramping and feeling enervated [exhausted],” all occurring within six to twelve hours of MCA ingestion. The woman spent years making the rounds of

specialists in rheumatology and immunology, undergoing “extensive work-ups for auto-immune disease, rheumatoid arthritis, vitamin deficiencies, as well as adrenal and thyroid imbalance, all of which were negative.” It was only after extensive “trial and error” dietary modifications that she identified the commonality: the presence of citric acid. Another case described similar symptoms of severe joint and muscle pain and swelling, while the two remaining cases reported fatigue on a par with chronic fatigue syndrome as well as shortness of breath (in a man with pre-existing asthma) and swelling of a prosthetic knee.<sup>5</sup>

In all four case reports, a dose-response relationship was evident, as described in case number one:

“The extent of her joint pain, abdominal discomfort and enervation was directly correlated with the amount of MCA ingested at a given time. If she consumed a meal in which a food item contained MCA and consumed a drink in which MCA was one of the leading ingredients, her symptoms were worse and lasted longer than if she consumed a single food item in which MCA was listed as a more minor ingredient. Even pre-prepared organic foods that were free of all additives except MCA would elicit her symptoms.”

Arguing that “the ubiquitous presence of MCA and repetitive exposure to it through ingesting common foods and beverages” entails

#### THE RISE OF THE HOUSE OF PFIZER

Pfizer was founded in 1849 by two men named Charles who were cousins: chemist Charles Pfizer and confectioner Charles Erhart. As recounted by former Pfizer chemist Joseph Lombardino,<sup>39</sup> who started working for Pfizer in 1957 and later developed a blockbuster arthritis drug that “became Pfizer’s largest selling drug product at the time,” the company’s first successful nineteenth-century product was a chemical treatment for intestinal worms. During the Civil War, Pfizer sold products ranging from iodine to morphine, reaching a workforce size of one hundred fifty and achieving sales revenues of \$1.4 million by 1865.<sup>17</sup> Unless otherwise noted, the following short list of milestones comes from Lombardino.<sup>17</sup>

1936: Following its citric acid success, Pfizer becomes a top producer of vitamin C.<sup>40</sup> By the late 1940s, according to the company website, it has become “the established leader in the manufacture of vitamins.”

1944: Using the deep-tank fermentation methods pioneered for citric acid, the company achieves “another major fermentation success” during World War II—the large-scale manufacture of penicillin for U.S. troops. “[S]o much penicillin was produced that prices fell from 20 dollars to 20 cents per 100,000 Units” [emphasis in original].

1952-1953: Thanks to a clever advertising campaign by Arthur Sackler (progenitor of Purdue Pharma, the company that later aggressively markets the opioid OxyContin),<sup>41</sup> sales of Pfizer’s “broad spectrum” antibiotic Terramycin explode, accounting for 42 percent of company revenues. Pfizer builds a massive sales force that bypasses wholesalers and expands its operations to Europe.

1960: Pfizer sets and achieves a five-hundred-million dollar sales goal and moves its headquarters from Brooklyn to midtown Manhattan.

1995: Pfizer sheds its Food Science Group—a three-hundred-million-dollar division focused on “reduced-calorie bulking agents, fat replacers, flavors, food protectants and speciality ingredients”—and dedicates itself “exclusively” to the health care market.<sup>42</sup>

Twenty-first century: As the publicly traded behemoth known for drugs like Viagra, Zithromax and Zolofit<sup>43</sup> rises to pharmaceutical superstardom, a growing number of critics voice credible accusations of “persistent criminal behavior,”<sup>44</sup> ranging from fraud and racketeering to abysmal quality control to fatal products.<sup>45</sup> Beginning in 2021, the brand becomes indelibly wedded in the public mind to murderous Covid injections.<sup>46</sup>

As consumers increasingly learn to navigate the perils of Pfizer pharma, they should perhaps be grateful that the company chose to close down its involvement in the food sciences!

A loophole in federal regulations for “non-agricultural substances” allows products labeled as “organic” or “made with organic ingredients” to include GMO-derived citric acid without disclosure.

the repeat introduction “of *A. niger* proteins or byproducts. . . repeatedly eliciting an insidious low grade immune response,” the two authors hypothesized that MCA-induced inflammatory reactions might be playing a “causative role” in musculoskeletal conditions like allergic asthma, fibromyalgia, juvenile idiopathic arthritis and chronic fatigue syndrome as well as gastrointestinal conditions like irritable bowel syndrome.<sup>5</sup>

#### OTHER HIDDEN RISKS

To increase MCA production, *A. niger* has undergone “significant genetic modifications. . . resulting in genetically modified mutant variants of this mold.”<sup>25</sup> Some believe that this places the mold squarely in the category of a genetically modified organism (GMO).<sup>15</sup>

The fact that corn has become a dominant substrate for the production of citric acid also raises GMO-related issues. The corn in industrial use is likely to be GMO, but a loophole in federal regulations for “nonagricultural substances”<sup>25</sup> allows products labeled as “organic” or “made with organic ingredients” to include GMO-derived citric acid without disclosure (§205.605).<sup>26</sup>

Interestingly, the Organic Materials Review Institute (OMRI), a nonprofit organization that “supports organic integrity,” shares the government’s convoluted logic on this point. To comply with OMRI’s evaluation criteria for genetic engineering (GE) material used in organic food processing, OMRI requires citric acid producers to use a non-GE strain of the fungus (*A. niger*), but the substrate can consist of GE ingredients; according to OMRI, “the final citric acid product would be allowed as a non-GE ingredient” because the fungus “biologically transforms GE

protein in the substrate.”<sup>27</sup> It is unclear whether OMRI has taken into account the massive genetic tinkering that has turned all strains of *A. niger* into GMOs.

Some citric acid skeptics have pointed out that the omnipresent additive is also a hidden source of monosodium glutamate (MSG), which acts as an excitotoxin.<sup>28</sup> One website explains the MSG connection, adding that companies can include citric acid in products labeled as “no MSG”:

“[C]orn is soaked in water with sulfur dioxide in order to remove the corn kernel and the remaining liquor is what is used to make the citric acid. However, during this process, the corn protein gets completely degraded, and manufacturers don’t remove this remaining protein, which leads to the protein becoming hydrolyzed, which means there is now free glutamic acid, aka MSG in the citric acid. Citric acid also has the capability to react with other proteins it comes in contact with (in processed foods), thus freeing up even more glutamic acid. Because this manufactured citric acid contains MSG, it is now considered an excitotoxin.”<sup>29</sup>

In January 2019, a writer for *The Atlantic* described “What life is like when corn is off the table,” outlining the considerable challenges that one corn-allergic individual faced when trying to eliminate corn derivatives such as citric acid from her diet:

“[S]he tried to put salt on her tomatoes. (Table salt has dextrose, a sugar derived from corn.) She tried drinking bottled iced

#### CITRIC ACID IN BEVERAGES

One of the reasons Pfizer experienced booming citric acid sales right from the start was that mass production of citric acid coincided with the burgeoning popularity of citric-acid-containing soft drinks such as Coca-Cola.<sup>18</sup> As one website explains, “The sharp bite that you often get from a soft drink is often due to the addition of citric acid.”<sup>347</sup>

Some winemakers use citric acid to acidify wines “that are too basic and as a flavor additive,” but the process has the admitted drawback of “microbial instability.”<sup>348</sup>

Nowadays, sales of so-called “energy drinks” are booming, and in common brands, citric acid may be “the second leading ingredient following water!”<sup>15</sup> Manufacturers who include significant amounts of citric acid in energy drinks to extend shelf life and enhance flavor generally do not disclose the fact that citric acid “directly attacks the teeth and dissolves the enamel.”<sup>349</sup>

Homemade kombucha and other fermented beverages can provide delicious alternatives—and no synthetic citric acid needed!<sup>150</sup>



tea. (It contains citric acid, which often comes from mold grown in corn-derived sugar.) She tried bottled water. (Added minerals in some brands can be processed with a corn derivative.) She ultimately gave up on supermarket meat (sprayed with lactic acid from fermented corn sugars), bagged salads (citric acid, again), fish (dipped in cornstarch or syrup before freezing), grains (cross-contaminated in processing facilities), fruits like apples and citrus (waxed with corn-derived chemicals), tomatoes (ripened with ethylene gas from corn), milk (added vitamins processed with corn derivatives). And that’s not even getting to all the processed foods made with high-fructose corn syrup, modified food starch, xanthan gum, artificial flavorings, corn alcohol, maltodextrin—all of which are or contain derivatives of corn.”<sup>29</sup>

Unfortunately, as frequent *Wise Traditions* contributor John Moody noted in an article about citric acid, it can be tricky to ascertain whether a reaction to a food or beverage containing MCA has to do with the corn, mold or MSG.<sup>28</sup>

## THE IDEAL DIET

Citric acid is likely to remain firmly entrenched in the food and beverage industries, but scientists also have their eye on other fancy, high-tech horizons, including “engineer[ing] citric acid-based polymers with enhanced mechanical properties, nanoporous features, and unique photoluminescent capabilities.”<sup>36</sup> While the mold-based production process launched by Pfizer over a century ago is still going strong and “provides satisfactory performance,” scientists also see “room for greater improvements in increasing yield and minimizing waste by developing novel fermentation techniques and the optimization of *A. niger* using genetic manipulation.”<sup>34</sup> If any of these mad scientists are concerned about the potential health impact of their “manipulations,” they aren’t saying.

The FDA’s website on food additives helpfully explains that—heaven forbid!—“Some additives could be eliminated if we were willing to grow our own food, harvest and grind it, [and]

spend many hours cooking and canning.”<sup>34</sup> Meanwhile, *The Atlantic’s* description of life without corn notes, “The diet of someone with a severe corn allergy is in some ways the ideal diet for a certain type of foodie: fresh, local, free of preservatives and processed foods, the provenance of every ingredient intensely cataloged.”<sup>29</sup> *The Atlantic’s* punchline is, “It’s just not exactly by choice,” but the fact is that we *do* have a choice. In the face of increasingly widespread and insidious risks, we can eschew lab-engineered “cheap and easy flavors” and recognize that the “ideal diet for a certain type of foodie” is actually an ideal—and delicious—diet for everyone. ☺☺

## REFERENCES

1. Pollan M. Foreword. P. xii in Katz SE, *The Art of Fermentation: An In-Depth Exploration of Essential Concepts and Processes from Around the World*. White River Junction, VT: Chelsea Green Publishing; 2012.
2. Teller M. Fake meat and other fake foods: synthetic biology wolves in “sustainable” sheep’s clothing. *Wise Traditions*. Winter 2021;22(4):45-50.
3. Fitts CA. Pharma food with Elze van Hamelen. The Solari Report, Feb. 1, 2023. <https://home.solari.com/coming-tuesday-pharma-food-with-elze-van-hamelen/>
4. Overview of food ingredients, additives & colors. U.S. Food & Drug Administration, November 2004; revised April 2010 (content current as of Feb. 6, 2018). <https://www.fda.gov/food/food-ingredients-packaging/overview-food-ingredients-additives-colors>
5. Sweis IE, Cressey BC. Potential role of the common food additive manufactured citric acid in eliciting significant inflammatory reactions contributing to serious disease states: a series of four case reports. *Toxicol Rep*. 2018;5:808-12.
6. Top players in the citric acid market. IMARC Group, n.d. <https://www.imarcgroup.com/citric-acid-manufacturers>
7. Ciriminna R, Meneguzzo F, Delisi R et al. Citric acid: emerging applications of key biotechnology industrial product. *Chem Cent J*. 2017;11:22.
8. Levy J. Citric acid pros & cons: is citric acid harmful to the body? *Dr. Axe*, Sep. 22, 2018.
9. Citric acid, black mold, and . . . Pfizer? The history and manufacture of the popular additive. *Velle*, Nov. 10, 2022.
10. Overview of citric acid in China. OKCHEM, n.d. <https://www.okchem.com/news/overview-of-citric-acid.html>
11. FDA’s approach to the GRAS provision: a history of processes. U.S. Food & Drug Administration, FDA Science Forum, April 2006 (content current as of Jan. 4, 2018). <https://www.fda.gov/food/generally-recognized-safe-gras/fdas-approach-gras-provision-history-processes>
12. Food additive status list. U.S. Food and Drug Administration (content current as of Aug. 25, 2022). <https://www.fda.gov/food/food-additives-petitions/food-additive-status-list#abb>
13. Sheehan J. The history and use of citric acid. *Citrus Depot*, May 25, 2022.
14. Show PL, Oladele KO, Siew QY et al. Overview of citric acid production from *Aspergillus niger*. *Front Life Sci*. 2015;8(3):271-283.
15. One of the most common food additives is made with GMO fermented “mold” and GMO corn syrup. *AltHealth Works*, Apr. 22, 2023. <https://althealthworks.com/citric-acid-gmo-mold-corn-author/>
16. <https://www.pfizer.com/about/history>
17. Lombardino JG. A brief history of Pfizer central research. *Bull Hist Chem*. 2000;25(1):10-15.
18. Pfizer: the making of a global drugs giant. BBC, May 14, 2014.
19. Cairns TC, Nai C, Meyer V. How a fungus shapes biotechnology: 100 years of *Aspergillus niger* research. *Fungal Biol Biotechnol*. 2018;5:13.
20. Intratec Solutions. Technology profile: production of citric acid. *Chemical Engineering*, Dec. 1, 2021. <https://www.chemengonline.com/technology-profile-production-of-citric-acid/>

21. Xie G, West TP. Citric acid production by *Aspergillus niger* on wet corn distillers grains. *Lett Appl Microbiol.* 2006;43(3):269-273.
22. Corn wet milling. U.S. Environmental Protection Agency, 1995. <https://www3.epa.gov/ttn/chief/ap42/ch09/final/c9s09-7.pdf>
23. Connor JM. The global citric acid conspiracy: legal-economic lessons. *Agribusiness.* 1998;14(6):435-452.
24. Seaton A, Wales D. Clinical reactions to *Aspergillus niger* in a biotechnology plant: an eight year follow up. *Occup Environ Med.* 1994;51(1):54-56.
25. National Organic Program. What ingredients can be utilized in the 5% of non-organic ingredients allowed in a processed product labeled as “organic”? U.S. Department of Agriculture, n.d. <https://www.ams.usda.gov/sites/default/files/media/3%20Nonorganic%20Ingredients%20-%205%25%20Rule%20FINAL%20RGK%20V2.pdf>
26. <https://www.ecfr.gov/current/title-7/subtitle-B/chapter-I/subchapter-M/part-205/subpart-G/subject-group-ECFR0ebc5d139b750cd/section-205.605>
27. Kennedy T. GE ingredients in processing. OMRI, revised and updated Nov. 2017. <https://www.omri.org/ge-ingredients-processing>
28. Moody J. Citric acid. Is this common ingredient safe? *The Healthy Home Economist*, n.d. <https://www.thehealthyhomeeconomist.com/citric-acid-ingredient/>
29. Zhang S. What life is like when corn is off the table. *The Atlantic*, Jan. 18, 2019.
30. <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/cfrsearch.cfm?fr=184.1061>
31. <https://lactic-acid.com/history/>
32. Peckham Jr. GT. The commercial manufacture of lactic acid. *Chem Eng News.* 1944;22(6):440-443, 469.
33. Krishna BS, Nikhilesh GSS, Tarun B et al. Industrial production of lactic acid and its applications. *International Journal of Biotech Research.* 2018;1(1):42-54.
34. Narayanan G, Vernekar VN, Kuyinu EL et al. Poly (lactic acid)-based biomaterials for orthopaedic regenerative engineering. *Adv Drug Deliv Rev.* 2016;107:247-276.
35. Komesu A, Oliveira JA, Martins LH et al. Lactic acid production to purification: a review. *BioRes.* 2017;12(2):4364-4383.
36. Henley J. 3 weird things about acetaldehyde. Centers for Disease Control and Prevention, Apr. 2, 2018.
37. Holroyd R. Am I allergic to lactic acid? And what is it? *What Allergy*, Mar. 9, 2011.
38. <https://www.jindanlactic.com/intro/1.html>
39. <https://www.legacy.com/us/obituaries/nytimes/name/joseph-lombardino-obituary?pid=189192878>
40. [https://cdn.pfizer.com/pfizercom/Pfizer\\_Legacy\\_of\\_Manufacturing\\_Excellence\\_110322.pdf](https://cdn.pfizer.com/pfizercom/Pfizer_Legacy_of_Manufacturing_Excellence_110322.pdf)
41. Keefe PR. *Empire of Pain: The Secret History of the Sackler Dynasty.* New York: Penguin Random House/Anchor Books; 2021, pp. 43-45.
42. Pfizer to sell food division to Cultor. UPI Archives, Dec. 14, 1995. <https://www.upi.com/Archives/1995/12/14/Pfizer-to-sell-food-division-to-Cultor/6936818917200/>
43. Llamas M. Pfizer. Drugwatch, last modified Jan. 25, 2023. <https://www.drugwatch.com/manufacturers/pfizer/>
44. Evans RG. Tough on crime? Pfizer and the CIHR. *Healthcare Policy.* 2010;5(4):16-25.
45. Children’s Health Defense Team. Bring back the boycott: say “no” to big pharma, big banks and totalitarian control. *The Defender*, Jan. 4, 2022.
46. Latypova S. Re-reading an FD&C Act citation from Pfizer contract with a conspiracy in mind. *Due Diligence and Art*, Substack, May 16, 2023. <https://sashalatyova.substack.com/p/re-reading-an-fd-and-c-act-citation>
47. Ipatenco S. What products contain citric acid? *Healthfully*, Jul. 8, 2011.
48. <https://www.calwineries.com/learn/wine-chemistry/wine-acids/citric-acid>
49. <https://energydrinkhub.com/energy-drink-with-citric-acid/>
50. Morell SF. Kombucha like fine champagne. *Nourishing Traditions*, n.d. <https://nourishing-traditions.com/kombucha-like-fine-champagne/>

#### BERN SWISS CHAPTER



The Bern chapter had a lovely meeting with a wonderful pot luck meal, and discussed a wide range of topics: raw milk, effective microorganisms, vaccines, Covid and the importance of strengthening the immune system through real traditional foods the WAPF way. Our apologies to WAPF member Roland Braendle (right), presenting on effective microorganisms, who was inadvertently cropped out of the photo in the Winter 2022 issue!

# Homeopathy Journal

## SUMMERTIME REMEDIES

By Lynn Wagner, CCH, RSHom(NA)

Homeopathy is well-known for its effectiveness in complicated and chronic conditions, but an often-overlooked application for homeopathic remedies is first aid. Summertime has its own unique first-aid challenges, including bee stings, insect bites, digestive problems, sunburn and even heatstroke. Keeping a few well-chosen homeopathic remedies on hand will ensure you are prepared for whatever summer may bring.

### BITES AND STINGS

Outdoor activities and summertime go hand in hand, but spending time outdoors is also associated with bug bites and especially bee stings. Typically, treatment of stings focuses on controlling potential allergic reactions.<sup>1</sup> Of course, those with specific allergies to bites or stings should (if advised) carry an epinephrine auto-injector whenever they are likely to be exposed to insects,<sup>2</sup> but for the rest of us, we can certainly benefit from a carefully selected homeopathic remedy to reduce pain from bites or stings.

Bee and wasp sting reactions are a result of injected venom, while insect bite reactions are usually due to allergens in the saliva of the insect.<sup>2</sup> Homeopathic remedies address painful symptoms such as swelling and redness regardless of their cause while also speeding healing. The most well-known remedy for bee stings is *Apis mellifica*. *Apis* is indicated for pain involving burning, stinging and soreness, and when the sting is very sensitive to touch. There is marked redness and swelling. The person affected is usually excited, restless and very talkative while feeling worse with heat and better with cool air.

If *Apis* doesn't seem to fit the situation, a second remedy to consider is *Ledum palustre*. *Ledum* is used for stings as well as all types of insect bites, including mosquito bites. While

a bite indicating *Apis* will be red and warm, a bite requiring *Ledum* will feel cooler or even cold to the touch, and the person affected may be drowsy or quiet. Any motion tends to make things worse.

A third remedy to have on hand for bites is *Staphysagria*, which is appropriate when the person who has been bitten or stung feels indignant and persecuted. Much stinging and burning as well as terrible itching will be associated with a *Staphysagria* bite.

I once observed how effective the *Apis* remedy can be at a Fourth of July pool party. An attendee named Susan wandered too close to some trees where a wasp nest was situated. Stung on her leg, Susan let out a loud scream and ran for the house, talking nonstop about how much it hurt and how it was going to swell up and be painful for days. Luckily, I had a container of *Apis* pillules in my purse, which I quickly grabbed, offering her a dose. She took the *Apis* without really thinking about it, being far more interested in locating the baking soda for her throbbing sting. However, before I could even get across the room to return the *Apis* to my bag, Susan abruptly stopped complaining and looked up with a surprised expression on her face. She exclaimed, "It doesn't hurt anymore," and then happily rejoined the party. This quick resolution of her pain from the wasp sting had never happened before; prior stings had always hurt her for days.

### POISON IVY

Walking outdoors offers us an opportunity to exercise and get lots of fresh air—and encounter lots of poison ivy! While some people are hardly bothered by this toxic plant, others can be debilitated by just the slightest contact. Poison ivy dermatitis resulting from contact with poison ivy, oak or sumac is a common form

An often-overlooked application for homeopathic remedies is first aid.

of allergic contact dermatitis that affects millions of people in the United States every year and results in an estimated forty-three thousand emergency department visits annually.<sup>3</sup> Fast treatment is key to a speedy recovery. In addition to a thorough washing of any affected parts as well as laundering all clothes that may have been in contact with the plant, the appropriate homeopathic remedy can significantly ease suffering.

Initial symptoms of poison ivy dermatitis are discomfort and marked itching, as well as the formation of blisters. Depending on the location of these eruptions, affected individuals may also suffer from limitations in activities of daily living such as sitting or walking, or even find their symptoms interfering with mental concentration.<sup>3</sup>

The top two homeopathic remedies used for poison ivy are *Anacardium orientale* and *Rhus toxicodendron*, with *Rhus tox* being the better known and more easily obtained of the two. *Rhus tox* works very well for skin eruptions experienced as intense itching and prickling—almost a crawling feeling—especially of the face and hands. There is restlessness and much stinging and pain, which is better with warm baths. *Anacardium orientale* also has painful

red eruptions and blisters and intense, voluptuous itching. The blisters often occur more toward the left side of the neck and torso.

If neither remedy is effective, another one to try is *Sulphur*, which is most appropriate when the skin is hot, red, itchy and worse for any sort of heat. Later stages of the condition may benefit from the remedy *Graphites*, which is helpful when the skin has crusted and is oozing. *Graphites* eruptions are predominantly in folds of the skin such as inside the elbows and knees.

#### FOOD POISONING

Acute gastrointestinal illnesses are extremely common throughout the world, second only to acute upper respiratory tract illnesses.<sup>4</sup> Summertime means warm weather, outdoor eating and less access to refrigeration—often a recipe for food spoilage. Rates of gastroenteritis increase during hot summer months. Symptoms include abdominal pain, nausea, diarrhea, vomiting and exhaustion.<sup>4</sup>

Luckily, having a few key remedies on hand can assist you in getting through the worst of the problem. *Arsenicum album* is a key remedy to rely on for many types of foodborne illnesses. The person needing *Arsenicum* is anxious, weak and may have burning pains or burning diarrhea. They do not want to be left alone. Predominantly chilly, they are thirsty for sips of water and nearly all symptoms are worse at night, especially after midnight.

When the symptom picture is mainly diarrhea—especially watery, profuse, offensive and exhausting diarrhea with cramps that are better after stools—*Podophyllum* is a more appropriate remedy choice. A third option for digestive issues is the remedy *Veratrum album*, indicated when there is icy coldness throughout the body and odorless diarrhea, with

#### TOP TEN REMEDIES FOR SUMMER MALADIES

**ANACARDIUM ORIENTALE:** Poison ivy with incredibly itchy rashes with yellow blisters; the skin is much worse after scratching.

**APIS MELLIFICA:** Bee stings with itching, burning and stinging or pricking, almost like hot needles; much redness, puffiness and restlessness.

**ARSENICUM ALBUM:** Stomach pains with burning and diarrhea that are worse at night, especially after midnight; person is thirsty for sips of cold water.

**BELLADONNA:** Burning heat with throbbing pain, especially headaches after prolonged and unsafe exposure to the sun; red dry skin and dilated pupils. Seek emergency care for suspected heatstroke.

**CALENDULA OFFICINALIS:** Available in lotion form to promote soothing and healing of minor skin irritations, including burns and insect bites.

**CANTHARIS:** Important remedy for burns with inflammation and smarting, intense pains, especially if blisters are present.

**LEDUM PALUSTRE:** Effective with insect stings and most insect bites where the skin is puffy but cool to the touch; the injury does not feel better with warmth.

**PODOPHYLLUM:** Summer diarrhea with a weak empty feeling and gurgling in the abdomen; profuse but painless stools.

**RHUS TOXICODENDRON:** Poison ivy (or poison oak or sumac) remedy for red rashes with itching, burning and swelling, potentially involving numbness and stiffness. The person is unable to rest in any position.

**URTICA URENS:** Remedy for minor burns and hives; stinging, itching and burning of the skin, which may have raised red welts.



exhaustion, fever and vomiting, including projectile vomiting or vomiting and diarrhea at the same time.

## SUNBURN AND SUNSTROKE

Too much of a good thing can be problematic, especially when it comes to summer sun. The best and simplest approach is always prevention. Nevertheless, sunburn is a common occurrence and can result in a most uncomfortable situation. Most medical diagnoses of sunburn do not result in a sunburn-specific treatment,<sup>5</sup> and leave people with the discomfort and pain. Homeopathy can quickly and effectively address the symptoms of sunburn.

*Urtica urens*, a remedy made from the stinging nettle plant, is an excellent remedy for minor burns. It is very effective when the person has a stinging, burning or itching feeling anywhere on the body. *Urtica* is also available in a tincture form that can be added to cooled water and sponged on the skin for additional soothing. A second choice is once again the *Apis* remedy, which reappears here as an effective aide in treating the burning and redness of sunburn. In this case, the skin is typically very hot and dry, possibly with edema, a stinging rash and a marked lack of thirst. *Cantharis* is a third excellent option and indicated in cases with more severe burns, especially with blisters present. The pain is much better for cold applications. These three remedies will help remove the pain and burning, while application of a first-aid cream or lotion made with *Calendula officinalis* can help speed healing of the affected skin.


Unfortunately, overexposure to summer heat can result in more than just sunburn. Heat exhaustion, a relatively mild form of heat-related illness, is defined as having a core body temperature of less than one hundred four degrees, but the person is no longer able to go about daily activities. Symptoms include flushed skin, muscle cramps, headache, dizziness, nausea, exhaustion and fainting.<sup>6</sup> Children are particularly prone to heat-related illness.

Heatstroke, a more severe form of heat-related illness that can develop slowly over a few days, is characterized by a core body temperature exceeding one hundred four degrees. It is often seen in the elderly. It may also appear suddenly due to overexertion—seen predominantly in younger active people. In addition to the milder symptoms already mentioned, there may be a racing heartbeat, confusion, agitation, irritability, slurred speech and even seizures. Treatment should begin with moving the affected person to a shaded, cooler environment, giving fluids and encouraging rest. Fans and ice packs or cooling towels are key.<sup>6</sup> While homeopathy can assist in recovery of milder forms of heat-related illnesses, heatstroke is a true emergency; if it is suspected, homeopathic remedies can be administered every fifteen to twenty minutes on the way to emergency care but never in place of emergency care.

Heat-related illness that results in dilated pupils, burning hot but extremely dry skin and a throbbing head indicates the remedy *Belladonna*. This person also often has a red face, may be irritable and feels much worse lying down. A person who would benefit from the remedy *Glonium* often also has a fullness and throbbing in the head. The head actually feels too large or heavy and painful. The throbbing feeling can

be felt throughout the body, and notably in the heart area, and they feel much better in open or fresh air. A third remedy that may be helpful is *Natrum carbonicum*, especially in cases with severe headaches, marked weakness and a pale face with bluish rings around the eyes.

## A WONDERFUL TOOL

In minor first-aid situations, homeopathy is often used alone to assist healing, and as we have seen, it can also be an excellent complementary treatment alongside other measures. Having a special set of homeopathic remedies on hand for use in emergency situations is a wonderful tool and can be of much benefit in dealing with summertime complaints. 

*Lynn Wagner, CCH, RSHom(NA), a board member of the National Center for Homeopathy (NCH), discovered homeopathy when her young son was very ill and did not respond to traditional medical treatment. After watching him heal quickly and easily with homeopathy, she eventually left a career in finance and information technology to follow her passion and study homeopathy. She has a private practice in the Philadelphia area, where she also teaches classes. She believes consumers should be knowledgeable about all of the healthcare options available to them.*

See our many other articles on homeopathy: [westonaprice.org/homeopathy/](http://westonaprice.org/homeopathy/).

## REFERENCES

1. Pucca MB, Cerni FA, Oliveira IS et al. Bee updated: current knowledge on bee venom and bee envenoming therapy. *Front Immunol.* 2019;10:2090.
2. Singh S, Mann BK. Insect bite reactions. *Indian J Dermatol Venereol Leprol.* 2013;79(2):151-164.
3. Butt M, Flamm A, Marks JG et al. Poison ivy dermatitis treatment patterns and utilization: a retrospective claims-based analysis. *West J Emerg Med.* 2022;23(4):481-488.
4. Guerrant RL, Hughes JM, Lima NL et al. Diarrhea in developed and developing countries: magnitude, special settings, and etiologies. *Rev Infect Dis.* 1990;12 Suppl 1(Suppl 1):S41-S50.
5. Nowakowska MK, Li Y, Garner DC et al. Clinical settings and demographic characteristics of patients with sunburn. *JAMA Dermatol.* 2021;157(9):1122-1125.
6. Becker JA, Stewart LK. Heat-related illness. *Am Fam Physician.* 2011;83(11):1325-1330.

# Wise Traditions Podcast Interviews

## INTERVIEW WITH NAOMI WOLF PFIZER DOCUMENTS EXPOSÉ



Hilda Labrada Gore is the producer and host of our Wise Traditions podcast and a Washington, DC, co-chapter leader. An enthusiastic communicator, Hilda is passionate about wellness on every level, which is why she is known as “Holistic Hilda.” She is a speaker, podcast consultant and the co-author of *Podcasting Made Simple*. Hilda lives in Washington, DC, with her husband, children, dog and cat. Subscribe to her blog through her website ([holistichilda.com](http://holistichilda.com)) and follow her on Instagram: [@holistichilda](https://www.instagram.com/holistichilda).

HILDA LABRADA GORE: The Pfizer documents on the testing of the Covid-19 vaccine were released by court order in March 2022. A detailed analysis of the documents reveals that not only was Pfizer’s Covid-19 injection far from safe and effective, but it was intentionally designed to harm the world’s populace and impede human reproduction. Naomi Wolf, journalist, activist, CEO of the *DailyClout* and author of books such as *The Beauty Myth* and *The Bodies of Others*, walks us through the many shocking revelations of the *War Room/DailyClout Pfizer Documents Analysis Reports*, now available in book form.<sup>1</sup> Over thirty-five hundred doctors and scientists participated in the project of analyzing the documents.

Naomi, the Pfizer documents were released in March 2022 to “crickets,” that is, with little to no interest from the public or the media. Why were these papers overlooked by most people? What was in them that is important for us to know?

NAOMI WOLF: These documents were released subsequent to a successful lawsuit by Aaron Siri and his firm, Siri & Glimstad. They were demanding that the U.S. Food and Drug Administration (FDA), which is the custodian of the Pfizer documents, release them all—and the judge agreed. This is fortunate because those documents are historic. They represent their record of the greatest crime in human history.

It was “crickets” when they were first released because the documents are difficult to understand—and they are voluminous. They are written in scientific language, which you need to be a specialist to interpret. There were tens of thousands of documents. I knew that we were looking at a journalistic black hole because lay journalists couldn’t understand what was in the documents, and they were going to come and go. We put out a call on Steve Bannon’s *War Room*, which is one of the examples of the many sur-

prising alliances that have been created in these crazy times. To his credit, Bannon supported us in asking for a crowdsourced interpretation of these documents. We initially got twenty-five hundred experts (now numbering thirty-five hundred)—biostatisticians, physicians, RNs, medical fraud investigators, pathologists, cardiologists, research scientists and biologists—to review the documents and to create what are now sixty-two reports, explaining to people in lay language what the documents show. The bottom line is that they show the greatest crime against humanity ever.

HG: That is a powerful statement. Let’s dive into it because people are eager to know. I’m grateful that you found this group of volunteer experts from around the world who have analyzed these papers extensively and can give us some answers. First of all, what evidence points to the fact that Pfizer knew during the clinical trials that the Covid-19 mRNA shot was harmful on a large scale or would be harmful on a large scale?

NW: That is a great question, and it matters legally, because it is one thing if they were greedy and clueless and the science changed, but it is a whole other level of criminality if they saw the harm and kept going or even intended the harm. Don’t take my word for it. The Pfizer documents reports are now in a book; you can order it and see for yourself. There is no way that anyone looking at these documents can conclude that Pfizer did not intend to murder, sterilize and maim people on a massive scale.

Let me give you a couple of examples. A month after the mass rollout in December 2020, Pfizer’s own internal data showed that the vaccines did not treat Covid and were useless. The language that Pfizer uses is “vaccine failure” and “failure of efficacy.” The documents showed that the third most likely bad thing that could happen to someone after getting injected—

again, they knew this a month after rollout—is that they would get Covid! From the beginning, these vaccines never worked as promised; they did not do what they were claimed to do. However, that did not cause this company to stop—they kept going.

Here is a second example. They knew, four months later, that the vaccines were causing heart damage in minors. They knew that thirty-five minors had sustained heart damage within a week of having been injected. They knew that, and nonetheless they pushed at that time for a medical Emergency Use Authorization (EUA) to inject minors. You have to understand what I'm saying. Their internal documents showed that thirty-five minors had been injured with heart damage, yet that was the time when they kept pushing for EUA—and they got it for minors. Four months later, after a giant summer-long campaign to inject minors, there was a press release from the government saying, "There may be an elevated risk of myocarditis." They knew, but again, they kept going.

HG: We know the big pharmaceutical companies have a financial incentive to keep pushing their products and make billions of dollars. But why would the media not make more of a stink about this once the Pfizer papers were released?

NW: In my 2022 book, *The Bodies of Others: The New Authoritarians, COVID-19 and the War Against the Human*,<sup>2</sup> I follow the money trail. Pfizer, with its ally, China, and their allies—the World Health Organization (WHO), the World Economic Forum and the Bill & Melinda Gates Foundation—bought up our media. This took place through millions of dollars from the Bill & Melinda Gates Foundation to fund "health coverage" or "Covid coverage." The *Guardian*, the BBC, NPR and all the legacy media we have learned to trust are invested in the vaccines; they took the money and, therefore, couldn't or wouldn't run anything critical about any side effects, problems or questions because the money would dry up. They also participated in smearing people like me, Dr. Mercola and Robert F. Kennedy, Jr., who tried to raise normal journalistic questions.

The other reason is our own taxpayer mon-

ey. In the 2021 Coronavirus Response and Consolidated Appropriations Act, one *billion* dollars went to overcoming vaccine hesitancy through a program to pay off trusted messengers. This was demonically brilliant. They bought up every trusted influencer in our society, including churches, synagogues, pop culture icons on Instagram, food writers, Broadway shows, tiny little dance troops in Koreatown and Columbia County tourism. I remember thinking this was weird when my synagogue sent me a "Jewish Life in the Hudson Valley" magazine with two little masked five-year-old girls on the cover. Organically, this would never happen. I began to see all of these local organizations saying, "You can't come in without a vaccine. You have to show a vaccine passport." Organically, that would never happen. They all took the money, and the money flowed like crazy up and down the food chain. It is heartbreaking.

I remember an influencer. I have known her since she was a young woman, and I knew her son. Her son was fifteen during the summer of 2021. She said, "I'm so excited. I took my son to get injected." All I did was tweet to her, "You know that the clinical trials will not be complete until 2023." She accused me of harassing her child and called me names. These are the "influencers." I'm not trying to single her out but am pointing out that it was down to that level of money flows—paying people to call other people names on Twitter. That is what happened.

It wasn't just rewards; it was also punishments. I did what I had done for thirty-five years. I called attention in June of 2021 to the fact that women were having menstrual symptoms, as eyewitness reports were communicated on Twitter. I'm a big believer that when women volunteer information—and it confirms other information that women also volunteer—that is a signal you should pay attention to. Women were reporting weird, bad things happening to their menstrual cycles. You don't have to be a weirdo hippie to know that a healthy menstrual cycle is a prime sign of a healthy woman. If your menstrual cycle is impaired, something is probably wrong. I reported on this neutrally, and I got deplatformed—but not just deplatformed—it was a global attack on my reputation on news site after news site around the world in the same

One *billion* dollars went to overcoming vaccine hesitancy through a program to pay off trusted messengers. This was demonically brilliant.

## There is a three-hundred-sixty-degree attack on human reproduction.

language, telling the same lies and distortions. This is what they are able to do now.

As we now know through other Freedom of Information Act (FOIA) requests, those reputational attacks were the result of our White House colluding with our Centers for Disease Control and Prevention (CDC), Department of Homeland Security (DHS), the Department of Justice (DOJ), the Census Bureau and all these agencies in our federal government to single out “that tweet by Naomi Wolf,” which was an accurate tweet. It is in our White House documents. There was a whole network of people unconstitutionally and unlawfully collaborating to say, “Get rid of this. Take care of this.” It was like a law enforcement “Be on the Lookout” (BOLO) advisory—like I was a criminal fugitive.

HG: Even if many people were part of a campaign of collusion to persuade the public to get this vaccine, I believe there must have been some goodhearted people in the mix. Tell me if you think this is true. Weren't there some people who simply thought, “This is best for humanity and public health”?

NW: Not at Pfizer and FDA! I haven't even begun to tell you what's in these documents, but there is a three-hundred-sixty-degree attack on human reproduction. There is a section where over 80 percent of the women who were pregnant sustained spontaneous abortion or miscarriage. There is a section where Pfizer defines “exposure to the vaccine” as inhalation, skin contact or sexual intercourse, especially at conception. In other words, a vaccinated male to an unvaccinated female is exposing her through his semen, presumably to the vaccine. They knew something bad was being transmit-

ted through vaccinated men's semen—through bodily fluids.

There is a section with a chart listing, in scientific language, twenty horrible things that can happen to women's menstrual cycles. There are tens of thousands of numbers in each category—like fifty thousand women are bleeding every single day for the rest of their lives; twenty-five thousand women have lost their menstrual cycles completely; seventeen thousand women have two periods a month. They are neutrally checking off the list of all these ruined and infertile women—and they keep going.

There is a section where they note biodistribution. They know, and they have checked. It is in their study; contrary to their messaging that “the vaccine stays in the injection site,” they knew that within forty-eight hours, it biodistributes to every organ in the body, accumulating in the lymph, the adrenals, the liver, the brain and, if you are a woman, in the ovaries. Dr. Chandler found that every time you get injected, you get more lipid nanoparticles—these industrial fats coated with polyethylene glycol (a petroleum byproduct)—in your ovaries, and there is no visible mechanism by which the body can get rid of it. You are going to have horrific fertility problems. The lipid nanoparticles traverse the placenta, so you are going to have the baby die-off that I alerted the world to some months ago. That is now being confirmed by people like Igor Chudov and Ed Dowd, the “million missing babies in Europe.”<sup>3</sup> We know the mechanism.

Respectfully, I would like to believe that this was bumbling idiots or people who didn't know the outcome, but there is no way to look at these experiments and these tables, and conclude that. Because it is not just that they

---

### SOMETHING NEW TO CELEBRATE THE TEN MILLION-DOWNLOAD MILESTONE

We are so excited to share something new with you, a kind of gift to members as we pass the milestone of ten million downloads of the podcast!

We are posting mini-episodes in the “members only” space on the westonaprice.org website. This means that when you log in, you can find short five- to ten-minute episodes that are extensions of conversations with some of our guests!

For example, on the “mini-sode” with Laura Held and Paola Brown, from episode 408 on homeopathy, Laura shared how she believes homeopathic treatments closed a gap in her teeth! And Paola offers a free course.

So, log in to the members' space on our website and take advantage of this free “bonus” content that is just for you! It's our way of saying thank you for listening and for helping us reach more people than ever before.



witnessed their injection causing death, stroke, neurological symptoms and infertility at an industrial scale, it is that they designed the experiments to ensure that they would. There is no simple way to say it.

HG: It sounds like money is not necessarily the bottom line for these companies and entities like the World Economic Forum and the WHO. It sounds like there may indeed be an agenda to depopulate or lower the world's population growth.

NW: I have to conclude that. I did some germane original reporting to answer that question; I found that China is central to the supply chain here and owns the intellectual property of these injections. Through a company called Fosun Pharmaceuticals, which is owned by the Chinese Communist Party, there is a memorandum of understanding (MOU) with BioNTech, the subsidiary of Pfizer that makes these injections. They are working with China to produce them. China produced one billion injections with this MOU through Fosun Pharma, but they didn't give them to their own population. They sent them to Western Europe and the United States. They opened fourteen manufacturing plants in Western Europe and two in the United States—one in Springfield, Massachusetts, and one in Princeton, New Jersey. In 2021, I found a Securities and Exchange Commission (SEC) filing—our own SEC—that showed a 100 percent completed tech transfer from BioNTech for this injection “to China.” Not to a Chinese person or a Chinese company—it says, “To China.” So, when you get a Pfizer injection after 2021, you are getting an injection manufactured and distributed by—and with the knowledge, ownership and decision-making about what is in the contents in the hands of—our existential adversary, the Chinese Communist Party. As my husband, who spent twelve years in military intelligence and is part of the intelligence community to some extent, with a long career in that world, pointed out to me early on, China wants our land. They want our natural resources and energy. They don't want our population.

That is the outcome in these tables, in these documents. There were forty-two thousand ad-

verse events in the three months after the rollout. Thirty-six thousand of the adverse events were in the United States. The next largest tranche was in Western Europe in order of political importance—Britain, France, Germany, Italy, Spain, Portugal, Greece—but all the adverse events combined of the other fifty-one countries add up to a tiny sliver. This is a disproportionately affecting bioweapon made by China.

HG: It makes me wonder whether placebos (or vaccines or injections of lesser potency) were given to some of the other countries because it seems like all around the world, there was a push to get vaccinated so we could all get back to normal life. Do you think that was the case?

NW: You're asking such an important question. Absolutely; but we found that you could kill and maim people by adjusting the dose. For instance, Pfizer's micrograms of the active ingredients are thirty for adults, but Moderna's is one hundred micrograms. Moderna is three times more lethal than Pfizer, according to Pfizer's own metrics. Even in the internal documents, Pfizer discontinued using one hundred micrograms as an experimental dose due to its being reactogenic, but they didn't tell the public, “If you have had the Moderna dose, stop, because it is already too much.” My mom has heart damage. She had two Moderna shots and a booster. They didn't tell her, but they knew. That is why when you say, “Is this an accident?” I'm like, “No, it is no accident. They knew one hundred micrograms was too much.”

Think about children now. The dose for a child is ten micrograms if the child is twelve to seventeen, but children who are twelve to seventeen vary hugely in size depending on whether they are a boy or a girl. You are going to give the same dose to a two-hundred-pound, seventeen-year-old quarterback male as you are to a tiny anorexic twelve-year-old female who is half his size. She could die! Small boys who are twelve could die. And you are seeing this. Think about the boys who have passed away in their sleep. They are small. They are not the big kids. Think about those news stories you have seen, “died suddenly.” Who knows why?

Then think about the next younger group,

There were forty-two thousand adverse events in the three months after the rollout. Thirty-six thousand of the adverse events were in the United States.

five through eleven years old. The dose is three micrograms. You are giving the same amount to a big eleven-year-old as you are to a tiny six-year-old. You can kill people or maim them just by not titrating the dose to their size or by giving them a different brand. If you want to take someone out, give them Moderna rather than Pfizer. It is that simple. That is why the vaccine passport thing is dangerous because if you want to take out all the mayors in blue states, or highly trained Special Forces guys, give them Moderna.

But you can also take people out through temperature and storage. This is our original reporting, and I have to say, *my* original reporting.<sup>4</sup> Remember, early on, when the very ultra-cold temperatures that this material had to be stored in were highlighted in news reports? There is a reason for that. These lipid nanoparticles coalesce at room temperature. They solidify when it gets warmer. What are human beings? They are warmer than room temperature. You inject something that is liquid because it is super cold, and then it warms up in the body and clumps or coalesces in the blood. That is zipping through the heart. There is this physiological mechanism to cause damage. We are seeing so much damage to the vasculature—thrombocytopenia, blood clots, leg clots, lung clots—this material is designed this way. They knew it for ten years. It traverses every membrane in the human body. It clots; it basically “lumps” in the body. The last thing I will say about temperature is that the guidelines for storing it have changed constantly. First, it was, “Don’t leave it out for more than two hours.” Then it was, “Don’t leave it out for more than twelve hours.”

HG: Why have they changed the amount of time that it should be cooled or allowed to be at room temperature? It is because of the characteristics, the clumping that happens more at room temperature.

NW: Think about it. It is the perfect crime. If you keep something liquid out for two hours, it is still liquid. If you leave it out longer, it is more damaging when it goes into the body.

I’m hypothesizing a little bit, because those studies have not been done. I know that it is an unstable product whose properties change with temperature. You can’t reliquefy it. Once it has been warmed, it doesn’t turn into solid again, even if you chill it. If you leave it out and it warms up, it causes a breakdown in its integrity to start out with. My expectation is that it is going to be more damaging. Leaving that aside, the change in temperature when it goes from liquid, super cold outside or in the refrigerator—the special refrigerator—into the body, which is warm, is inevitably going to cause damage, and they knew that. It’s genius.

HG: If Pfizer, the CDC, some of these other organizations that are ostensibly overseeing world health and the media are all colluding together to keep this stuff on the market, is this one reason the CDC has recommended that Covid-19 injections be added to the childhood schedule?

NW: Yes, because if you add anything to the childhood schedule, it is protected from liability. You can’t sue them in the same way. There are

more legal protections.

HG: Even if people don’t comb through the Pfizer documents themselves and maybe don’t even read the book, I think they are still starting to notice this association between the injections, clotting, heart issues, and menstrual cycle disruptions, aren’t they? What is your take on it?

NW: It is hard for me to know what is happening in the general culture because I’m still quite ostracized and excluded from the general culture. I talk to people who are already worried. I talk to people I never spoke to before I was deplatformed and smeared. Most of my audience now is alternative media, conservative media, evangelicals—the people who already had questions. I wrote a piece about this. When I am back in New York City, where I used to live, when I dip a toe into my former haunts of liberal media, liberal elite circles and liberal social circles, I find that people don’t want to talk about it. There is a lot of denial. It’s not that I’m even trying to talk about it, but I went into a



## Order Podcast Postcards

Ta-da! Unveiling our latest podcast postcard, designed by chapter leader Kristen Files from Austin, Texas! We love it and hope you will, too!

They’re FREE. Order as many as you’d like to distribute at your local farmers market, your practice, your event or your school. Just go to [westonaprice.org](http://westonaprice.org) and click on “order materials.” We’ll ship them to you free of charge. Thanks in advance for joining hands with us in getting this important health information out to the world!

bookstore, and there is not a single book—none of the respected commentators who ordinarily write about race, gender, economic justice or even medicine or science are touching the events of the last several years, let alone the lethality of this injection. I see a lot of denial.

I also see a lot of backpedaling. On the front page of the *New York Times*—two and a half years late!—there was a story about how young women are sustaining heart damage from the AstraZeneca vaccine. Two years ago, the *New York Times* reporter blocked me when she kept saying, “It is safe and effective for pregnant women.” I kept saying, “Where are those datasets? Where are they? Show them to me. I don’t see them.” She blocked me.

I see a lot of people trying to get ahead of lawsuits by saying, “Yes, maybe it is kind of unsafe.” That is not the same as doing real reporting. Who poisoned America? Who put our children at risk? Why did they do that? If they do that reporting, it comes back squarely to point at them. They took the money. They encouraged that crime, and they are probably criminally culpable as an accessory to mass murder. I can’t stress this enough.

HG: You have become allies with people who before might have seen you as *persona non grata*. Now you have joined this other camp, but you are a person who is seeking truth and speaking truth as you see it. It doesn’t mean you are discarding your former work. You saw what was happening, and you spoke about it. Suddenly, you are allied with people who think a little alternatively.

NW: I hear what you are saying, but I would gently push back against the framing of it. What is heartbreaking about this time is that I’m doing exactly what I have done for thirty-five years. I haven’t changed, but the culture and the politics around me have changed. When I wrote a book about eating disorders among young women on the rise, I was a hero. When I wrote a book about women being railroaded by industrial obstetrics and having bad birth experiences, I was a hero. When I wrote a book about female sexuality being negatively affected by the hormones in birth control pills, I was a hero. Silicone breast

implants, I’m a hero. Now that I have done the same type of reporting, saying “here is Big Pharma messing with women’s bodies again,” I call attention to it, and I’m *persona non grata*. I haven’t changed! I don’t feel like I am aligning with new people. I feel like there has been a massive cultural corruption of the landscape involving the money flow that I described. To some extent, it is also ideological. It is like, “Our guy Biden is in the White House”—this is my liberal friends I’m referring to—“Because we are good, he must be good; if he must be good, he can’t be doing anything bad.” It is that kind of reductive tribalism.

I do feel like I have always been happy to speak with everybody. Even when I was a darling of the left (until several years ago), I have never understood people’s reluctance to talk to people who disagreed with them. To me, it is exciting and important to talk to people with whom you disagree because you can learn something, or they can learn something. That is how our country is supposed to work. Before, conservatives and alt media couldn’t talk to me, but I have always been happy to talk to them.

HG: That is what I was trying to get at. You are still doing your best to wake people up to things that are dishonoring to people, especially women. People are rejecting that new you, but it is the same you! Speaking of having conversations that are difficult with folks who think differently, with all the knowledge you have, what do you say to someone who is still persuaded by the mainstream narrative and thinks the shots are helpful? What is one fact that you point out to get their attention?

NW: That is tough because I don’t try anymore to lobby people who don’t affirmatively want to come get the information. It is a heartbreaking experience. A cult mentality has set in, in the worlds of people who watch CNN and listen to NPR. These people include my loved ones. These are people who are well-educated, critical thinkers, editors, psychoanalysts and journalists. I will try to bring them a primary source piece of evidence, and they won’t even look at it. Many other people also have had this experience. That is depressing. There is no point—no matter what you show them, they will say, “That is not an authoritative source,” or they will go through the “script,” saying “You are not a doctor.” “No, I’m not a doctor, but I oversee thirty-five hundred doctors and scientists, and this is what *they* are saying.” If it is not the CDC, it doesn’t seem to matter, which is surreal because now the CDC has turned out to be completely corrupt. Their numbers are completely compromised.

That is why I feel good about this Pfizer documents material being in a book format because it takes an aggregate approach. I have a lot of loved ones who are doctors and scientists in my family. Up until 2022, they would get on family Zoom calls and read me the “overcoming vaccine hesitancy” script. I would have specific conversations with them, asking, “Do you know where the spike protein goes in the body?” I will never forget this response from my relative—I love this person, God bless him—but I heard this a lot from different doctors: “It gets digested and excreted.” I would say, “How do you know that? What evidence do you have of that?” They were assuming this. We know it does *not* get digested and excreted. It goes into every organ in your body and stays

there. I remember these demoralizing conversations in which people I loved, who were smart people with the best credentials, were reading a “script” from the National Institutes of Health (NIH). It may have been a script from the NIH, but they weren’t aware that it was a script from the NIH. All the way down—from the American College of Obstetrics and Gynecology (ACOG) to the American Medical Association (AMA) to all of the licensing boards and probably every website on which they applied to get funding for their research—this script was being presented. I am not blaming them—well, I am blaming them a little; they are scientists and doctors. They should have looked a tiny bit deeper. When has it been considered an American or post-Enlightenment value to just believe what the authorities say? Everybody knows that is a stupid idea rather than verifying it for yourself! I don’t understand what happened to this country. We all understood that principle until 2020.

HG: What keeps you hopeful? Is all hope lost? Everybody with these spike proteins all over their internal organs, and even people who haven’t gotten the shot concerned about shedding are asking, “Are we all going to be messed up?” What do you see as a hopeful point?

NW: The fertility question is a huge one. We have seen just the tip of the iceberg there. Clearly, affecting reproduction was their intent. Dr. James Thorpe, a fetal-maternal medicine specialist, has pointed out, together with Amy Kelly, our project director, who broke the story, that the lipid nanoparticles degrade the testes of baby boys in utero and degrade the Sertoli cells and Leydig cells, which are the factory of masculine hormones. We don’t know if these little boys will grow up to be fertile, but we don’t know if they will grow up to be *men*. These are little babies that weren’t even vaccinated. Their moms were vaccinated.

Babies are also ingesting lipid nanoparticles and polyethylene glycol in the breast milk of vaccinated moms. We don’t know what that is going to do to them. We know that one baby described in the Pfizer documents died of seizures after having drunk milk from a vaccinated mom. The Weston A. Price Foundation is about natural health, so you know how significant it is that breastfeeding in the pandemic fell from 34 percent of women, which is low already, to 14 percent of women. Eighty-six percent of babies are not having that primal experience of nurture from the mom’s body of this perfect food. As a former nursing mom, I can tell you that 20 percent of women don’t stop breastfeeding out of nowhere! They probably stopped because many of them are vaccinated, and their babies are having trouble with their breast milk. Understandably: it’s got a petroleum byproduct in it. We don’t know what gastrointestinal problems, allergies or physical outcomes there will be from that. To stick to fertility, we don’t know whether the lipid nanoparticles are lodging in the eggs of baby girls in utero and penetrating the baby.

We don’t know. *This* generation is dying disproportionately; Ed Dowd has confirmed widespread disability, horrible menstrual problems and heart damage. It is the next generation about which we don’t know whether they will be able to reproduce. God forbid, but from what I see, it may be that we won’t know what has happened to humanity until we

see whether the offspring of both vaccinated and unvaccinated parents can have children. It may be that only children of two unvaccinated parents who mate with children of two unvaccinated parents will be able to have children. That is a small percentage of the human population at this point.

HG: We try to offer information, like you are doing, to alert people to the gravity of the situation, so they will become wise, make some shifts in their diet and lifestyle and be fully aware of what they are taking into their body, whether through a shot or in their mouth. It all matters.

NW: I should pivot and respond to the more hopeful question you asked. You said, “How can people hope?” I sketched out the worst-case scenario. I’m moving on to how people hope. I see some beautiful things happening. I see that people are becoming skeptical of conventional medicine, seeking out herbal remedies and alternative remedies, and creating new institutions. For example, our podcast sponsor is called The Wellness Company.<sup>5</sup> They have started a new form of uncorrupted telemedicine—at least not corrupted by pharma pressure, health insurance and big hospital industry pressure. They are advising people and trying to help them get off the prescription medications they think they don’t need. That is positive. I don’t know whether that is going to be the solution, but I know that having more options to hear things from doctors that are unmediated by commercial pressures is positive.

I know that people have started unvaccinated blood banks. One is called Blessed By His Blood.<sup>6</sup> I’m sure the next thing will be unvaccinated sperm and embryo banks. Surrogacy is going to be on the rise. That is not hopeful. I’m being a futurist. I have loved ones who are vaccinated, and I pray for them nonstop—and for myself. These evil-doers designed these things to transmit by hugging and kissing. We don’t know what shedding does. My husband and I both feel sick when we are around lots of vaccinated people—and we are not alone. They are designed to shed and transmit whatever this is through breathing, sweat and human contact.

The hopeful thing is there are treatments



like Dr. McCullough's and Dr. Alexander's, though they are not cures. I'm advising people to take nattokinase. There is some suggestion that chelation-type treatments and sauna-type treatments are helpful, cleaning the lymphatic system. I sent my mom some diatomaceous earth. It cleans out your digestive tract. Of course, these are all gestural compared to the huge insult to human beings that these injections represent, but the more we understand about the injections—which is why the Pfizer documents book is important—the more real scientists and doctors can construct treatments that are effective.

Here is another victory. Four hundred and fifty million doses were trashed in Europe because no one wanted them. The WHO announced there is no point in children and teenagers taking the injections. Slowly—but also fast compared to the aggressive rollout—people at least are not taking more and not adding that to their systems.

Existentially, I have concluded this whole thing is a giant battle of good and evil. I can't understand it by sticking to a materialist analysis. As a firm believer in empirical processes, I have concluded that there is something spiritual going on. We have to choose between good and evil. This is the time in history when we have to do it—this situation forces us to.

The blessing, if there is one, is that a lot of people are turning to a higher power and spiritual practices, community, going back to church and synagogue. I believe what was unleashed upon us is so evil that it can't be described just in human terms. If enough of us have what we call in my Jewish tradition *teshuvah*—a return to righteousness or faith, or getting it together as human beings ethically—maybe God will heal us. He said he would. He said, "If my people, which are called by my name, shall humble themselves, and pray, and seek my face, and turn from their wicked ways; then will I hear from heaven, and will forgive their sin, and will heal their land" (2 *Chronicles* 7:14). I'm banking on that, but that is the best I can do.

HG: When the worst of humanity comes out, the best of humanity comes out. I have seen the same resurgence among experts I have inter-

viewed, friends and people looking for something—that solid ground on which their feet can stand. When they connect with something spiritual, it also makes them more human. There is a push not only to eliminate humanity but also to contaminate humanity and dehumanize us. One thing that bothered me the whole Covid time was everybody covering their faces. I thought, "That makes us look like robots." Something in my spirit told me this wasn't right.

NW: The intention was to deindividuate us so that anything could be done to us. I have gone back to the Old Testament, and I found out that the 1560 Geneva Bible is one of the most original translations and most accurate to Hebrew. I read Hebrew. I have been going back and looking at *Genesis*. In the original Hebrew, it is much stronger than being made in the image and likeness of God. It is something like, "I will make them to resemble me." It is like a family resemblance. It is much more intimate than "I'm putting my stamp on this clay," which is the way it has been translated in subsequent centuries. I don't know where I'm going with that, but I know that when people want to dehumanize people, they shave their heads, they cover their faces, they strip them naked, they turn them into units. They tattoo them.

People are even rethinking abortion. I'm pro-choice, whatever that means, but we—and me personally—have to rethink a society in which we throw away babies. We throw them away like they are nothing. We clean them out like nothing. As a feminist, I'm not saying, "Tell a woman what she can or can't do with her body," but maybe we can completely redesign society so that every single baby that is conceived is wanted, has a home, has someone to care for it—and every woman has somewhere safe to give birth and doesn't have to interrupt her studies. We accepted an anti-human reality even before all this happened to us.

God went, "Do you want to do it yourself? Do it yourself. Do you want to see how bad humans can be to each other? Good luck." Going back to the Old Testament, there have been times this has happened before. That is what is incredible. It feels to us like nothing this bad has ever happened. It does feel that way. In our lifetimes, nothing this bad has ever happened. I'm the granddaughter of someone who lost nine brothers and sisters in the Holocaust. I don't say that lightly. I have been rereading the book of Noah. God is like, "These people are wicked from morning until night. It is not working out. I'm going to have to destroy creation." But even when he was preparing to destroy creation, he was like, "Noah, you are a good guy. Take your wife, sons, daughters-in-law, daughters, sons-in-law, and two of each animal. Here is the ark. Build it like this. You will have three rooms. Cover it with pitch." It is so nurturing and paternal—it is so moving—because even while He was trying to bring Himself to wipe out all the creation that went astray, He was still hoping that He could save this guy and his family, and they could start over and repopulate. He was saving two of each. He couldn't bring himself to give up on us.

I'm not trying to be pointlessly optimistic, but I do feel like this is a moment in which we are called deeply to make a moral choice and live in a moral universe because that is the universe I believe God created

for us. This situation forces us to think, “What is important to me?” Deciding, “Having babies, being a family, being healthy, being independent from slavery and knowing where my food comes from is important to me.” Maybe fancy things are not important. Being able to have a glass of milk that is uncontaminated is important. It is a complete reversal of all the corruption that was already around us in our society.


I have started an institute for this. It is called Liberty House. We are bringing thought leaders, people and students together to imagine how we rebuild America. Maybe what will come out of this is a new revolution in which medicine, culture and journalism are all imploding, and we build better versions from the ground up.

HG: Charles Eisenstein said on this show that when systems crumble—and we see the things we trusted crumbling before our eyes—new things can be built. We remember what is important to us. We might have to have a resurgence of understanding the possibilities. We are capable of building and renewing our spirits and humanity in profound ways. This is a shakeup of sorts. It is going to all settle into something beautiful. That is my hope.

NW: It is up to us. It won’t settle into something beautiful without our affirmative choice.

HG: We have to make a moral choice. We have agency. People can take all the information you are putting forth or they can turn a blind eye, but you can’t say that you didn’t do your part, nor

can anyone who is on this train of trying to get helpful information out to people. You are a journalist and advocate and not a doctor, but I still want to ask, if readers could do just one thing to improve their health, what would you recommend?

NW: Sunshine! It turns out that the wisdom from before the Rockefeller-petrochemical-pharmaceutical-industrial complex took hold—fresh air, exercise, nutrition and sitting in the sun and socializing—is incredibly good for your health and your immune system. Given all the stuff that is already inside many of us, that is the advice I give my loved ones. And please tell everyone to order their *Pfizer Documents Analysis Reports* book.<sup>1</sup> Give a copy to your representative, doctor and loved ones. It is helping to change the environment of information. Thank you so much. 

*This was Wise Traditions Podcast episode 421 (May 22, 2023).*

#### REFERENCES

1. DailyClout. *War Room/DailyClout Pfizer Documents Analysis Reports*. <https://dailyclout.io/product/war-room-dailyclout-pfizer-documents-analysis-volunteers-reports-book-paperback/>
2. Wolf N. *The Bodies of Others: The New Authoritarians, COVID-19 and the War Against the Human*. All Seasons Press; 2022.
3. Pfeiffer MB. The missing babies of Europe. *RESCUE with Michael Capuzzo*, Substack, Nov. 28, 2022. <https://rescue.substack.com/p/the-missing-babies-of-europe>
4. Wolf N. Lipid nanoparticles: are they subtly changing human beings? *DailyClout*, Oct. 6, 2022. <https://dailyclout.io/lipid-nanoparticles-are-they-subtly-changing-human-beings/>
5. <https://www.twc.health/>
6. <https://www.blessedbyhisblood.com/>
7. <https://substack.com/@sashalatyova>
8. <https://substack.com/@bailiwicknews>
9. Skidmore M. Robert F. Kennedy Jr. details how the NSA was in charge of Operation Warspeed’s [sic] COVID-19 mRNA vaccines, the history of the United States bioweapons program, and why Anthony Fauci is the highest-paid government official in history. *Lighthouse Economics*, May 13, 2023. <https://mark-skidmore.com/2023/05/13/robert-f-kennedy-jr-details-how-the-nsa-was-in-charge-of-operation-warspeeds-covid-19-mrna-vaccines-the-history-of-the-united-states-bioweapons-program-and-why-anthony-fauci-is-the-highest-paid/>

#### “A MILITARY PROJECT FROM THE BEGINNING”

In addition to the valuable information assembled from the Pfizer documents and described by Dr. Naomi Wolf in this podcast, citizen researchers like Sasha Latypova<sup>7</sup> and Katherine Watt<sup>8</sup> have assembled chilling facts about the lead role played by the U.S. military in Operation Warp Speed and the subsequent “vaccine” rollout. Presidential candidate Robert F. Kennedy, Jr. has summarized these findings as follows:

“The weird thing about the pandemic was this constant involvement by the CIA, the intelligence agencies, and the military. When Operation Warp Speed made its presentation to the FDA committee called VRBPAC. When Warp Speed turned over the organizational charts that were classified at the time, it shocked everybody because it wasn’t HHS, CDC, NIH, FDA, or a public health agency. It was the NSA, a spy agency that was at the top and led Operation Warp Speed. The vaccines were developed not by Moderna and Pfizer. They were developed by NIH. . . the patents are owned 50% by NIH. Nor were they manufactured by Pfizer, or by Moderna. They were manufactured by military contractors, and basically, Pfizer and Moderna were paid to put their stamps on those vaccines as if they came from the pharmaceutical industry. This was a military project from the beginning.”<sup>9</sup>

# All Thumbs Book Reviews

*Unsettled: What Climate Science Tells Us, What It Doesn't, and Why It Matters*

By Dr. Steven E. Koonin

BenBella Books, Inc.

Climate science is one of those fields where you routinely hear that the science is settled. “Ninety-seven percent of scientists agree. . .” blah, blah, blah. Koonin shoots down the idea that science can be settled. Some scientists may agree that the climate is warming, but when you pick apart the details—asking “Why is the climate warming?” or “How serious is it really?”—there is nowhere near that level of agreement. Claiming the science is “settled” is wrong, grossly unscientific and arrogant, implying we have it all figured out. Aren’t we awesome? Maybe we need to get over ourselves.

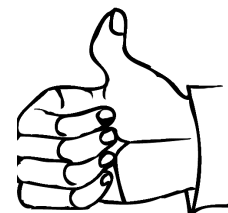
Koonin is highly qualified, having worked in industry, academia and government as an undersecretary in the Obama administration. He has spent years scrutinizing climate hysteria and the data behind it. I am an amateur compared to him, but I have looked into the subject enough to get a good feel for what is really going on. A huge breath of fresh air, the book covers the subject about as fairly and objectively as is humanly possible. And what is cool is that I learned a lot.

We’re all familiar with the frantic headlines

that tell us we need to shut down all fossil-fueled operations and choke down kale as we sit in our very hot or very cold houses, depending on the time of year. Where are the data behind this coming from? What do the data really say?

Data from the UN Intergovernmental Panel on Climate Change (IPCC) are considered the most authoritative. This is where the climate cultists claim to get their data, so Koonin focuses extensively on the IPCC data. The people who collect these data do a reasonably competent job, but then, for some reason, the data are turned over to—well, I was going to say chimpanzees, but I don’t want to insult chimpanzees. I don’t think chimpanzees could care less about climate change. You get the idea. By the time the data get to the politicians and the sock puppet media, the world’s population is gaslit into believing we are some horrible scourge on the planet, which is our fault. “You bad, bad people. How dare you?!”

A quick overview of the data shows that global temperature has increased by about one degree C over the last century. CO<sub>2</sub> has also gone up and is now a little over four hundred ppm. If it continues at its current rate, it will reach about one thousand ppm in two hundred fifty years. Doubling CO<sub>2</sub> from four hundred to eight hundred ppm would increase global tem-



## BOOK REVIEWS IN *Wise Traditions*

The Weston A. Price Foundation receives two or three books *per week*, all of course seeking a Thumbs Up review. What are the criteria we use for choosing a book to review, and for giving a Thumbs Up?

- First and foremost, we are looking for books that add to the WAPF message. Dietary advice should incorporate the WAPF guidelines while adding new insights, new discoveries and new therapies.
- We are especially interested in books on the fat-soluble vitamins, traditional food preparation methods and healing protocols based on the WAPF dietary principles.
- We look for consistency. If you talk about toxins in vaccines in one part of your book but say you are not against vaccines in another part of your book, or praise fat in your text but include recipes featuring lean meat, we are unlikely to review it.
- We do not like to give Thumbs Down reviews. If we do not agree with the major tenets expounded in a book sent to us, we will just not review it. However, we feel that we have an obligation to point out the problems in influential or bestselling books that peddle misinformation, and for these we will give a negative review. We also will give a negative review to any book that misrepresents the findings of Weston A. Price.
- If you want us to review your book, please do not send it as an email attachment. Have the courtesy to send us a hard copy book or a printout of your ebook or manuscript in a notebook or coil binding.

# All Thumbs Book Reviews

peratures by about one degree C. This is not an emergency. Atmospheric methane has been increasing for about four thousand years. There was a plateau from 1998 to 2008, which scientists can't explain. There is no reason to believe methane is going to kill us all in our lifetime or our grandchildren's lifetime.

One of the book's recurring themes is that the whole subject is complicated. A lot of things can't be explained. So far, we see that, yes, CO<sub>2</sub> is increasing. Yes, global temperatures are increasing—but hardly at an alarming rate. How much of that is anthropogenic (caused by human activity)? The data do not give us a clear answer, but it is clear that there is no need for the sort of fear-mongering that leads to explosive incontinence.

Much of the “ooga booga” scary stuff comes from computer models. Koonin spends a whole chapter on computer models. In my previous life as a computer engineer, I did a lot of computer simulating, mostly of complex programmable computer chips. I was essentially using a computer to simulate another computer or part of a computer. Digital computers deal with ones and zeroes, which is very deterministic and very predictable. If you do it carefully enough and have some experience, it works very well. When you test out that design in the lab, you get exactly what the simulation said you would get. If you don't, it is usually due to operator error.

Simulating a climate, however, is a completely different game. I read this chapter very closely to see whether Koonin got it right. He did. The climate is not ones and zeroes. It does not behave in a simple, linear way. You have this butterfly effect where small changes now can result in massive changes a few weeks later. Climate gurus have created different models that generate wildly different results—all of them wrong. One expert says, “It's a challenge to model what we don't understand.” Yeah. It's a challenge to drive a car blindfolded, too. Some might even say it's impossible.

Testing a climate model is simple in principle. For example, you plug in data from 1980 and see what it predicts for 2010 or other periods of time where you know what the right answers are. How many models get the right answer? None. How many were close? None. Amusingly, the more sophisticated, newer models produce even worse results. Yet, climate scientists continue to use these models as though somehow they will eventually get something intelligent out of them.

Computers are not magic, and they certainly are not intelligent. They are high-speed idiots. We can generate errors faster than ever before. They cannot truly think. Apparently, some people can't either. Sorry, I couldn't resist. There has been a lot of buzz about artificial intelligence and programs like ChatGPT or OpenAI. While these programs can do some impressive things, what I've seen of them proves my point. If you ask them the right questions, you not only can get wrong answers but self-contradictory answers and answers betraying the programmers' po-

litical bias. They will not answer some questions because they are “afraid” of offending someone. The publicly available AI may not be leading-edge technology, but it gives you an idea what to look out for. Computers do exactly what they are programmed to do. That is not intelligence.

GIGO stands for “Garbage In, Garbage Out” (not “Garbage In, Gospel Out”). It's not hard to extract any answer you want from a computer, so it is a little hard to believe any computer knows what is going to happen in one hundred years. Is it worth destroying our standard of living based on what a computer model says? Computers are not good crystal balls.

First-world nations like the U.S. have achieved the highest prosperity and standard of living in history, enabled by abundant, affordable and reliable energy. Energy is connected to everything we do. For things like transportation, fossil fuel is the only feasible option with current technology. California is barely able to keep its power grid online. If they switch completely to alternative energy and mandate all-electric cars, most of California is not going anywhere.

The greatest CO<sub>2</sub> increases are coming from the poorest countries, where millions of people are just starting to climb out of that poverty hole. As they ramp up energy use, their poverty levels drop. If your plan is to tell them they can't have the same energy that made life so much better for the rest of us, I'm pretty sure there is not a middle finger in this world long enough to fully express their contempt. Konstantin Kisin illustrated the point effectively in a debate with Oxford students, which he won. To paraphrase, he said that if there were a big red button that parents could push that would feed their hungry children and, at the same time, release a big old cloud of CO<sub>2</sub>, they would smash that button as hard as they could (probably with their middle finger) every day for the rest of their lives.

There is no climate emergency. Condemning a few billion people to die in poverty for no reason is murderously evil, to put it nicely.



# All Thumbs Book Reviews

Thomas Sowell insightfully sums up the difficulty of having an intelligent discussion on this subject: “It is usually futile to try to talk facts and analysis to people who are enjoying a sense of moral superiority in their ignorance.” Climate cultists are not standing on the moral high ground but on ground that could lead to somewhere way hotter than this planet. Koonin is realistic about what you can get people to do. If people are struggling to find their next meal, they are in no condition to worry about what will happen to the planet in fifty—or two—years. If you and your kids are going to starve to death this year, who cares what happens next year?

Step one in Koonin’s practical advice is to calm down and get a grip. He agrees we should probably do something, but there’s no need whatsoever to panic and grab at the first lame or damaging solution that comes along and force it on everyone. We have plenty of time. While in the corporate world, he studied alternative power options. We get orders of magnitude more power out of a gallon of gas than we will ever get out of a solar panel or windmill. Solar can work in a supplemental way, but unless there is a major breakthrough, we are not going to run the world on solar and wind. A promising strategy is to simply adapt. The human race has proven itself very good at adapting. We occupy regions from Siberia to the Equator. We’ll be OK.

Aren’t severe weather events spinning out of control? Nope. Koonin found no evidence that weather is getting more severe. That is all media hyperbole. There is a very good chapter on who is pushing the panic button and why. For the news media, bad news sells. H. L. Mencken summed it up nicely: “The whole aim of practical politics is to keep the populace alarmed (and hence clamorous to be led to safety) by menacing it with an endless series of hobgoblins, most of them imaginary.” For institutions and scientists, funding can motivate dishonesty. They may feel the need to scare everyone into giving them more money to study the crisis and

find a solution or “we’re all gonna die.”

This is an extremely controversial topic, and there is a lot of confusion out there about whom to believe. Here are a few pointers. Any sentence that starts with, “Ninety-seven percent of scientists agree. . .” is a sentence you can safely disregard as total rubbish. The truth is not up to a vote. Who is ready and willing to debate, and who will not tolerate debate? Who will not even tolerate questions? Liars know they have no chance against someone who knows what they are talking about. Who appeals to authority and not data? I am convinced that the legacy media almost never tell the truth. Which point of view do they promote? If they say “X” is true, I’m pretty sure that whatever the truth is, it is not “X.” Who has a conflict of interest? Who resorts to name-calling? Who claims their opponents are deniers, racists, conspiracy theorists or flat-earthers? And (a big one), who is trying to persuade you with fear, not facts? Who is telling you “we’re all gonna die” if you don’t go along with them?

This book is wonderfully optimistic. There no impending climate apocalypse, and we have made amazing progress in the last century. The global standard of living is higher than ever. Poverty is at a fraction of what it was even fifty years ago. The global population is living much longer on average. NASA reports show the planet has greened by 40 percent, including semi-arid regions, since 1980 (due to more abundant CO<sub>2</sub>). Food production has skyrocketed. UN data show that we are producing enough food to feed the world. There is a distribution problem—not everyone is getting the food they need—but there is enough if we fix that. Modern civilization, for all its warts and problems, has made incredible advances. If we allow other nations to enjoy affordable, abundant power, we will have more intelligent people in the world capable of solving whatever problems come along. The Paris agreement will never reach net zero. Stabilizing human influence on the climate is impossible, and the current ham-fisted attempts to do so are causing far more harm than good.

Destroying civilization to save it is not a good plan. We are already seeing preliminary results in places like Germany and Sri Lanka. Due to environmental policies, Germany has been forced to go back to burning coal to keep from freezing in the winter. Sri Lanka has completely collapsed, and they’re getting kind of hungry. The solutions that are being pushed are no better than a rubber crutch and not nearly as funny. I reviewed a video that tells us cows will be the death of us all because they warm up the atmosphere too much. If this kind of mindless panic is allowed to continue unchallenged, we will lose important sources of nutrition and energy. This book is the best source I’ve seen yet to restore some sanity to the conversation. If you are not into reading books, there is a very good interview of Steven Koonin on YouTube at [youtube.com/watch?v=reaABJ5HpLk](https://www.youtube.com/watch?v=reaABJ5HpLk). The thumb (not my middle finger) is UP.

Review by Tim Boyd

# All Thumbs Book Reviews



*The Bodies of Others: The New Authoritarians, COVID-19 and the War Against the Human*  
By Naomi Wolf  
All Seasons Press

“We are the Borg. You will be assimilated. Resistance is futile. Your lives, as you have known them, are over. From now on, you will service. . . us.” This quote may not be exact, but it’s close enough for science fiction nerds to recognize. It appears nowhere in Naomi Wolf’s book, but while reading, it kept echoing in my mind. My apologies for going all *Star Trek* on you, but some plot lines are so acutely relevant, I had to do it. Resistance was futile. The Borg were an innovative, nightmarish new villain introduced in the late 1980s, a collective of human or humanoid-machine hybrids or cyborgs. Humans were stripped of all that made them human, their bodies integrated with very uncomfortable-looking machinery and devoid of any concept of individuality. There was no “I am Borg,” only “We are Borg.” Transhumanists would love it. Normal people, not so much.

Wolf powerfully and poignantly elaborates how our very humanity has come under unprecedented attack in the last few years. Our faces covered to mask our emotions. No more hugs. No more church. No more parties. No school. No funerals. In some states, women had to wear a mask even while in labor. This book elucidates the sadistic madness quite eloquently. The U.S. has seen division like never before. People from different sides of an issue rarely meet in person. We don’t see that the “others” are human, too. We only see what the machines, Internet, social media and our favorite websites want us to see. The “others” are monsters.

We are told to “follow the science.” Are we following the science that tells us how important social contact is to human health? Or the basic science of how respiration works? Is it scientific to impose experimental vaccines on a few bil-

lion people, or to promote them long after the manufacturers have admitted they don’t work?

Wolf points out how computer models provided the excuse for much of the insanity. We are letting machines do our thinking for us. In the 1970s, nifty hand calculators came out. In the 1980s, personal computers took the world by storm. The 1990s saw the rise of the Internet. All those things are useful tools, but when we hand over our reason to machines and allow them to displace our humanity, we see the dark consequences.

An interesting point is that the evil that descended over the world seemed more creatively destructive than mere humans could have spawned on their own. It seems to be a transcendent, supernatural evil. It feels like resistance really is futile. It’s not. Evil overplayed its hand. Brave individuals spoke up, sacrificing careers and reputations. They spoke up against the slaves to the machine. Rays of hope began to break out. When Pfizer wanted to hide its data for seventy-five years, I only needed to see those words to know there is a huge problem with the data. I don’t like to continually bang on the human race, of which I am a part (I think), but there must be some great evil that has neutralized human intelligence. You don’t need calculus, advanced quantum mechanics or psychic abilities to figure this out. The vaccines are not safe and effective. The pharmaceutical-industrial complex has no integrity and could not care less about your health. I defer to Einstein’s assessment of those who follow authority against any common sense: “He has been given a large brain by mistake, since for him the spinal cord would suffice.”

Fortunately for the human race, a judge with integrity and a working brain said “no” to hiding data until we are all safely dead. Shortly after that, mandates and masks began to fall. There are still strongholds of evil, but they have been beaten back, at least for now. Resistance is *not* futile. The thumb is UP. Review by Tim Boyd

Are we following the science that tells us how important social contact is to human health?

# All Thumbs Book Reviews

***Pfizer Documents Analysis Reports:  
Find Out What Pfizer, FDA Tried to Conceal***  
Edited by DailyClout  
Foreword by Naomi Wolf

Spoiler alert: The FDA was planning to keep you in suspense about the data in this book until the year 2097. For those of you who don't want to skip ahead, go ahead and plug your head back into the sand or wherever you like to stick it. Don't read this review. But I should warn you, the FDA has been overruled by the court and has released the data. Hence, this book.

I have said elsewhere that the massive reluctance of the FDA to release these data pretty much tells me what I need to know. In saying that, I don't mean to minimize the profound importance of this book. I'm sure there are many who don't follow my logic or think I jump to unwarranted conclusions. For those who want clear, smoking guns, this book has an armory full.

First, a little background. The Pfizer documents are not some neat little three-inch pile of paper. There are fifty-five thousand documents, some of them thousands of pages long. It would take a few lifetimes for one person to read through all that. So, Naomi Wolf put out a call for help. She didn't just get one answer, she got thirty-five hundred answers. Many of them were from PhDs, MDs, biostatisticians, RNs, people who have done studies like this themselves and people who have experience reviewing studies. Notably absent from this list were unemployed janitors or gamers who decided to emerge from their mama's basements to score points with a damsel in distress.

This mob of experts was organized by a project manager who divided them up into teams that went through all the documents in an orderly way. One more thing—they did it for free. This revives my faith in humanity. There are still scientists who care about the truth and put a lot of effort into getting it out there.

I won't belabor every smoking gun, but here are a few highlights. The claims of "95 percent efficacy" are wildly exaggerated. The real number is, at best, below 50 percent. In the first twelve weeks after the rollout of the Pfizer injections, there were over one hundred fifty-eight thousand reports of adverse effects. Pfizer had to hire twenty-four hundred additional staff to handle the flood of reports. If an announcer were to read through all those reports, it would take approximately eighty hours. The fact that Pfizer and the other manufacturers demanded immunity from legal liability is another good indication of how safe they believe their products to be.

There were all kinds of procedural anomalies: missing data, missing patients, skipped steps, and so on. There was no safety testing for pregnant women. Of course, these untested groups of people are strongly pressured to get the untested injections when they are rolled out. I guess somebody has to test this stuff, and it's up to the general public. They are the lab rats.

Naomi Wolf correctly points out that the pervasiveness of corruption, cheating and distortion of data makes it impossible for any thinking person to believe this is all an accident. Further, when you consider the historic spike in death and injury rates that Edward Dowd found in insurance data, Bureau of Labor Statistics data and CDC data, it becomes even more impossible. As authorities continue to aggressively promote the jab, you can be a good little subject, or you can see through their murderous scams and follow the real science to what they are really up to. The thumb is UP.

Review by Tim Boyd



There are still scientists who care about the truth and put a lot of effort into getting it out there.

# All Thumbs Book Reviews



## *The Stevia Deception: The Hidden Dangers of Low-Calorie Sweeteners*

By Dr. Bruce Fife  
Piccadilly Books

I hope you are not enticed by the phrase “low calorie,” and you know that anything synthesized in a lab before being added to your food is grounds for suspicion. However, if you still believe, like millions around the globe, that man-made sugar substitutes are better for you than the real thing, then read this book—and for your health’s sake, please read it soon.

Though titled *The Stevia Deception*, the book not only gives spine-tingling (if not tongue-tingling) data about stevia but also discusses other artificial sweeteners. However, Dr. Fife’s main focus is on stevia because it has been so heavily marketed as a natural, innocuous sugar alternative.

Many people believe that because it derives from a plant (*Stevia rebaudiana*), stevia must be safe. Some studies even claim desirable health benefits. Thousands of anecdotal observations, as well as independently funded studies, reveal the truth. Certain peoples, such as the Guarani in South America, have used stevia leaf for over a thousand years, but the leaves they traditionally chewed or used in teas as a mild sweetener or for medicinal purposes (and even as a contraceptive) are not comparable to the additive now found in thousands of foods and beverages, touted as a dieter’s “dream come true.”

Industry extracts stevia derivatives, called steviol glycosides, with crystallization techniques that primarily use ethanol or methanol as a solvent. The active compound in brands such as Truvia (made by Cargill) and Pure Via is called rebaudioside A (“Reb-A”). Up to three hundred times sweeter than sucrose, it can have a bitter aftertaste—perhaps a metaphor for its deleterious aftereffects on the human body. Because of the unpleasant aftertaste, companies often combine steviol glycosides with other

sweeteners. Truvia, for example, includes erythritol, a sugar alcohol. While Cargill and its paid scientists would claim this is just a harmless way to make your treats taste yummier, independent studies—including one inspired by a school science fair project—present alarming findings. A fruit fly study found that a diet with Truvia shortened the flies’ average life span from sixty to just under six days—a reduction of 90 percent! No other sweetener had such a drastic effect. I’m not a fruit fly or a scientist, but after seeing a graph like that, I would use Truvia as an insecticide rather than a food additive.

Stevia and other zero- or low-calorie sweeteners are publicized as a “have your cake and eat it, too” alternative for diabetics and those looking to lose weight or avoid sugar’s harmful effects. As largely synthetic substances, they are not fully metabolized and are excreted without adding nutritive caloric content. People assume that no calories means no weight gain, but as we have discovered, the human body is far more complex than the rudimentary calories-to-pounds model used to mislead the public.

One reason why stevia and other artificial sweeteners not only do *not* lead to weight loss but actually can lead to weight gain and blood sugar dysregulation is because the taste buds in the mouth (and the taste buds in the gastrointestinal [GI] tract) are primed to release insulin when they sense sweetness. When the insulin is released but no accompanying calories are found, it is like—to use Fife’s metaphor—someone ringing a doorbell over and over, prompting a cascade of events without the requisite counterpart to complete the cycle. This problem, as well as the difficulty the human body has with metabolizing steviol, causes a long list of potential negative outcomes, both short-term (gas and bloating) and long-term (mutagenic effects leading to cancer). Also, like any other sweet substance, it can be dangerously addictive.

Fife, a naturopathic doctor and author of *The Stevia Deception* continued on page 72.)

A fruit fly study found that a diet with Truvia shortened the flies’ average life span from sixty to just under six days—a reduction of 90 percent!



# All Thumbs Book Reviews

## *Healthy Mouth, Healthy You!*

### *Holistic Dental Guide*

By Michelle Coles Jorgensen, DDS

Independently published

*Healthy Mouth, Healthy You!* is an excellent resource for those who want to learn more about their teeth, various dental procedures, what can go wrong in the mouth and how to remedy it, as well as the link between the mouth and the rest of the body. The knowledge within this holistic dental guide empowers readers to take responsibility for the health of their teeth.

Dr. Michelle Coles Jorgensen begins by introducing holistic dentistry, discussing how it differs from mainstream dentistry. This is followed by a list of ten questions she suggests we ask dentists before making an appointment. In the next two chapters, we learn what teeth are made of and what leads to cavities, with Jorgensen briefly describing several theories for dental decay: the acidogenic theory (sugar plus bacteria), the diet theory (Dr. Weston A. Price) and the hormone theory (Dr. Melvin Page).

Subsequent chapters give us descriptions of methods we can implement and tools we can use to take care of our teeth. Did you know that there is a difference between cleaning our mouth and brushing our teeth, that the timing of cleaning the mouth is important, that we need to consider the acidity level of our mouth in relation to cleaning it and that perhaps flossing isn't necessary? After opening our minds to those ideas, Jorgensen recommends specific types of toothbrushes and alternatives to flossing, and outlines how to make effective toothpastes and mouth rinses. She says seven minutes of mouth care a day, using the methods and tools she describes, does the trick!

Because Jorgensen embraces the connection between nutrition and the health of the mouth, one chapter acknowledges the work of Dr. Price and dives into the importance and best sources of the fat-soluble vitamins and their roles in the body. The reader learns how to soak grains, nuts and legumes to reduce phytic acid and why that step is significant when trying to achieve optimal health. She also shares the benefits of fermented foods, butter oil, cod liver oil and bone broth. The only recommendation that is inconsistent with WAPF principles is a drink that contains cocoa.

Jorgensen does an excellent job of explaining all the options we have when it comes to root canals, mercury fillings, jaw bone infections and bony cavitations. She acknowledges the dangers and controversies of the various solutions so that the reader can make an educated decision. If you want to learn more about antimicrobial root fillings and oral probiotics, as well as ozone and laser sterilizations, that chapter is for you. And before the book is finished, she also dives deep into gum health, discusses how to remineralize teeth and even offers natural ways to whiten our smile. This easy-to-understand guide is filled with nuggets of dental knowledge! Thumbs up!

Review by Anya Adams



Seven minutes of mouth care a day, using the methods and tools Jorgensen describes, does the trick!

## A huge education in a little package



**\$3 for all 13 trifolds (1 ea)**

[westonaprice.org/order](http://westonaprice.org/order) (703) 820-3333

Why Butter is Better?	A Message to Grandparents
Cancer Protection with Food	Soy Alert
Cholesterol Myths & Truths	Sugar Alert: Why Refined
Cod Liver Oil: Our Number	Sweeteners are Bad for You
One Superfood	Vaccination: The Most
Covid 19: Myths & Truths	Important Decision Parents
Industrial Fats & Oils	Will Ever Make
A Campaign for Real Milk	Vegetarian & Vegan Diet
Mental Health Nutrition	Dangers

# All Thumbs Book Reviews



***For the Love of Soil: Strategies to Regenerate Our Food Production Systems***  
**By Nicole Masters**  
**Independently published**

This educational and enjoyable book is written in an endearing story format. The reader “meets” interesting people as Nicole Masters traverses North America with a pickup, a trailer and her horse. Now, that is the description of a researcher with her “feet on the ground.” A New Zealander, Masters suffered for fifteen years with migraines, brain fog and lethargy. She sought advice from every body worker imaginable, but it wasn’t until the brilliant blue eyes of an eighty-year-old doctor in Auckland mesmerized her enough to believe in radionics that she found the culprit; paraquat poisoning. While living in Hong Kong as a teen, local Cantonese women had warned her that walking barefoot would sabotage her health; sure enough, paraquat-contaminated soil did the job.

Masters views healthy soil as “the gut microbiome of the planet” and shares many insights about soil management. Although most readers likely know that using synthetic nitrogen fertilizer is counterproductive, Masters makes that fact explicit. Just like us, plants need air! Soil compaction, one of the inadvertent results of synthetic nitrogen application, suffocates plants and destroys the infrastructure formed by the termites, dung beetles, ants and earthworms that let plants breathe easily. Her favorite won’t-leave-home-without-it device is the lowly shovel. A shovel allows visualization of soil color and its aggregates. One can smell the aroma, count the earthworms and even discern whether legumes are fixing nitrogen. Another essential tool is the simple refractometer, which measures the Brix (solids or “sugars”) in a plant. She tests crops *and* weeds, because if the weeds score high, and the crops score low, an adjustment is needed. “Make sure you are not farming or ranching for weeds,” she advises.

To implement adjustments, Masters likes to “tickle” rather than “shock” the system. She highly recommends vermicast (worm castings), but only in “miniscule” kickstarter amounts. If you have a worm farm and you have liquid exudate from it, she suggests adding more carbon (e.g., newspapers). The liquid indicates that it is unbalanced, heavy on the bacterial side.

Masters presents an interesting scientific explanation for “ghosts.” Restoring good soil means having a balance of armor on the soil to maintain aerobic conditions; anaerobic conditions (without air) can actually produce volatile organic compounds visible to the naked eye. Historically, shallow burial sites gave rise to stories of ghosts wafting through cemeteries as bioluminescent gas was released.

We have all seen dust blowing in the wind as working (tilling) the soil disrupts the soil infrastructure. Do the people tilling realize that the most valuable substance in their soil is what is darkening the sky? It is humus, the final breakdown of organic matter, with a structure even finer than clay. Humus is an amphitheater, if you will, in which soil microorganisms thrive.

Masters questions why the top minerals “established” for soil health (nitrogen, phosphorus and potassium) do not include calcium. According to her, we’ve been hoodwinked. Calcium plays an essential role in soil health.

Sharing secrets of the magical properties of mycorrhizal fungi, she laments that we are smiting them with herbicides and pesticides. Her pragmatic out-of-the-box solutions include using spurge and cheatgrass to enlist this wondrous substance to enhance soil health. One way to encourage conventional farmers to step lightly out of the herbicide rut is to reduce non-selective, non-residual herbicides by 30 percent, adding one part fulvic acid (or vermicast extract) to four parts herbicide. This could reduce costs, enhance the function of the herbicide and give the soil a boost. This book gets two enthusiastic thumbs up!

Review by Mary Walkes

Masters views healthy soil as “the gut microbiome of the planet.”

# All Thumbs Book Reviews:

*The Moth in the Iron Lung:*

*A Biography of Polio*

By Forrest Maready

Createspace Independent Publishing

If you believe that polio was a virus that swept the nation in the 1900s, attacking the nervous system and resulting in partial paralysis or death, and if you believe that the polio vaccine eradicated it, you should read this book. If you're convinced that DDT caused polio and that the polio epidemic ended as soon as the pesticide was no longer in use, you should also read this book. Forrest Maready addresses both polio explanations in his "biography" of polio, concluding that both are a bit too facile.

In fact, poliomyelitis appeared before DDT ever came on the scene. There were also many who tested "positive" for the "poliovirus" who never experienced any symptoms or paralysis. And evidence shows that the "vaccines" made to combat the illness did not reduce the incidence of sickness by any significant percentage.

Maready covers a lot of territory in this ambitious book, making no assumptions and avoiding foregone conclusions. Instead, he offers an objective, in-depth take on how the disease appeared, who it affected, how the public and the scientific community reacted and how it vanished (or was vanquished).

It's a complicated subject. It's also controversial because polio is one of the main diseases people point to as a vaccination success story. Those who lived through the time of the "terrible disease with a terrible diagnosis and an even more terrible treatment" shudder and thank their lucky stars that science purportedly came to the rescue. As Maready points out, however, "lost amidst the jubilation of Salk's injected polio vaccine in 1955 and Sabin's oral polio vaccine in 1961 is an intriguing riddle—what happened before the vaccine?" Maready examines that question, piecing together the available evidence much in the style of Sherlock Holmes. In fact,

I found that *Moth* read like a suspense novel, a page-turner and genuine whodunit. In this case, the wily criminal at large caused a mysterious paralysis that often overcame infants and children and sometimes resulted in their death.

Why was this marauder so difficult to pin down? At one point, poor sanitation and poor nutrition were thought to contribute to outbreaks, but strangely, polio seemed to strike primarily the rich. "The better the sanitation, the more frequently paralysis would occur." Years before Sabin developed his vaccine, he conducted infectious disease research abroad with the U.S. Army. In 1943, he wrote from the Philippines, "The only mystery as I see it, is why the incidence is so much higher among the troops than among the natives." Locals who tested "positive" for the "poliovirus" had a nearly zero incidence of paralysis—a mystery, indeed.

Noting that poliomyelitis is defined as inflammation of the grey matter of the spinal cord, Maready observes that a "polio" diagnosis was at first given to anyone with paralysis, without attribution to a particular virus; any number of agents or triggers, therefore, could have caused "polio." Later, scientists determined to identify a single cause of the "outbreaks" chose to focus on a polio enterovirus as the source, though they had a very difficult time infecting monkeys with the supposed virus. (Parallels to the recent mainstream "Covid virus" narrative abound.)

In 1841, the first known cases of "polio" were identified as "teething paralysis." At the time, doctors encouraged parents to give their children mercury-containing calomel to clear the bowels. Paralysis is now a known side effect of mercury poisoning, but back then, mercury's role went undetected by most.

In 1888, a gypsy moth invasion led to the application of the arsenic-based pesticide Paris Green throughout much of the northeastern U.S. When this was insufficient to halt the moth, a new pesticide, lead arsenate, was aggressively sprayed. Poisoning from these pesticides re-



Paralysis is now a known side effect of mercury poisoning, but back then, mercury's role went undetected by most.

# All Thumbs Book Reviews

sulted in “outbreaks” of paralysis. No one made the association between the spraying or the diet of the affected patients (which likely included heavily sprayed fresh fruit) and the paralytic or fatal symptoms of polio.

A popular uprising in the 1930s sought to prohibit the use of lead arsenate and Paris Green. Although the two substances were finally banned, DDT quickly took their place. DDT seemed a promising substitute to eradicate pests, until it, too, became linked with ill effects and ultimately was banned in 1972. (By the way, DDT was used heavily in areas where U.S. troops were deployed overseas—a fact that may explain Sabin’s observation that soldiers were “contracting” polio, while most of the native populations of the islands they occupied were not.)

Initial batches of Salk’s vaccine had to be recalled, and in the early days of its rollout it became apparent that “the vaccine was inadvertently causing paralysis and death.” As a matter of fact, an “uptick in paralytic polio” was recorded after the vaccine’s wide distribution. By the time Sabin’s vaccine became broadly available in 1963, poliomyelitis already had nearly disappeared from the U.S. landscape. As pesticide use dropped (with DDT mostly used commercially and no longer recommended for households) and as the era of “metallic medicine” (e.g., using mercury to cleanse bowels) began to end, polio started to vanish. The vaccine had actually come too late to be of any assistance in wiping polio off the map.

There are many more details in this book and many lessons to learn from what we as a country and the entire world went through. Maready’s contextualization of polio is a red flag, warning humanity to avoid the hu-

bris that hindered efforts to identify the cause(s) of the sickness and instead promoted a poorly thought-through, lab-concocted solution. As the saying goes, “Those who do not learn history are doomed to repeat it.” Maready candidly makes it clear that unless we approach epidemics with a good measure of genuine humility and curiosity—and are willing to consider our own role in propagating sickness—we will once again end up with false assumptions and frantic fears of contagion.

The only bone that some may have to pick with Maready are his constant references to viruses; apparently, he is convinced they exist. However, he concedes that a number of agents likely led to the sickness called polio, and not *only* a virus [emphasis mine]. Other than this uncharacteristically discordant note, this book rings true. Anyone who dares to crack it open will find information that is both factually evenhanded and eye-opening. For this reason, I give it a hearty thumbs up.

Review by Hilda Labrada Gore

(*The Stevia Deception*, continued from page 68.)

over twenty books on nutrition and health topics, originally believed that stevia was a desirable alternative to sugar and other sweeteners. However, he grew alarmed when hearing reports of miscarriages, addiction, inability to lose weight and a plethora of other side effects ranging from skin rashes to headaches to GI upset. After learning how stevia extracts are produced and delving into the animal studies that show toxicity potentials, he changed his tune. He now claims that stevia should not be thought of as a benign or beneficial herbal sweetener but as an *artificial* sweetener as per his four criteria: does not occur in nature in its present form; has a high-intensity sweet taste (many times sweeter than sucrose); provides no significant calories; and has been linked to issues such as insulin resistance, inflammation, weight gain, slowed metabolism and changes in the gut microbiome. Upsetting the delicate balance of gut bacteria can lead to an overgrowth of the kind that can cause weight gain and poor health.

Giving you the “What do I do about it?” answer that we are all looking for, Fife recommends small amounts of the truly natural, whole-food sweeteners also espoused by WAPF—items such as date sugar, Sucanat (unrefined cane sugar), maple syrup, honey and coconut sugar. If people in your circle are still reaching for brightly colored tabletop packets of artificial sweetener or mistakenly believes that stevia extract is harmless or even helpful, do them a big favor and send them the link to or a copy of this book. An easy-enough read and full of references to supporting studies, it is sufficiently convincing that these highly processed, concentrated extracts have huge potential health risks. In a world chock-full of gimmicks and industry-funded propaganda, the hard truth still eludes many people. There is no such thing as a sweet treat that has zero repercussions—it’s just not how nature or the human body work. Learn the pleasures of a little raw honey with your herbal tea, and leave the fake stuff on the shelf. Two thumbs up.

Review by Jennifer Grafiada, NTP



# Tim's Video Reviews

## *Nourished*

**Directed by Cade Prior**

**Produced by Noel Ostrosky**

**Executive Producers: Dean Brennan,  
Josh White and Paul Saladino**

Much of the human race seems to be losing its capacity to reproduce. This is not just due to older generations neglecting to explain the birds and the bees to the younger generation. Along with the birds and the bees, they should have explained how to eat if one wants to see any babies in one's future. This video, available on YouTube, provides a quick, basic tutorial.

Some of the video's stars were vegans who could not get pregnant. As soon as they converted (for some it was almost a religious experience) to more nutrient-dense, animal-based foods, they began reproducing like rabbits. In addition to proper diet, it is a good idea to avoid drugs and other toxic stuff polluting our world today. The estrogen-mimic substances in plastic could be a major problem. Of course, breastfeeding is the best option. Stay away from commercial formulas and industrial seed oils.

The video shows a couple of placentas—one from a vegan and one from a proper omnivore. The vegan one is calcified and pale compared to the healthy darker placenta. They both looked a little gross to me, but that is just a dumb guy perspective. Be that as it may, the midwife and doula were horrified with the clear physical evidence of what a vegan diet can do to a baby. The thumb is UP.

## *Eating Our Way to Extinction*

**Produced by Kian Tavakkoli,**

**Ludovic Brockaway and Mark Galvin**

Since 1900 (we are told), we have experienced climate change and a massive increase in weather-related disasters, species loss, pollution and water use. Then we are told all of this is happening because we eat meat. Did we just

start eating meat one hundred years ago? Did climate just start changing one hundred years ago? We have climate data for thousands of years. Climate has always been changing. If we look at the data, we see that nothing wildly new is going on. They say the increase in water use is at least partly due to raising cattle. Did cattle just start drinking water one hundred years ago? Does that water disappear from the planet forever, or does it eventually get returned to the environment?

We have invented creative new ways to pollute the planet, and we do need to clean that up. Yes, there is air pollution, which is not a great thing. My personal theory is that much of the hot air, misinformation, carbon dioxide and other forms of air pollution are coming from the pieholes of politicians. A relatively modest investment in piehole plugs for politicians (PPP) would solve many of the world's problems by tomorrow morning.

One of pseudoscience's more persistent and pernicious mistakes is to make assumptions that gain popularity and reach a point where they magically graduate to the status of sacred doctrine, unquestionable by mere mortals. One such assumption seems to be that this planet was at the optimal temperature for life around the middle of the twentieth century. We are told the planet has been warming since then and, unless we do something, it will continue to heat up until it is a glowing fireball. The solar system will have a second little sun.

Solar output—the amount of heat we get from the sun—varies in cycles. This has been known for centuries. Is this considered in the video? No. Is the bovine population at an all-time high? No. But the solution to this global meltdown is the Bart Simpson maxim—"Don't have a cow, man." If there were more bovines, especially buffalo before Columbus, why have they just become a problem in the last century or two? Sounds like a conspiracy theory to me, or maybe a cowsspiracy. A new KKK. Krazy Konninging Kows that will kill us all.

Many of us living in the eastern U.S. have a bad habit of thinking the entire world can grow massive amounts of corn, soy and grain. However, much of the world's population occupies areas where the climate does not allow for growing any plant except grass. They have two choices: raise animals that convert grass into meat and milk, or starve. Demanding that they starve is not exactly the first stop on the moral high road.

Experts in this video whine about how inhumane it is to eat meat but then essentially campaign for the virtual extinction of cows to save the planet. Why are cows so environmentally unfriendly? Because they breathe, drink water and exhale carbon dioxide and methane. Vegetation produces methane whether it is fermenting in a cow or a swamp. Guess who else exhales carbon dioxide? You do. Me, too.

I have a CO<sub>2</sub> meter which I put in my eight- by twelve-foot greenhouse. When I first walk into the greenhouse, the meter reads a little over four hundred ppm. After I work in there for an hour, the reading has

# Tim's Video Reviews

doubled or more. We produce a lot of carbon dioxide. Experts like Joel Salatin can explain how properly pastured cows sequester a lot of carbon from the air into the soil. The same cows that are accused of being the problem are really the most economical and ecological solution we have.

I know there are people out there who engage in all manner of creative self-loathing and consider human beings to be useless parasites on the environment (and some of them are). Who produced this video? Some of the funding comes from organizations like Veganuary and Veg Capital. It is fairly obvious what they are about. Blue Horizon is not so obvious, but their website says their mission is to take animals out of the food chain. If we eat the way they are promoting, that would ultimately lead to the extinction of all humanity and bovinity.

All this to save the planet. And to save it for what? I don't want to save the planet for cockroaches. If cows had thumbs, those hairy thumbs would point the same way my thumb points for this video. DOWN.

## *Anecdotal*

**Written, directed and produced by Jennifer Sharp**

*Anecdotal* (anecdotalsmovie.com) quotes Anthony Fauci: "I represent science, and if you are attacking me, you are attacking science. I mean, everybody knows that." The man is over eighty years old, and he still hasn't gotten over himself. It reminds me of an old saying: "He who worshippeth himself hath a congregation of one." Arguing in favor of a point of view based solely on your own or someone else's personal authority is a common strategy for cheating in a debate or discussion. Another is the old *ad hominem*—name-calling or otherwise insisting that someone is not smart enough to have a relevant opinion. Now, apparently, calling someone a "racist" is even worse than accusations of an inappropriate maternal relationship.

There is one more strategy, but it requires a little more effort, research and thinking. Some people like to argue based on facts and data, such as Peter Doshi, who reviewed the data from the Pfizer and Moderna trials clearly showing that their so-called "vaccines" do not work. This strategy is not guaranteed to persuade people. If the person you are speaking to has erected an emotional blockade against logic and reason, there is not much you can do. A nice paycheck can also create blockades. For people calm enough to think, however, data and facts can work very well.


There are strongly differing opinions about Covid and the associated injections. Many who are still on the fence don't know who to believe. I would go with the ones who cite facts and data that I can look up and verify. Another quote from the video: "It is not science if you cannot see the data." I would disregard anyone who won't even let you ask a question. And what about anecdotal accounts? Many people disregard

them with extreme prejudice, but when we have thousands of anecdotal reports from people who have nothing to gain and sometimes a lot to lose, I think we need to take a closer look.

A whistleblower who was working on the vaccine trials discovered that large amounts of adverse event data were being thrown away. She collected the evidence and took it to the FDA. Six hours later, she was fired. This is the same "transparent" FDA that tried to withhold Pfizer's vaccine data for seventy-five years. This does not inspire my trust in the FDA; I'm strongly inclined to believe the whistleblower.

The video shows people who had such a severe reaction to the first injection that they were unable to take any more. Their doctors agreed that a second shot or booster would be too risky. They still lost their jobs because they were not fully vaccinated. They have no recourse.

The Department of Homeland Security has a disturbing definition of terrorism: the proliferation of false or misleading narratives, which sow discord or undermine trust in U.S. government institutions. Do they mean false and misleading like the narrative that says vaccines are safe and effective? Am I a terrorist? People are so emotionally fragile and easily terrified these days. I do not find false or misleading information terrifying unless it comes from government. The people who run these misinformation ministries of truth are the worst people on the planet for the job. The truth is not afraid of debate, scrutiny or questions. Liars don't like any of those things because, on some level, they know they are one good question away from being busted.

The video's producers say they created it for distribution to congressional representatives, but the video is around eighty-two minutes. Will someone who deals with people clamoring for attention all day every day spend the time? It might have a better chance if there were a concise edited version that is fifteen or twenty minutes. Either way, the thumb is UP. 

# Vaccination Updates

## SMALLPOX MYTHS AND THE BIRTH OF THE VACCINE AWARENESS MOVEMENT

By Kendall Nelson, Director, *The Greater Good*

According to the World Health Organization (WHO), smallpox was one of the most lethal diseases known to humankind. The WHO reports that it affected humanity for several millennia and indiscriminately claimed the lives of “hundreds of millions” across the globe. Citing possible evidence of smallpox in Egyptian mummies, WHO estimates that the disease could date as far back as 1350 BC.<sup>1</sup> Among the numerous epidemics attributed to smallpox,<sup>2</sup> one commonly cited example is the devastating outbreak that swept through Native American populations in the sixteenth century. History also tells us that famous individuals like Wolfgang Amadeus Mozart and Abraham Lincoln suffered from smallpox.<sup>1</sup>

The medical literature classifies smallpox (variola) as a viral illness within the *Orthopoxvirus* genus. Symptoms, according to the literature, include fever and a distinctive rash that starts as small red spots on the face, hands and feet before spreading to the trunk and limbs. The spots become fluid-filled blisters that eventually scab over and sometimes leave permanent scars. During smallpox’s heyday, observers described different forms of the disease that varied in severity. The wide range of symptoms attributed to the less severe form included head and backache, abdominal pain, vomiting, exhaustion, malaise, chills, high fever and rash. For the more severe and potentially life-threatening form of smallpox, reported symptoms ranged from anorexia, blindness and encephalitis to infertility, disfigurement and death.

Both the WHO and the U.S. Centers for Disease Control and Prevention (CDC) cite a historical smallpox case-fatality rate (the proportion of persons with a disease who die from that disease) of up to 30 percent.<sup>1,3</sup> However, U.S. data from the early 1900s for the most serious form of smallpox document an average

case-fatality rate of around 18 percent—and as low as 6 percent in some years.<sup>4</sup>

### THE OFFICIAL NARRATIVE

We are taught that smallpox was an acute and highly contagious disease that was eliminated only after the WHO led a global vaccination effort involving mass immunization in endemic areas and isolation of affected individuals. The public health record states that the last “natural” U.S. smallpox outbreak occurred in 1949<sup>5</sup> and that the last endemic case in the world—which was non-fatal—was in Somalia in 1977.<sup>6</sup> In 1980, the WHO declared smallpox to be eradicated worldwide, pronouncing it the first successful human effort to wipe out an infectious disease. The WHO proudly describes this accomplishment as “among the most notable and profound public health successes in history.”<sup>7</sup> Others dramatically liken its importance to the moon landing.<sup>8</sup>

The conventionally accepted description of smallpox as a serious and potentially deadly viral infection is similar to descriptions of the coronavirus said to be responsible for Covid-19. The fear associated with both conditions—based on the premise of contagion—led to isolation, social distancing and face masks, as well as the framing of mass vaccination campaigns as the ultimate answer for both. However, in a 2022 video titled “The Truth about Smallpox,” Russian naturopath, researcher and activist Katerina Sugak asks, “But what if smallpox was never really eradicated, and furthermore, what if our idea of smallpox is fundamentally wrong?”<sup>9</sup> As you read further, I urge you to consider her questions with an open mind, setting aside any preconceived notions or biases. Reexamining the scientific and historical record, including the WHO’s declarations and evidence presented by Sugak and others, can provide a clearer view of the lessons we can learn from smallpox.

### THE FIRST VACCINE

To start, let’s look at the earliest efforts to prevent smallpox. Written evidence from China in the mid-1500s describes the practice of “insufflation” to protect healthy people against smallpox. This technique involved pulverizing and drying smallpox scabs and blowing them into the healthy person’s nostrils using a pipe.<sup>1</sup> Historical records point to similar disease prevention theories having taken hold in India, where they used a lancet or needle to transfer smallpox material from a sick person to a healthy child’s skin.

In the Western world, medical historians credit Lady Mary Wortley Montagu, a prominent figure in eighteenth-century England, with first introducing the practice of “variolation” (inoculation with smallpox). Lady

Over the thirty-eight years of “inoculation,” the death rate from smallpox relative to the number of people born had surged by 41 percent.

Montagu observed the practice of inoculation while stationed in the Ottoman Empire in 1717 (her husband was the English ambassador);<sup>10</sup> the process involved transferring tissue from a person with active smallpox into scratches on a healthy person. Convinced of the procedure’s effectiveness, she had her son inoculated while in Constantinople and, upon her return to England, did the same for her daughter during a smallpox outbreak there, also promoting the practice among her social circle despite initial opposition from the medical establishment.<sup>10</sup>

As described by Dr. Suzanne Humphries—a modern champion of vaccine awareness—and her coauthor Roman Bystryanyk in their 2013 book *Dissolving Illusions: Disease, Vaccines, and the Forgotten History*, people of the time suspected variolation of helping to spread the disease into surrounding communities (p. 60).<sup>11</sup> The two cite a 1764 article in *The Gentleman’s Magazine and Historical Chronicle*, in which an anonymous author argued that “the practice of Inoculation manifestly tends to spread the contagion, for a contagious disease is produced by Inoculation where it would not otherwise have been produced” (p. 62).<sup>11</sup> The eighteenth-century writer also highlighted another undesirable outcome of variolation: an escalation in smallpox mortality. Over the thirty-eight years of “inoculation,” the writer noted, the death rate

from smallpox relative to the number of people born had surged by 41 percent.

Nevertheless, Lady Montagu’s popularization of smallpox inoculation paved the way for the development and trial run of the first vaccine by Dr. Edward Jenner in 1796. Jenner used the same principle of variolation but derived his source material from cowpox sores. As colorfully recounted by the WHO, Jenner obtained cowpox material from the hand of local milkmaid Sarah Nelmes; he then “inoculated” his gardener’s son, eight-year-old James Phipps.<sup>1</sup> (Informed consent, said a *Forbes* writer in 2019, “wasn’t really a big thing in the 18th century, especially if you were poor and your father worked for the scientist in question.”<sup>12</sup>) As per Jenner’s notes, Phipps then suffered “nine days of fever and aches” but eventually recovered.<sup>12</sup> About six weeks later, Jenner again tested out his ideas on Phipps, this time using material from human smallpox. Despite having no scientific methodology and basing his assertions on this single test subject, Jenner’s claims of success propagated the idea that exposure to cowpox could provide lifelong immunity to smallpox—and Phipps went down in history as the first person vaccinated by Jenner against smallpox.

*Dissolving Illusions* cites many critics of Jenner’s primitive experimental design. For

## HEALTH FREEDOM DEFENSE FUND

Health freedom is one of our most sacred and cherished rights but threats to that freedom have occurred with increasing frequency over the past few years. Health Freedom Defense Fund was founded to protect those fundamental rights and is honored to have the Weston A. Price Foundation’s support in pursuing our mission.

HFDF furthers the cause of health freedom through litigation and to that end we have filed many lawsuits strategically focused on resisting infringements of our rights by government, businesses, schools and other organizations. Our biggest success was a lawsuit striking down the federal travel mask mandate but the Department of Justice is appealing as the CDC wants the right to mask you again, absent scientific justification.

Any funds donated will go to advancing the litigation underway. Some of the critical lawsuits your donation will support would be:

- DOJ’s appeal of HFDF’s federal travel mask mandate lawsuit
- HFDF’s lawsuit challenging the Los Angeles Unified School District vaccine mandate
- In process lawsuits against Pfizer and FDA

Donate to HFDF at: [healthfreedomdefense.org/](http://healthfreedomdefense.org/)



example, Dr. Charles Creighton, who wrote a scathing critique about a century after Jenner's experiment, postulated that Jenner had cherry-picked his findings in order to, in Humphries' words, "arrive at whatever conclusion fit his predetermined outcome" (p. 64).<sup>11</sup>

#### CONTROVERSIAL FROM THE START

Despite Jenner's dubious science, the practice of smallpox vaccination—and related coercion—took off in both Britain and the United States. In 1809, the state of Massachusetts became the first government in the world to mandate a vaccine,<sup>13</sup> and, in 1813, the federal government passed an "Act to Encourage Vaccination"—"the first federal endorsement of a medical practice in American history"—though in 1822 the government succumbed to pressure to repeal it.<sup>14</sup> England's government, meanwhile, put strict compulsory vaccination laws into place in 1840, in 1853 (when it required every child to be vaccinated within three months of birth) and again in 1867. The 1853 Act made rejecting vaccination a crime, punishable by a fine; later laws also threatened imprisonment (p. 114).<sup>11</sup>

Little different from today, economic and political interests influenced nineteenth-century governments' heavy-handed promotion of vaccination. As documented in 2018 in the *American Journal of Public Health*, the medical establishment and its allies in government recognized that vaccination offered a lucrative income stream and a chance to enhance the establishment's dominance in a then highly

competitive market.<sup>14</sup> Doctors who ran early "vaccine institutes" that housed vaccine material forged strong relationships with local and state governments, which granted the physicians "some measure of authority through political endorsement."<sup>14</sup> Newspapers, too, played their part—again with uncanny modern echoes—"affirm[ing] elite physicians as experts, singularly qualified to . . . practice [vaccination] safely."

Nevertheless, as Humphries ably documents, the controversial practice met with objections right from the start. Some religious groups viewed the intervention as an affront to God's will and resisted or obstructed vaccination campaigns. Doubts about the vaccine's potential to live up to its promise also steadily surfaced, with medical journals reporting that smallpox "fell upon great numbers" of those who had received the ostensibly protective vaccine (p. 73).<sup>11</sup> Some critics noted that the vaccinated appeared *more* susceptible to smallpox, often fatally, than the unvaccinated (p. 77).<sup>11</sup> As quoted by Humphries, an 1850 letter to the editor pointed out, "There were more admissions to the London Small-Pox Hospital in 1844 than in the celebrated smallpox epidemic of 1781 before vaccination was introduced" (p. 75).<sup>11</sup> And across the pond in Boston, Humphries observes (p. 82) that smallpox-related deaths in the twenty years following Massachusetts' implementation of compulsory vaccination surpassed the smallpox death toll of the previous two decades.<sup>11</sup>

Newspapers also frequently reported fatal vaccine injuries, noting cases of vaccinated

Little different from today, economic and political interests influenced nineteenth-century governments' heavy-handed promotion of vaccination.



## Vaccination Dangers Trifold from WAPF

### Includes:

- Myths and Truths about Vaccines
- Important Facts about Vaccines
- Harmful Ingredients in Vaccines
- How to Protect Your Child Without Vaccines

Order at [westonaprice.org/order](http://westonaprice.org/order)  
(703) 820-3333



With the advent of smallpox vaccination was born a manipulative tactic that the medical and public health establishments continue to use to great effect in declaring epidemics and then making vaccines the heroes of the day.

individuals who subsequently developed erysipelas, a bacterial skin condition that caused sufferers to die a “prolonged and painful” death. Members of the public noticed that many children suffered serious health problems or death following vaccination.

Government willingness to make smallpox vaccination compulsory—coupled with growing public mistrust and concerns about safety, efficacy and state intrusion on individual freedoms—helped spur vaccine awareness “movements” in both England and the United States (p. 124).<sup>11</sup> These movements gained momentum as people sensed the incoherence and disconnect between the information being disseminated and their personal experience. Inconsistent messaging from healthcare authorities left the public with many unanswered questions and doubts.

Even in the face of mandates and legal penalties, many courageous individuals refused to be vaccinated or refused to vaccinate their children. In a chapter titled “The Great Demonstration,” Humphries recounts how an entire town—Leicester—spurred a movement against the British government’s smallpox vaccination policies (pp. 113-123).<sup>11</sup> In March 1885, protesters converged on Leicester from all over England, taking to the streets in large numbers and brandishing banners with messages like “Liberty is our birthright, and liberty we demand.” The demonstration drew an estimated crowd of eighty to one hundred thousand people, forming a “two-mile-long procession.” Representatives from over sixty towns stood on the platform as the public called for self-determination and instigated a historic rebellion against medical authoritarianism.

The widespread public objections led to steep declines in vaccination, with vaccine coverage in England and Wales falling from close to 90 percent in 1872 to just 40 percent by 1909 (p. 92).<sup>11</sup> Concurrently, smallpox deaths sharply decreased, “all but vanish[ing] from England” by the early 1900s, a trend especially noticeable in children. As many observers could not help but notice, “Decades of strict vaccination laws did absolutely nothing to improve the overall life expectancy of children in all age groups,” and it was only after vaccination declined that child mortality improved (p. 134).<sup>11</sup>

## A FLAWED CONCEPT

In her “Truth about Smallpox” video, Katerina Sugak argues that the conventional understanding of smallpox as a single disease with specific and distinct symptoms is flawed.<sup>9</sup> Sugak traces the historically loose—and overlapping—use of the terms “leprosy,” “plague” and “smallpox,” showing that none had a clearly defined symptomatology. Initially, “smallpox” might refer to anything from a respiratory illness to a cancerous tumor; only later was it narrowed down to skin conditions. Because of the three terms’ broad applications, Sugak notes, art historians have often found it difficult to decide whether a particular artwork depicts leprosy, plague or smallpox!

In former centuries, the lack of clarity and diagnostic precision proved useful to the church. Control mechanisms such as quarantine and other oppressive measures could be justified by claiming that those affected with “leprosy,” “plague” or “smallpox” were “unclean” sinners suffering God’s wrath and deserving of social exile. The church also could generate fear for gain and political ends. Eventually, when the role of the church and the religious doctrine equating disease with sin both receded, the philosophy pinning disease causation on a “toxin of disease” took center stage. The Latin word for “toxin of disease” is *virus*.

An accompanying belief was that individuals recovered because their bodies produced an “antidote” to the “toxin of disease,” with the former subsequently morphing into the nebulous concepts of “antibodies” and “immunity,” and the latter into modern conceptions of viruses and bacteria. These beliefs contributed to the rise of variolation and then to contemporary vaccination. None of this logic holds up to close scrutiny, however; for example, in an exhaustive 2001 report on smallpox vaccination, the CDC reported that the effectiveness of smallpox vaccination comes from its induction of “neutralizing antibodies,” but in the same breath, it admitted that “the level of antibody that protects against smallpox infection is unknown.”<sup>15</sup>

## MANIPULATING EPIDEMICS

Sugak devotes considerable effort to explaining how, with the advent of smallpox vac-

cination, was born a manipulative tactic that the medical and public health establishments continue to use to great effect in declaring epidemics and then making vaccines the heroes of the day. To manufacture an epidemic, authorities need only pull together an array of distinct conditions and repackage them under an “umbrella label,” as they did most recently with Covid-19 and, in the 1980s, with AIDS.<sup>16</sup> Conversely, to proclaim that a given vaccine has brought an epidemic to a close, they need only “play with terminology” again, pulling out the various components of the umbrella term into separate diagnostic labels and criteria, masking the same symptoms under new names. The spinning out of multiple diagnostic labels, moreover, encourages a new and highly profitable cycle of drug and vaccine development.

For example, after the seeming vaccine-wrought eradication of smallpox in 1980, doctors began diagnosing rashes that would previously have been called “smallpox” as a range of other skin conditions: “chickenpox, monkeypox, tanapox, scarlet fever, measles, rubella, herpes zoster, erythema multiforme, molluscum contagiosum, impetigo, dermatitis and so on.”<sup>9</sup> Sugak explains:

“The only thing that has happened is that the symptoms previously associated with ‘smallpox’ have simply been relabeled and reclassified under new labels. The creation of many new labels is the only method of manipulation—used to this day—with the help of which the medical establishment demonstrates to us its success in eliminating the so-called epidemics.”

In 1955, U.S. officials used the same tactic to artificially lower the number of reported polio cases and make the introduction of polio vaccination appear more successful. As I noted in my article titled “Polio Vaccines: Medical Triumph or Medical Mishap?”:

“In 1955, officials redefined ‘paralytic poliomyelitis’ and made the diagnosis much more stringent. Prior to the vaccine’s introduction, a patient only had to exhibit paralytic symptoms for twenty-four hours, and a diagnosis required no laboratory confirmation or tests to determine residual paralysis. Post-vaccine, the revised definition expanded the time period for symptoms of paralysis to a minimum of sixty days and required confirmation of residual paralysis at least twice during the course of the disease.”<sup>17</sup>

As a result, Sugak comments, the number of reported polio cases in the U.S. dropped significantly from approximately sixty thousand to just a few hundred cases per year.<sup>9</sup>

Most recently, we witnessed the same playbook deployed and weaponized for “coronavirus,” with a disparate group of symptoms lumped under the singular label “Covid-19.” When the public then was poisoned with deadly medications like remdesivir and toxic injections called “vaccines,” the resulting deaths further fanned the public’s pandemic fears. Similar to the prior historical periods of leprosy, plague and smallpox,

many individuals were unjustly labeled as sick and dangerously contagious.

## REAL CAUSES OF SKIN RASHES

As Sugak emphasizes, “Skin rashes are never the result of exposure to a mythical virus” but are “the consequence of a detoxification mechanism that involves the skin.”<sup>9</sup> When the build-up of wastes and toxins overloads other excretory systems (urination, defecation, sweating and breathing), the body turns to the skin and produces rashes. Wastes and toxins may result from a wide variety of factors, including “poverty, chronic malnutrition, exhaustion, psychological stress, water and food contamination, toxic drugs” and various forms of medical experimentation. “The nature of the rash,” Sugak explains, “depends on what the body is trying to get out.”

We can explain the prevalence of skin rashes in eighteenth-century Europe by noting the many natural and man-made disasters during that time, including wars, floods, earthquakes and volcanic eruptions that deprived populations of sunlight, created psychological stress and led to deficiencies in nutrients vital to the skin such as vitamin D, iron and potassium.

Sugak also notes various physiological reasons why children have a stronger tendency to experience skin rashes, especially if they accumulate waste products and toxins from an improper diet, unhealthy lifestyle, psychological stress or other poisons in their environment. Getting rid of rashes, therefore, requires recognizing and eliminating the toxicological and psychosomatic factors that are giving rise to them. Encouragingly, when children have a healthy family life, spend a lot of time outdoors, eat a Wise Traditions diet, get proper sleep and minimize or entirely avoid pharmaceutical products, their excretory system is able to cope with waste removal uneventfully.

## THE SANITATION REVOLUTION

Hollywood and popular culture tend to romanticize the nineteenth century, but while there were certainly moments of beauty and wonder, many people faced daily challenges and hardships that resulted in high morbidity

Unbiased medical historians agree that the true champions of twentieth-century public health were not doctors but rather the engineers responsible for sewage treatment, clean water and refrigeration.

and mortality rates. Unsanitary living and working conditions were prevalent and negatively affected health and well-being. Humphries' chapter describing this period is titled, "The Not So Good Ol' Days." By the mid-1800s, for example (p. 167),<sup>11</sup> New York City alone housed over one hundred thousand slum dwellers in twenty thousand tenement buildings. Describing the crowded and insect-infested slums, reporter and photographer Jacob Riis, in his 1902 book *The Battle with the Slum* (p. 37), noted housing commissioners' reference to tenement houses as "infant slaughter houses" because one in every five babies born there died.<sup>18</sup>

The day-to-day challenges affecting health and well-being went far beyond substandard housing. Problems included pollution emitted by factories and coal-burning stoves, contributing to poor air quality and lung diseases; factories and mills that exposed workers to other dangerous chemicals and materials; inadequate sewage systems that often led to waste being dumped in streets or rivers, fostering waterborne bacterial diseases like cholera and typhoid fever; animals roaming narrow, crowded streets; reliance on contaminated sources of water for drinking and cooking; contaminated or poor-quality food, including adulterated milk produced in filthy inner-city confinement dairies; and subsistence diets lacking in essential vitamins and minerals.


As for children, Tom Cowan and Sally Falton Morell note in their book *The Contagion Myth* (p. 30), "The death rate among children

born in these conditions was 50 percent."<sup>19</sup> Humphries describes the harsh and dangerous nineteenth- and early twentieth-century conditions in which many poor children worked. Long hours in unventilated and cramped factories and mines exposed child laborers as young as four years of age to hazardous substances such as coal dust and lead, causing respiratory issues, neurological damage and even death.

What Humphries dubs the nineteenth-century "Sanitation Revolution" marked a public health turning point, enabling gradual but significant improvements in living and working conditions (pp. 167-173).<sup>11</sup> Governments began to set standards for cleanliness, initiating large-scale urban projects such as sewer systems, indoor plumbing and regulations for waste disposal. Additionally, public health campaigns educated people about sanitation and hygiene practices. As a result of these efforts, disease rates plummeted and overall health improved—all well before it was even possible to claim, falsely, that vaccines were responsible.<sup>20</sup>

In fact, in a 1970 speech while he was president of the Infectious Diseases Society of America, Dr. Edward H. Kass (1917–1990) took his colleagues to task for giving too much credit to medical care for the dramatic declines in U.S. mortality from diseases like tuberculosis, scarlet fever, diphtheria, whooping cough and measles—and for not giving enough credit to socioeconomic and environmental improvements.<sup>21</sup> Unbiased medical historians agree that

Timeless Principles  
of Healthy  
Traditional Diets

  
THE WESTON A. PRICE  
FOUNDATION®  
for *Wise Traditions*  
IN FOOD, FARMING AND THE HEALING ARTS  
*Education • Research • Action*

COMPLIMENTS OF:

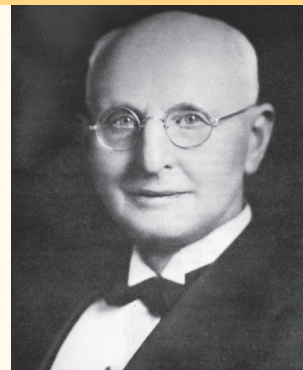
OVER  
34 MILLION  
IN PRINT

Visit our fascinating website at  
[westonaprice.org](http://westonaprice.org)

## Timeless Principles of Healthy Traditional Diets

950,000 printed so far.  
The extensive information in this  
brochure is life-changing.  
Share it with others!

\$1 each or \$60 for 100 copies.  
Order at [westonaprice.org/order](http://westonaprice.org/order) (703) 820-3333





the true champions of twentieth-century public health were not doctors but rather the engineers responsible for sewage treatment, clean water and refrigeration.<sup>22</sup>

## DISPROVING CONTAGION

Sharing the opinion of many others who have looked into fraudulent claims of “virus isolation,” Sugak argues that no one has ever provided scientifically validated evidence—including a photograph of the isolated virus and its biological characterization—of the existence of either the smallpox virus or the poxvirus called “vaccinia” cited as the source of “second-generation” smallpox vaccines (see next section). Unfortunately, as Tom Cowan noted in his article titled “What Does—and Doesn’t—Make Us Sick” in the Spring 2023 issue of *Wise Traditions*, when we neglect the true scientific method “we can end up in a world of illusions, delusions and make-believe.”<sup>23</sup>

In *Contagion Myth*, Cowan and Morell describe (p. 31) the work of Dr. Charles A.R. Campbell of San Antonio, Texas, who in the early twentieth century publicly rejected officialdom’s notion that smallpox was a contagious virus infecting people via contact with “droplets,” a sick person’s bodily fluids or contaminated household items.<sup>19</sup> Instead, invariably finding bedbugs in the homes of everyone with smallpox, Campbell hypothesized that bedbug bites were the transmitting agent. Cowan and Morell note that this common-sense theory would explain how smallpox spread among Native Americans after the latter came in contact with British and American colonists—with weaponized, bedbug-infested blankets doing the job attributed to viral contagion.

To disprove contagion, Campbell conducted personal experiments in a “pest house” he ran for smallpox patients, intentionally and repeat-

edly exposing himself to all the supposed vectors of smallpox transmission, including patients covered in sores as well as their clothing and items like area rugs. Neither Campbell nor any of his family or friends ever got sick.

To treat and prevent smallpox, Campbell eschewed toxic vaccinations and instead recommended eating foods rich in vitamin C and eliminating bedbugs—practical solutions that other practitioners and medical historians have largely ignored because, in Cowan’s and Morell’s words (p. 32), “Where’s the glamour of a solution that involves clean beds and fresh fruit compared with the heroics of vaccination”?<sup>19</sup>

## “SECOND-GENERATION” VACCINES

Even though the smallpox virus theory remains unproven to this day—with the accompanying implication being that testing for and vaccinating against “smallpox virus” are meaningless and potentially dangerous actions—the practice of smallpox vaccination persists. The U.S. discontinued regular smallpox vaccination in the early 1970s,<sup>24</sup> but in 2015, the CDC’s Advisory Committee on Immunization Practices (ACIP) continued to recommend routine smallpox vaccination of “specific populations at high risk of occupational exposure to orthopoxviruses”—vaccines provided by the CDC itself.<sup>25</sup> The U.S. maintains three smallpox vaccines in the Strategic National Stockpile (SNS)<sup>26</sup> as part of the “federal medical response infrastructure,” only two of which are licensed:

1. In 2007, the U.S. Food & Drug Administration (FDA) licensed the “live” vaccinia virus vaccine ACAM2000, initially developed by Sanofi Pasteur and acquired in 2017 by Emergent BioSolutions, for persons of any age “determined to be at risk for smallpox infection.”<sup>27</sup>
2. In 2019, FDA licensed the two-pronged “live, non-replicating” vaccine Jynneos for both smallpox and monkeypox; the Danish biotech company Bavarian Nordic A/S makes Jynneos.<sup>28</sup> Although the Jynneos licensure applies only to adults age eighteen and up, FDA then issued emergency use authorization (EUA) in August 2022 for administration of Jynneos injections to persons of all ages (that is, including children) if “determined to be at high risk for monkeypox infection.”<sup>29</sup> In May 2023, the CDC issued a new health alert about monkeypox (now restyled as “mpox”), drumming up warnings about new “clusters or outbreaks” and recommending two doses of vaccine as a “prevention” measure.<sup>30</sup>
3. A third stockpiled smallpox vaccine, the “replication-competent vaccinia virus” Aventis Pasteur Smallpox Vaccine (APSV), is unlicensed

## A DIRE SITUATION

Robert F. Kennedy, Jr., the founder and president-on-leave of Children’s Health Defense, eloquently captured the dismal state of healthcare in America in his recent presidential campaign announcement.<sup>57</sup> Kennedy highlighted the fact that despite being the highest spender on healthcare worldwide, the U.S. also has the highest rate of chronic diseases. In the mid-twentieth century, an estimated 6 percent of American children had chronic illnesses, but by the 1980s, that figure had doubled to 12 percent, and today, at least 54 percent of American children suffer from chronic diseases, making this generation the sickest in the nation’s history. Kennedy emphasized that the situation is dire, as America has the unenviable distinction of having some of the sickest children on the planet.<sup>58</sup>

Across the globe, citizens face increasing discrimination and persecution for making vaccine choices that do not align with official policies.

but could be used “in a smallpox emergency under the appropriate regulatory mechanism,” including the EUA mechanism or as part of an investigational new drug (IND) application.<sup>31</sup>

As reported in the package insert, many serious adverse events are associated with ACAM2000, including various forms of brain inflammation and other conditions affecting brain function or structure.<sup>32</sup> The insert also warns of a variety of severe skin complications,<sup>33</sup> including generalized vaccinia (the systemic spread of vaccinia from the vaccination site), progressive vaccinia (“secondary metastatic vaccinia lesions” that cause the death of bodily tissues), eczema vaccinatum and Stevens-Johnson syndrome. Other serious complications include heart problems, blindness and fetal death in pregnant women. The insert notes that all of these complications have the potential to cause “severe disability, permanent neurological sequelae and death,” including death in “unvaccinated contacts.”

Serious adverse events reported during clinical trials for the Jynneos vaccine include Crohn’s disease, sarcoidosis (an inflammatory disease affecting various organs), extraocular muscle paresis (weakening of eye muscles) and throat tightness, as well as “cardiac adverse events of special interest” considered causally related to the vaccine but dismissed as not serious.<sup>34</sup>

As of March 31, 2023, the Vaccine Adverse Event Reporting System (VAERS) jointly administered by the CDC and FDA had received reports of almost seventy-six hundred adverse events related to smallpox vaccines, with almost

a thousand (13 percent) classified as serious and twenty-two reported as fatal.<sup>35</sup> A significant majority of these adverse events, almost 82 percent, were in younger adults aged seventeen through forty-four years, including half of the deaths.

#### VACCINE AWARENESS MOVEMENTS

Although compulsory smallpox vaccination came to an end in England in 1948 (p. 159),<sup>11</sup> vaccine coercion and vaccine mandates have not gone by the wayside. Across the globe, citizens face increasing discrimination and persecution for making vaccine choices that do not align with official policies. In America, this policy requires doctors to administer seventy-two doses of seventeen vaccines to children starting from birth—with several prenatal vaccines also urged on pregnant women.<sup>36</sup> Adults are at risk of having a growing number of vaccines be federally recommended or mandated, similar to what we experienced with the rollout of the fast-tracked, experimental Covid shots.

In *Dissolving Illusions*, Humphries urges citizens to learn from history, noting that state laws and workplace policies have been steadily eroding our freedom to make decisions about what enters our bodies. She observes that the forceful efforts of vaccine proponents have successfully deleted religious vaccine exemptions that once seemed solidly in place (p. 160).<sup>11</sup> On a positive note, a federal judge ruled in April 2023 that parents in Mississippi—a state that has been without a religious exemption since 1979<sup>37</sup>—“can opt out of vaccinating their children for school on account of religious beliefs.”<sup>38</sup>

Barbara Loe Fisher, president of the National Vaccine Information Center (NVIC), has long argued in defense of the ethical principles

#### FREEDOM FROM LIABILITY MEANS FREEDOM TO INJURE AND KILL

Under the 2005 Public Readiness and Emergency Preparedness (PREP) Act, U.S. vaccine manufacturers are protected from liability when a vaccine or drug created in response to a health emergency and given emergency use authorization (EUA) causes death or permanent injury to individuals who receive it during pre-licensure clinical trials or after its release for public use. The PREP Act applies to the Covid injections, meaning that injured individuals cannot sue for damages.

In such cases, the Countermeasures Injury Compensation Program (CICP) provides a possible but highly unlikely means of compensation. As of April 2023, only three individuals had been compensated through the CICP, with the highest dollar amount paid being around two thousand dollars to an individual who suffered severe allergic shock.<sup>59</sup> However, a recent independent analysis suggests that Covid shots administered in the U.S. in calendar year 2022 injured 2.6 million Americans, disabled another 1.36 million and were responsible for over three hundred thousand excess deaths, with these events estimated to have an economic cost of \$147.8 billion.<sup>60</sup>

of informed consent and the “first, do no harm” practice of medicine. As Fisher writes, “The individual’s right to autonomy and exercise of voluntary, informed consent to medical risk-taking has been defined internationally as a human right since 1947,” when the Nuremberg Code was issued to safeguard human subjects in scientific experiments.<sup>39</sup> Fisher notes the harm done when authorities disregard citizens’ rights to dissent, petition the government for redress and hold beliefs that differ from the majority—rights enshrined by our nation’s founders to protect minorities from oppression.

Fisher played a pivotal role in igniting the modern vaccine awareness movement after her infant son suffered tragic injuries from the diphtheria-pertussis-tetanus (DPT) vaccine. Together with other parents of vaccine-injured children, Fisher co-founded NVIC in 1982. For forty years, Fisher has worked to mobilize a nationwide grassroots movement and public awareness aimed, among other goals, at strengthening informed consent protections in the public health sector.<sup>40</sup> (For more information about Fisher and the DPT vaccine, see my article, “Pertussis Vaccines: A Historical and Present-Day Perspective” in *Wise Traditions*, Winter 2020.<sup>41</sup>)

Over the decades, a growing number of parent advocates have joined the vaccine awareness movement, with many noticing a correlation between the increased number of vaccines given to children beginning in the late 1980s and the subsequent development of autism in their children. These parents have humanized the issue of vaccine injury, revealing that vaccine-related injuries and deaths are far from uncommon occurrences. This grassroots parent movement has achieved some notable successes, for example pushing the U.S. government to remove mercury from most childhood vaccinations (although it remains in some flu shots and is still present in “trace amounts” in other vaccines due to its use in the manufacturing process). Parent-driven advocacy groups like Age of Autism (which publishes the online *Age of Autism* newsletter) have helped show that autism is a preventable disorder caused by human activity; *Age of Autism* also works to expose “the special interests, bureaucratic inertia, and medical malfeasance that perpetuate denial and suffering.”<sup>42</sup> With rates surging from an estimated one in one hundred fifty children in 2000<sup>43</sup> to an estimated one in thirty-six children as of 2020,<sup>44</sup> experts expect autism to cost the U.S. \$1.36 trillion annually by 2040.<sup>45</sup> (For more information, see my article, “Vaccines and Autism: A Very Real Connection” in *Wise Traditions*, Winter 2018.<sup>46</sup>)

## TRUTH AND JUSTICE

Today, there are vaccine awareness advocacy groups around the world with millions of followers serving as warriors for truth and justice. These groups reflect the global waning of trust in vaccination programs, a trend that worried the world’s top vaccine experts when they gathered at the WHO in December 2019 on the eve of the pandemic.<sup>47</sup> In the U.S., public health agencies’ willingness to authorize and recommend experimental Covid injections for children as young as six months old has prompted a growing number of parents to question the CDC’s childhood vaccine schedule in its entirety.<sup>48</sup> Other factors contributing to the decline in

public confidence include mounting awareness of the vaccine industry’s significant, liability-free profits; inadequate scientific transparency and integrity; the politicization of vaccine recommendations; and false claims of safety that downplay risks while exaggerating benefits.


In its eBook titled *Conflicts of Interest Undermine Children’s Health*,<sup>49</sup> Children’s Health Defense (CHD) outlines needed actions to address the shocking—and personally and societally costly<sup>50</sup>—phenomenon of vaccine injury. One of the most important steps, CHD and many others agree, is to repeal the National Childhood Vaccine Injury Act of 1986, which provides vaccine manufacturers with complete liability protection for injuries caused by childhood vaccines. CHD has also long argued for the elimination of all vaccine mandates.<sup>51</sup>

For my part, I propose a suspension of all vaccinations until and unless their safety and effectiveness can be definitively proven. I also believe that individuals have the right to make their own medical decisions, although it is difficult for most people to make truly informed choices due to the propaganda and misdirection deployed in the public sphere. Given the vast amount of literature and studies on vaccinations, it can be challenging for individuals to decipher the truth, especially because the funding for many of the studies pronouncing vaccines to be “safe” comes from the vaccine manufacturers themselves.

The Covid-19 pandemic is a prime example of the confusion that can arise from the distorted information put forth by the media and officialdom. Even as the reported incidence and deaths attributable to “Covid-19” increasingly have been called into question,<sup>52</sup> the mainstream media have devoted no attention to other possible causes of the disease,<sup>53</sup> such as electromagnetic poisoning from 5G and other wireless technologies.<sup>19</sup> Canadian physics professor Denis Rancourt frankly argues for an “interpretation of the ‘COVID peak’ as being a signature of mass homicide by government response.”<sup>52</sup> Meanwhile, the media have remained silent about the estimated 14.5 percent excess mortality seen globally in the Covid-injected as compared with the uninjected.<sup>54</sup>



Until we address nutrient deficiencies and focus on the various forms of poisoning that are the true causes of illness, we will not make progress in restoring health. Disregarding the possibility of toxic causes and attributing disastrous epidemics solely to an elusive pathogen is a false path—leading to unscientific and totalitarian measures such as China’s mass imprisonment (“zero Covid”) policy. The past several years also have shown us how easy it is to manipulate epidemiological data and use unverifiable figures and fraudulent tests to create a false sense of impending catastrophe. Moreover, the concept of disease transmission is a new one and is nowhere to be found in much older traditions such as Ayurvedic and Chinese medicine. As Covid reminded us, our greatest epidemic is that of fear.

The White House recently announced the launch of a five-billion-dollar program called “Project NextGen” to be led by the Biomedical Advanced Research and Development Authority (BARDA) and the National Institute of Allergy and Infectious Diseases (NIAID); replacing “Operation Warp Speed,” Project NextGen’s mission will be to “accelerate and streamline the rapid development of the next generation of vaccines and treatments.”<sup>55</sup> However, putting our faith in vaccines to offer salvation is a mistake. I pledge to continue my efforts to oppose vaccine mandates and other authoritarian measures, such as mandatory mask-wearing, that infringe upon our personal freedoms. Through unity, our movement can achieve success, as seen in recent wins like the landmark victory of the Informed Consent Action Network (ICAN) in federal court, which, as already mentioned, secured the right to a religious exemption from all vaccines for all Mississippi schoolchildren. Hopefully, that decision will set a crucial legal precedent paving the way for a nationwide religious opt-out from vaccination requirements for school attendance.<sup>56</sup> The vaccine industry may be worth trillions of dollars, but it’s important to remember that their success is based on magic fairy dust. If we bond together, we have the power to persevere, blow that dust to the wind and emerge victoriously. 

*Kendall Nelson is a documentary filmmaker actively engaged in directing, producing and distributing media that matter. With over twenty years of television and film experience, Nelson’s lifelong commitment is to bring about awareness through her work, including advocating health freedom, simple living and real food. She is an Idaho chapter board member of the International Women’s Forum.*

## REFERENCES

1. History of the smallpox vaccine. World Health Organization, n.d. <https://www.who.int/news-room/spotlight/history-of-vaccination/history-of-smallpox-vaccination>
2. Babkin IV, Babkina IN. The origin of the variola virus. *Viruses*. 2015;7(3):1100-1112.
3. National Center for Emerging and Zoonotic Infectious Diseases. What is smallpox? Centers for Disease Control and Prevention, reviewed Jun. 7, 2016. <https://www.cdc.gov/smallpox/about/index.html>
4. Fenner F, Henderson DA, Arita I et al. The incidence and control of smallpox between 1900 and 1958. Chapter 8 in *Smallpox and Its Eradication*, pp. 315-363, Table 8.8. World Health Organization; 1988. [https://biotech.law.lsu.edu/blaw/bt/smallpox/who/red-book/9241561106\\_chp8.pdf](https://biotech.law.lsu.edu/blaw/bt/smallpox/who/red-book/9241561106_chp8.pdf)
5. Smallpox. Centers for Disease Control and Prevention, reviewed Jul. 12, 2017. <https://www.cdc.gov/smallpox/index.html>
6. Deria A, Jezek Z, Markvart K et al. The world’s last endemic case of smallpox: surveillance and containment measures. *Bull World Health Organ*. 1980;58(2):279-283.
7. Smallpox. World Health Organization, n.d. [https://www.who.int/health-topics/smallpox#tab=tab\\_1](https://www.who.int/health-topics/smallpox#tab=tab_1)
8. Small PA Jr., Small NS. Mankind’s magnificent milestone: smallpox eradication. *Am Biol Teach*. 1996;58(5):264-271.
9. Sugak K. “The Truth about Smallpox.” Odysee, Sep. 16, 2022. <https://odysee.com/@katie.su:7/thetruthaboutsmallpox:9>
10. Brumfiel G. A 300-year-old tale of one woman’s quest to stop a deadly virus. NPR, Mar. 8, 2021.
11. Humphries S, Bystriany R. *Dissolving Illusions: Disease, Vaccines, and the Forgotten History*. Dissolvingillusions.com; 2013, 2015.
12. Smith KN. Why Edward Jenner infected his gardener’s son with smallpox. *Forbes*, May 17, 2019.
13. Haelle T. Vaccine hesitancy is nothing new. Here’s the damage it’s done over centuries. *ScienceNews*, May 11, 2021.
14. Lanzarotta T, Ramos MA. Mistrust in medicine: the rise and fall of America’s first vaccine institute. *Am J Public Health*. 2018;108(6):741-747.
15. Centers for Disease Control and Prevention. Vaccinia (smallpox) vaccine: recommendations of the Advisory Committee on Immunization Practices (ACIP), 2001. *MMWR*. 2001;50(RR-10):1-25.
16. Rappoport J. My HIV/AIDS investigation, and the parallels to the COVID hoax. *Jon Rappoport’s Blog*, Mar. 8, 2021. <https://blog.nomorefakenews.com/2021/03/08/my-hiv-aids-investigation-and-the-parallels-to-the-covid-hoax/>
17. Nelson K. Polio vaccines: medical triumph or medical mishap? *Wise Traditions*. Summer 2019;20(2):77-85.
18. Riis JA. *The Battle with the Slum*. New York: The Macmillan Company; 1902.
19. Cowan TS, Morell SF. *The Contagion Myth: Why Viruses (including “Coronavirus”) Are Not the Cause of Disease*. New York: Skyhorse Publishing; 2020. <https://learntherisk.org/vaccines/diseases/>
20. Kass EH. Infectious diseases and social change. *J Infect Dis*. 1971;123(1):110-114.
21. Handley JB. Impact of vaccines on mortality decline since 1900—according to published science. Children’s Health Defense, Mar. 12, 2019.



23. Cowan T. What does—and doesn't—make us sick. *Wise Traditions*. Spring 2023;24(1):16-26.
24. Rich M. The discontinuation of routine smallpox vaccination in the United States, 1960–1976: an unlikely affirmation of biomedical hegemony. *Cien Saude Colet*. 2011;16(2):471-477.
25. Smallpox: vaccines. Centers for Disease Control and Prevention, reviewed Aug. 8, 2022. <https://www.cdc.gov/smallpox/clinicians/vaccines.html>
26. Strategic National Stockpile. Administration for Strategic Preparedness & Response, n.d. <https://aspr.hhs.gov/SNS/Pages/default.aspx>
27. ACAM2000 (smallpox vaccine) questions and answers. U.S. Food & Drug Administration, Aug. 19, 2022. <https://www.fda.gov/vaccines-blood-biologics/vaccines/acam2000-smallpox-vaccine-questions-and-answers>
28. FDA approves first live, non-replicating vaccine to prevent smallpox and monkeypox. U.S. Food & Drug Administration, Sep. 24, 2019. <https://www.fda.gov/news-events/press-announcements/fda-approves-first-live-non-replicating-vaccine-prevent-smallpox-and-monkeypox>
29. Monkeypox update: FDA authorizes emergency use of JYNNEOS vaccine to increase vaccine supply. U.S. Food & Drug Administration, Aug. 9, 2022. <https://www.fda.gov/news-events/press-announcements/monkeypox-update-fda-authorizes-emergency-use-jynneos-vaccine-increase-vaccine-supply>
30. Baletti B. CDC issues monkeypox alert, recommends two doses of vaccine despite questions about efficacy. *The Defender*, May 19, 2023. <https://www.cdc.gov/smallpox/clinicians/vaccines.html>
31. <https://www.cdc.gov/smallpox/clinicians/vaccines.html>
32. Emergent Product Development Gaithersburg, Inc. ACAM2000 package insert. U.S. Food & Drug Administration, content current as of Dec. 13, 2019. <https://www.fda.gov/vaccines-blood-biologics/vaccines/acam2000>
33. Vaccine adverse events. Centers for Disease Control and Prevention, reviewed Dec. 5, 2016. <https://www.cdc.gov/smallpox/clinicians/vaccine-adverse-events5.html>
34. Bavarian Nordic. JYNNEOS package insert. U.S. Food & Drug Administration, content current as of Mar. 15, 2023. <https://www.fda.gov/vaccines-blood-biologics/jynneos>
35. Smallpox and monkeypox (mpox) disease & vaccine quick facts. National Vaccine Information Center, n.d. <https://www.nvic.org/disease-vaccine/smallpox/quick-facts>
36. <https://www.cdc.gov/vaccines/schedules/index.html>
37. Unhealthiest state in America has best vaccination rate: Offit's Orwellian logic fails to connect dots. Children's Health Defense, Jan. 16, 2018.
38. Bose D. Mississippi has the highest childhood vaccination rate in the country. That may be about to change. *Mississippi Today*, Apr. 19, 2023.
39. Fisher BL. Reforming vaccine policy & law: a guide. National Vaccine Information Center, 2022. <https://www.nvic.org/NVIC/media/LegacySite/pdf/NVIC-Referenced-Vaccine-Law-Reform-Guide.pdf>
40. Barbara Speaks Out! National Vaccine Information Center, updated Apr. 26, 2023. <https://www.nvic.org/about/our-work/speaks-out>
41. Nelson K. Pertussis vaccines: a historical and present-day perspective. *Wise Traditions*. Winter 2020;21(4):70-79. <https://www.ageofautism.com>
42. <https://www.ageofautism.com>
43. Feldman S. Research shows rise in autism rate. Statista, Apr. 2, 2019. <https://www.statista.com/chart/17578/autism-rate-in-the-united-states/>
44. Maenner MJ, Warren Z, Williams AR et al. Prevalence and characteristics of autism spectrum disorders among children aged 8 years—Autism and Developmental Disabilities Monitoring Network, 11 sites, United States, 2020. *MMWR Surveill Summ*. 2023;72(2):1-14.
45. \$1.36 trillion in annual autism costs to hit U.S. by 2040, \$5.5 trillion by 2060. SafeMinds, Jul. 21, 2021. <https://safeminds.org/news/1-36-trillion-in-annual-autism-costs-to-hit-u-s-by-2040-5-5-trillion-by-2060/>
46. Nelson K. Vaccines and autism: a very real connection. *Wise Traditions*. Winter 2018;19(4):92-98.
47. Look WHO's talking! Vaccine scientists confirm major safety problems. Children's Health Defense, Jan. 16, 2020.
48. Children's Health Defense. A COVID silver lining? More parents than ever questioning “routine” childhood vaccines. *The Defender*, Aug. 12, 2022.
49. *Conflicts of Interest Undermine Children's Health*. Children's Health Defense eBook, April 2019. <https://childrenshealthdefense.org/ebook-sign-up/ebook-sign-up-conflicts-of-interest/>
50. Children's Health Defense. *Profiles of the Vaccine-Injured: "A Lifetime Price to Pay."* New York: Skyhorse Publishing; 2022.
51. *Vaccine Mandates: An Erosion of Civil Rights?* Children's Health Defense eBook, November 2020. <https://childrenshealthdefense.org/ebook-sign-up-vaccine-mandates-an-erosion-of-civil-rights/>
52. Rancourt D. All-cause mortality during COVID-19 – no plague and a likely signature of mass homicide by government response. Denisrancourt.ca, 2020-06-02. [https://denisrancourt.ca/entries.php?id=9&name=2020\\_06\\_02\\_all\\_cause\\_mortality\\_during\\_covid\\_19\\_no\\_plague\\_and\\_a\\_likely\\_signature\\_of\\_mass\\_homicide\\_by\\_government\\_response](https://denisrancourt.ca/entries.php?id=9&name=2020_06_02_all_cause_mortality_during_covid_19_no_plague_and_a_likely_signature_of_mass_homicide_by_government_response)
53. Gilbert D. The mystery of synchronous Gompertz mortality curves. Apr. 15, 2023. <https://odysee.com/@LongXXvids:c/Dorothea-Gilbert-talk—15.04.2023:0>
54. Šorli AS, Makovec T, Krelj Ž et al. Forgotten “primum non nocere” and increased mortality after COVID-19 vaccination. *Qual Prim Care*. 2023;31(1):23-42. <https://www.primescholars.com/articles/forgotten-primum-non-nocere-and-increased-mortality-after—covid19-vaccination.pdf>
55. HHS Press Office. Fact sheet: HHS details \$5 billion “Project NextGen” initiative to stay ahead of COVID-19. U.S. Department of Health and Human Services, May 11, 2023. <https://www.hhs.gov/about/news/2023/05/11/fact-sheet-hhs-details-5-billion-project-nextgen-initiative-stay-ahead-covid.html>
56. ICAN attorneys secure religious exemption to vaccination in Mississippi. ICAN Legal Update, Apr. 17, 2023. <https://icandecide.org/press-release/ican-attorneys-secure-religious-exemption-to-vaccination-in-mississippi/>
57. Children's Health Defense. RFK Jr. launches presidential campaign, vows to reduce chronic disease in children. *The Defender*, Apr. 20, 2023.
58. LIVE: Robert F. Kennedy, Jr. expected to announce presidential run. Reuters, Apr. 19, 2023. <https://www.youtube.com/watch?v=EsuLBPjdt-w>
59. <https://www.hrsa.gov/cicp/cicp-data/table-4>
60. COVID shot damage report reveals alarming human and economic cost. *Liberty Counsel*, Mar. 31, 2023. <https://lc.org/newsroom/details/033123-covid-shot-damage-report-reveals-alarming-human-and-economic-cost-1>

# Soy Alert!

## Soy Studies 2015-2023

Soy foods had their heyday of promotion and propaganda in the early 2000s, with soy presented as a panacea for everything from hormonal problems to osteoporosis. This hype has gone quiet as studies accumulate showing soy for what it is: an endocrine-disrupting poison.

The Weston A. Price Foundation has maintained a list of studies showing the adverse effects of soy and soy isoflavones on our Soy Alert! page at [westonaprice.org](http://westonaprice.org).<sup>1</sup>

We have recently updated this list to include all relevant studies published since 2015. A great thanks to Ana Jane Ivacove for compiling the list.

Soy foods had their heyday of promotion and propaganda in the early 2000s, with soy presented as a panacea for everything from hormonal problems to osteoporosis. This hype has gone quiet as studies accumulate showing soy for what it is: an endocrine-disrupting poison.

### STUDIES SHOWING ADVERSE EFFECTS OF SOY

2015: Studies compare soybean oil to coconut oil and find changes in gene expression and metabolite levels in the organs, particularly the liver, of soy-fed animals. “[Soy feeding] showed increased weight gain, larger fat deposits, a fatty liver with signs of injury, diabetes and insulin resistance, all of which are part of the Metabolic Syndrome.”<sup>2</sup>

2016: Soy foods increase the length of the female menstrual cycle. In men, soy consumption is linked with lower sperm concentration. Two case reports describe feminizing effects in men that occurred due to soy food consumption. This study is especially interesting because the author, Mark Messina, has been one of the most vocal and active promoters of soy.<sup>3</sup>

2017: Endocrine disruption manifests as a decrease in testosterone levels, Sertoli cell number and an increase in the percentage of degenerated Sertoli and Leydig cells in animals receiving soy milk.<sup>4</sup>

2017: Animals fed with soy have difficulty with digestion and absorption, resulting in negative effects. The abnormality of intestinal cells negatively affects the immunity of animal intestines and causes death. “Studies have demonstrated that SBA [soybean agglutinin] can affect the integrity and permeability of cell membrane and decline in the cell proliferation in the intestinal epithelial cell line from piglets.”<sup>5</sup>

2018: Soybean protein (agglutinin) causes negative effects on animal gut health by influencing the intestinal structure, barrier function, mucosal immune system and the balance of the intestinal flora.<sup>6</sup>

2019: Studies investigating breast cancer survivors find that those who consumed soy have a high risk of osteoporosis-related fractures.<sup>7</sup>

2020: Researchers find that soybean oils influence the activity of the hypothalamus, causing genes not to function as expected. Abnormal changes are seen in the gene that produces oxytocin (a hormone that controls key aspects of the reproductive system, such as childbirth and lactation, and aspects of human behavior). Changes are noted in other genes associated with neurological ills such as anxiety, pain, depression or schizophrenia.<sup>8</sup>

2020: Researchers find dysregulation of the hypothalamic gene and oxytocinergic system by feeding soybean oil diets to male mice. “Genes were associated with inflammation, neuroendocrine, neurochemical, and insulin signaling. Oxt was the only gene with metabolic, inflammation, and neurological relevance upregulated by both soybean oil diets compared to both control diets. Oxytocin immunoreactivity of the hypothalamus was reduced. . . these central and peripheral

effects of soybean oil diets were correlated with glucose intolerance but not body weight.”<sup>9</sup>

2021: This study finds that tofu consumption is associated with cognitive impairment and memory decline. One study has suggested “that the detrimental effects of tofu on memory performance could be due to the use of formaldehyde as a preservative.”<sup>10</sup>

#### STUDIES SHOWING ADVERSE EFFECTS OF SOY ISOFLAVONES

2015: Levels of soy isoflavones similar to those in infant formula fed to mice play a role in exposure to endocrine-disrupting chemicals (EDCs) associated with the obesity epidemic. “Obesogenic EDCs have the potential to inappropriately stimulate adipogenesis and fat storage, influence metabolism and energy balance and increase susceptibility to obesity.”<sup>11</sup>

2016: Exposure to soy-based infant formula results in negative effects on the long-term development of infants.<sup>12</sup>

2016: In a rat model, intake of soy (genistein)

inhibits follicle development, disrupts the production of sex steroid hormones and alters the expression of steroidogenic enzymes. Like other phytoestrogens found in soy, this has the potential to mimic, enhance or impair the estradiol pathway, thereby altering ovarian follicle growth.<sup>13</sup>

2016: Data show a link between long-term soy consumption and Kawasaki disease (KD). Soy isoflavones play a role in this.<sup>14</sup>

2017: “Consumption [of isoflavones] by infants and small children is of particular concern because their hormone-sensitive organs, including the brain and reproductive system, are still undergoing sexual differentiation and maturation. Thus, their susceptibility to the endocrine-disrupting activities of soya phyto-oestrogens may be especially high.”<sup>15</sup>

2018: Early-life exposure to genistein, a naturally occurring component in soy formula, interferes with development of the reproductive system, produces changes in tissues that persist into adulthood, and may be related to menstrual pain.<sup>16</sup>

2018: Soy infant formula has negative effects on animals, including on sexual development and reproductive function, neurobehavioral development, immune function and thyroid function. This brings awareness associated with relevant abnormalities in children with congenital hypothyroidism.<sup>17</sup>

2019: Studies find that animal diets containing soy isoflavones result

#### ESTROGENS IN SOYBEAN OIL

The most shocking discovery in our literature search was a 1999 analysis that we had missed. The researchers documented 28,370 ug estrogen in a tablespoon of soybean oil. Most birth control pills today contain between 20,000 ug and 30,000 ug estradiol. So, a tablespoon of soybean oil contains as much or more estrogen than most birth control pills. A serving of French fries, chicken nuggets or a pastry can easily contain one tablespoon of oil—and 80 percent of all oil used in processed and fast foods is soybean oil.

**1 TABLESPOON SOYBEAN OIL CONTAINS 28,370 UG ESTROGEN, MORE THAN MOST BIRTH CONTROL PILLS**

Approximately 1 tbsp soybean oil is in a serving of each of these items: chicken nuggets, French fries and a pastry. So the "happy" meal would provide the estrogen equivalent of 3 birth control pills.

SOURCE: MacDonald, HB. When it comes to hormones and milk, please give it a rest. *The Canadian Nurse*. 1999, 95(10):5 [www.proquest.com/openview/b995bb7d22da49a80068bb1afa254603/1?pq-origsite=gscholar&cbl=41610](http://www.proquest.com/openview/b995bb7d22da49a80068bb1afa254603/1?pq-origsite=gscholar&cbl=41610).

in behavioral issues, with negative impact on estrogen-regulated systems, as well as dominating behavior and cognition.<sup>18</sup>

2019: A change in gender-related behavior in children and feminization is associated with soy consumption. In animals, the excessive phytoestrogen intake leads to derangements of fertility, sexual development and behavior. Phyto-endocrines are called modulators or disruptors of the endocrine system.<sup>19</sup>

2019: Several studies show that the bioactive ingredient in soy changes the expression in several cell receptors of different tissues and cancer cells. Therefore, consumption of soy isoflavones disrupts endocrine functions, such as thyroid function and reproductive performance (because of their similar structure to estrogens). Furthermore, changing their gene expression stimulates the sensitivity of cells or tissues to the effects of physiological functions, such as growth, development, osteogenesis, immune response, lipogenesis, reproductive process and anticarcinogenesis.<sup>20</sup>

2020: High intake of soy and soy isoflavones increases the risk of prostate cancer. "During 16.9 years follow-up, we registered 221 deaths from prostate cancer. Isoflavones and soy products intake was associated with an increased risk of prostate cancer death."<sup>21</sup>

2021: The metabolites of soy isoflavones play a role in the risk of development and recurrence of breast cancer and in interactions with drugs used for treating breast cancer.<sup>22</sup>

2022: Worldwide collected data for over a decade show an increase in women diagnosed with breast cancer. A case report on the amount of isoflavone consumption and risk of breast cancer diagnosed in population indicates a strong correlation of isoflavone consumption and the risk of breast cancer.<sup>23</sup>

## REFERENCES

1. <https://www.westonaprice.org/soy-alert/>
2. Nealon S. Soybean oil may be more fattening than fructose or coconut oil. University of California-Riverside, Jul. 22, 2015. <https://www.universityofcalifornia.edu/news/soybean-oil-may-be-more-fattening-fructose-or-coconut-oil>
3. Messina M. Soy and health update: evaluation of the clinical and epidemiologic literature. *Nutrients*. 2016;8(12):754.
4. Nardi J, Moras PB, Koeppel C et al. Prepubertal subchronic exposure to soy milk and glyphosate leads to endocrine disruption. *Food Chem Toxicol*. 2017;100:247-252.
5. Pan L, Zhao Y, Yuan Z et al. The integrins involved in soybean agglutinin-induced cell cycle alterations in IPEC-J2. *Mol Cells*. 2017;40(2):109-116.
6. Pan L, Farouk MH, Qin G et al. The influences of soybean agglutinin and functional oligosaccharides on the intestinal tract of monogastric animals. *Int J Mol Sci*. 2018;19(2):554.
7. Zheng N, Hsieh E, Cai H et al. Soy food consumption, exercise, and body mass index and osteoporotic fracture risk among breast cancer survivors: the Shanghai Breast Cancer Survival Study. *JNCI Cancer Spectr*. 2019;3(2):pkz017.
8. America's most widely consumed oil causes genetic changes in the brain. *ScienceDaily*, Jan. 17, 2020. <https://www.sciencedaily.com/releases/2020/01/200117080827.htm>
9. Deol P, Kozlova E, Valdez M et al. Dysregulation of hypothalamic gene expression and the oxytocinergic system by soybean oil diets in male mice. *Endocrinology*. 2020;161(2):bqz044.
10. Svensson T, Sawada N, Mimura M et al. Midlife intake of the isoflavone genistein and soy, and the risk of late-life cognitive impairment: the JPHC Saku Mental Health Study. *J Epidemiol*. 2021 Dec 18.
11. Stel J, Legler J. The role of epigenetics in the latent effects of early life exposure to obesogenic endocrine disrupting chemicals. *Endocrinology*. 2015;156(20):3466-3472.
12. Yu J, Bi X, Yu B et al. Isoflavones: anti-inflammatory benefit and possible caveats. *Nutrients*. 2016;8(6):361.
13. Patel S, Peretz J, Pan YX et al. Genistein exposure inhibits growth and alters steroidogenesis in adult mouse antral follicles. *Toxicol Appl Pharmacol*. 2016;293:53-62.
14. Portman MA, Navarro SL, Bruce ME et al. Soy isoflavone intake is associated with risk of Kawasaki disease. *Nutr Res*. 2016;36(8):827-834.
15. Patisaul HB. Endocrine disruption by dietary phyto-oestrogens: impact on dimorphic sexual systems and behaviours. *Proc Nutr Soc*. 2017;76(2):130-144.
16. Pasley J. Study links soy formula feeding and menstrual pain. *VUMC Reporter*, Dec. 13, 2018. <https://news.vumc.org/2018/12/13/study-links-soy-formula-feeding-and-menstrual-pain/>
17. Testa I, Salvatori C, Di Cara G et al. Soy-based infant formula: are phyto-oestrogens still in doubt? *Front Nutr*. 2018;5:110.
18. Mallien AS, Soukup ST, Pfeiffer N et al. Effects of soy in laboratory rodent diets on the basal, affective, and cognitive behavior of C57BL/6 mice. *J Am Assoc Lab Anim Sci*. 2019;58(5):532-541.
19. Yang J, Wen L, Jiang Y et al. Natural estrogen receptor modulators and their heterologous biosynthesis. *Trends Endocrinol Metab*. 2019;30(1):66-76.
20. Xiao CW, Wood C, Gilani GS. Nuclear receptors: potential biomarkers for assessing physiological functions of soy proteins and phytoestrogens. *J AOAC Int*. 2006;89(4):1207-1214.
21. Sawada N, Iwasaki M, Yamaji T et al. Soy and isoflavone consumption and subsequent risk of prostate cancer mortality: the Japan Public Health Center-based Prospective Study. *Int J Epidemiol*. 2020;49(5):1553-1561.
22. Hatono M, Ikeda H, Suzuki Y et al. Effect of isoflavones on breast cancer cell development and their impact on breast cancer treatments. *Breast Cancer Res Treat*. 2021;185(2):307-316.
23. Boutas I, Kontogeorgi A, Dimitrakakis C et al. Soy isoflavones and breast cancer risk: a meta-analysis. *In Vivo*. 2022;36(2):556-562.



# Farm and Ranch

## SHOULD WE WORRY ABOUT mRNA IN LIVESTOCK?

By Tom Cowan, MD

Since 2018, pork producers have been using customizable mRNA-based “vaccines” on their herds. One example is Sequivity, an RNA-based vaccine developed by Merck Animal Health. There is no way to know specifically which producers are using these vaccines.

In addition to the avian influenza RNA shot for chickens licensed in 2015, newer mRNA-lipid nanoparticle shots for avian influenza are also in the works.

No mRNA vaccines are approved for use yet for cattle, but Iowa State University is working on an mRNA shot for cows, and lobbyists for the Cattlemen’s Association recently confirmed they intend to use mRNA “vaccines” in cattle, which might affect both dairy and beef.

The question is, should we be concerned about mRNA from vaccines in pork, chicken and beef?

In an interview I did with Stefano Scoglio about this a few months ago, he reported that there is zero evidence that injecting any living organism with mRNA makes them produce the desired protein. There are no studies in which they injected an mRNA vaccine and measured the result—that is, the protein in the blood or tissues. If this were a real phenomenon, there should be hundreds of such studies.

Instead they use non-specific antibodies without controls. These only show that the injections cause tissue damage which then binds with these antibodies, which are probably tissue-repair proteins and have nothing to do with “immunity.”

That said, there is no doubt that injecting mRNA sequences along with the rest of the toxic brew is extraordinarily harmful to people and animals. These added chemicals, nanoparticles,

There is zero evidence that injecting any living organism with mRNA makes them produce the desired protein.

### TEN WAYS TO SUPPORT LOCAL FARMS AND FOOD PRODUCERS

1. Contact a local Weston A. Price Foundation chapter leader near you to get a list of local food sources.
2. If there is no chapter leader near you, visit your state Department of Agriculture to identify local farms and farmers markets. Plus, consider starting a chapter: [westonaprice.org/start-a-chapter-2/#gsc.tab=0](http://westonaprice.org/start-a-chapter-2/#gsc.tab=0)
3. Check [realmilk.com](http://realmilk.com) for dairy farms.
4. Visit [farmmatch.com](http://farmmatch.com) to see whether farms deliver in your area.
5. Visit health food stores to see which local products they carry; when possible, purchase the local product (for example: local meat, cheese or ferments).
6. Once you know what is available, consider committing to WAPF’s “50-50 Pledge,” which means spending at least 50 percent of your food dollars on purchases from local sources. If you can’t manage half, decide how much and which foods you will obtain from local sources.
7. Once you have a list of farms, check the farms’ “About us” webpage to see whether they match your values, price range and location.
8. Place an order with a local farm. Consider the order a trial run to see whether you want to continue ordering.
9. Visit a farmers market. When you go, know what to look for—do not simply ask “Are you organic?” Most farms are not officially certified as organic but will be happy to tell you about their practices.
10. If satisfied, spread the word using social media, reviews and word of mouth.

synthetic lipids, hydrogels and perhaps graphene oxide poison the animals, make them sick and collect in certain sensitive tissues.

They are not, however, “genetically modified.”

So, even though there is no evidence that mRNA in vaccines causes the formation of toxic proteins, we all should try to obtain our meat and dairy products from small farmers who use no vaccines or chemicals of any sort. That is the only safe and reasonable way to obtain meat. ☺☺

---

TRIBUTE TO THE LATE JAMES CUTCLIFFE  
CHAPTER LEADER IN SUNSHINE COAST, QUEENSLAND, AUSTRALIA  
BY KYLE GRIMSHAW-JONES ALONG WITH FRIENDS AND COLLEAGUES

I was privileged to begin the first local chapter of the Weston A. Price Foundation in Australia and to help arrange some of the early talks presented by Sally Fallon Morell around the Gold Coast and Brisbane. In the early days, this felt somewhat lonely, and so I remember feeling grateful when other individuals joined in this group endeavour. James was one of these, and this is one of the gratitudes I have for him, that he helped meet my and many other people’s, need for shared reality and camaraderie around health and lifestyle.

I first met James Cutcliffe at the Woodford Folk Festival in the early 2000s and was introduced to him by Phillip Higson, who had met James himself at one of the late Don McFarland's early Weston Price lectures in Australia.

I was honoured to be invited by James to deliver Weston Price presentations on more than one occasion at his various residences over time. He always seemed to be organising health talks and farm tours, liaising with farmers and healthy food consumers, working with farmers, making and fermenting food for his many friends, and was also, I believe, the founder of a local food co-op group called “The Real Food People.”

One of my favourite memories of James was waking in the morning after one such talk where my family and I stayed overnight afterward in a tent and being greeted the next morning by a cute and friendly smiling garden-gnome-like creature with a winter beany on his head carrying room-service (or should it be tent-service?) bowls of soured porridge and yoghurt! (This was, of course, our beloved James!)

Once he was visiting and staying over at my old place at Guanaba and kindly brought me back some equipment from



the U.S. that I was having difficulty arranging shipping for. I remember he got so excited seeing all the old early *Wise Traditions* journals that he didn't yet have copies of. He went through each one and begged me to borrow them with such enthusiasm as he valued them so highly.

I also remember James being on stage representing the Weston A. Price Foundation at the Woodford Folk Festival. He was gleeful, genuine, humble, honest, helpful and had a wonderful audience rapport. He shared his experience and did an exemplary job of championing the principles that we see summarised on the back cover of every *Wise Traditions* journal, above the words “You teach, you teach, you teach!”

Sadly on 3 Aug 2022, in the Maleny Hospital, James Cutcliffe passed away at the age of eighty. He said he felt the most well looked after and cared for in that place, even in view of the multiple forms of health care he had received previously over the course of his life. This gives me a sense of peace and solace with the loss of my friend. I salute you James, my old friend, on a life well-lived.

WAPF mates Jillaine Williams, James Cutcliffe, Camille Mortaud and Judy Williams.

Photo courtesy of Jillaine Williams.

## BACK ISSUES OF **Wise Traditions** AND OTHER INFORMATIVE LITERATURE

Summer 2013	Our Broken Food Supply; The Marketing of Crisco; GMOs in Europe; Insights of a Meat Processor; Natto.
Fall 2013	GMO Dangers; Roundup Dangers: Culinary Traditions in Romania; The Battle for the People's Milk.
Spring 2014	Dr. Price's Scientific Approach; Weston Price and the Fluoridationists; Cows and Climate; Economics of Raw Milk.
Fall 2014	What Causes Heart Attacks? The Myogenic Theory of Heart Disease; Thrombi in Heart Disease.
Winter 2014	Effects of Smart Phones on the Blood; Dangers of Smart Meters; Protection Against EMR; U.S. Dietary Guidelines.
Spring 2015	Cleansing Myths and Dangers; Toxicity and Chronic Illness; Gentle Detoxification; Great Nutrition Pioneers.
Summer 2015	Vaccination Dangers Issue.
Fall 2015	The Scandal of Infant Formula; Vitamin D in Cod Liver Oil; Cod Liver Oil Controversy; Fermented Fish Foods.
Winter 2015	Water Issue: The Fourth Phase of Water; Sewage in a Glass; Water Stressors; Teaching WAPF to College Students.
Spring 2016	Folic Acid and Glyphosate; Why We Need Saturated Fats; Cod Liver Oil Testing; Flint, Michigan Cautionary Tale.
Summer 2016	Vitamin A; Healthy Fertility; Recovery from the Pill; The Concussion Epidemic; EMR and the ADHD Child.
Fall 2016	Recovery from a Low-Carb Diet; Why We Need Carbs; Salt; Nutritional Yeast; Big Box Stores; Addictions.
Spring 2017	Type 2 Diabetes; Couch Potato or Marathon Runner?; Weight Loss; Costa Rica; Moving Heavy Loads; MSG.
Winter 2017	The HPA Axis; A Primer on the Thyroid; Recovery from Bioidentical Hormones; WAPF in Peru.
Spring 2018	Mercury Issue: Mercury as Anti-Nutrient; The Thimerosal Travesty; Poisoning Our Children; The Cutler Protocol.
Summer 2018	Treating GERD; Gallbladder Health; Herbal Bitters; Hidden Histamine Problems; Constipation.
Fall 2018	Seniors on Drugs; Chronic Hyperinsulinemia; Dangers of Daily Aspirin Use; Incontinence; Nepal.
Spring 2019	Surviving in the Aluminum Age; The Cannabis Craze; Fluoride Dangers; Risks from Tablet Use.
Summer 2019	Rancidity Testing of Cod Liver Oil; Getting Informed about 5G; The Ketogenic Diet; Ukraine's Traditional Foods.
Fall 2019	Why We Cook; Mitochondria and Health; Prenatal Ultrasound, Not So Sound; Dissecting Fake Burgers.
Winter 2019	Dietary Support for the Alcoholic; Vitamin B6 and Nutritional Dependencies; Switzerland's Sourdough Bread.
Spring 2020	Vitamin A-Mazing; Sunlight and Vitamin D; Vitamin K2 MK-4, Dr. Price's X Factor.
Summer 2020	Is Coronavirus Contagious? Air Pollution, Biodiesel, Glyphosate and Covid-19; The Current Health Crisis.
Fall 2020	Toxic Iron, Arsenic and Anthrax, Traditional Foods of Morocco; Modified Food Starch.
Spring 2021	Bringing Up Baby; MSG-Glyphosate Connection; Advice for the EMF-Sensitive; Colonoscopy Risks.
Summer 2021	Questioning Covid; Glyphosate and the Gut; Hidden Food Ingredients; Foodways of the Australian Outback.
Fall 2021	Sound Frequency Therapy; Covid Vaccine Shedding; Outlawing Meat in India; The Batwa Pygmies of Uganda.
Winter 2021	Money and Public Health Policy; Cell Phones and Thyroid Cancer; DIY Covid Treatment; Low-Fodmap Diet.
Spring 2022	The Great Virus Debate; Solving the Mystery of TB; RFK, Jr. Speech; Covid and Mechanical Ventilation.
Summer 2022	Devil in the Garlic; MSG and Obesity; Sunscreen Dangers; Reducing EMF Exposure; Mediterranean Diet.
Fall 2022	Salt, Dopamine and Health; Gallbladder Health; Lung Health; A Soy Prison Saga.
Winter 2022	Optimal Hormonal Development in Your Child; Living in the Plasticene; Gender Surgery; Scottish Porridge.
Spring 2023	What Makes Us Sick?; Transcending the Narrative; The Kazakh Eagle Hunters; Medical Testing.
Summer 2023	Pfizer documents; Omega-6 oils; High-Lysine Diets; Manufactured Citric Acid.

**HEALTHY BABY ISSUE:** Traditional Remedies for Childhood Illness; Baby Food and Formula; Vitamins for Fetal Development; Wrong Advice in Baby Books; Vaccinations; Baby Food; Gut and Psychology Syndrome.

**HEART DISEASE ISSUE:** What Causes Heart Disease? Benefits of High Cholesterol; Oiling of America and more.

**All articles from all journals are posted at westonaprice.org.**

Back issues are \$12 (includes shipping). Discounts: \$8 for 10-49; \$5 for 50 or more.

**FREE JOURNAL COPIES:** Request a free issue from between 2015-2018 on the westonaprice.org homepage. Members willing to share the journal, may request copies (1, 2, 5 or 19 copies) by emailing info@westonaprice.org

**HEALTHY 4 LIFE DIETARY GUIDELINES AND RECIPE BOOK** in English, French, Spanish and Italian

\$10 each (includes shipping) or \$6 each for 10 or more.

**11 DIETARY PRINCIPLES:** \$10 each (includes shipping) or \$6 each for 10 or more.

**TIMELESS PRINCIPLES OF HEALTHY TRADITIONAL DIETS** 28-page booklet in English, French and Spanish

\$1 each (includes shipping), 60¢ each for 100 or more.

**2023 SHOPPING GUIDE** 99-page booklet listing 2,000 products in categories: *Best, Good, Avoid*

\$3 each (includes shipping) \$1 each for 10 or more.

**LISTEN TO THE PODCAST OFFLINE - FLASHDRIVE WITH 3 MONTHS WORTH OF PODCASTS**

### TRIFOLD FLYERS

Suggested donation for flyers is 25¢ each (includes shipping), 15¢ each for 50 or more

The Dangers of Industrial Fats and Oils	Cod Liver Oil, Our Number One Superfood	Butter Is Better
Dangers of Vegan and Vegetarian Diets	How to Protect Yourself Against Cancer with Food	Soy Alert!
Myths & Truths About Cholesterol	Nutrition for Mental Health	Sugar Alert!
A Campaign for Real Milk	A Message to Grandparents	Vaccination Dangers
	Covid-19: Contagious Virus or 5G Microwave Technology?	

Make checks payable to The Weston A. Price Foundation OR order online at westonaprice.org or by phone (703) 820-3333.



## RAW MILK UPDATES

IOWA: Governor Kim Reynolds has signed a bill allowing farmers to sell raw milk from the farm. SF 315 passed after years of opposition. The bill also allows the sale of raw cheese, yogurt, ice cream and other raw dairy products, but limits raw milk farmers to a maximum of ten cows.


Several major farm organizations, including the Iowa State Dairy Association and Iowa Dairy Foods Association, registered to lobby against the bill. Proponents included Americans for Prosperity, a conservative-leaning national libertarian group that helped organize the Tea Party movement.

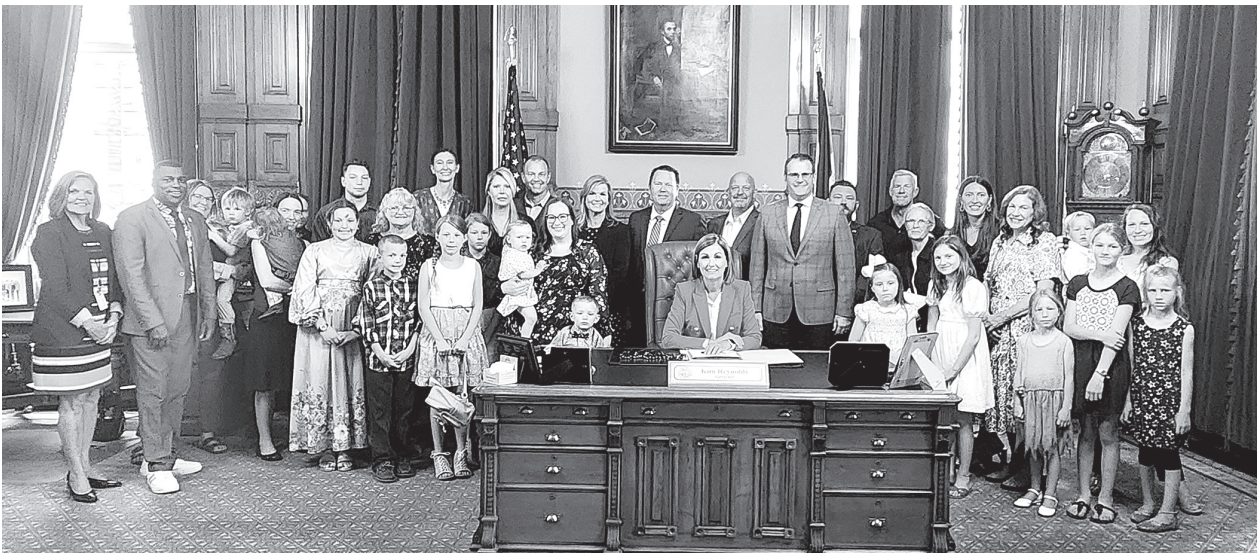
“The passage of SF 315 is a victory for families and agriculture across our great state and reaffirms that the government has no right to dictate what Iowans choose to drink,” Tyler J. Raygor, deputy state director of Americans for Prosperity-Iowa, said in a statement following the Senate’s vote. “With this legislation, Iowans will have the freedom to choose what to feed their family while enabling innovation in the fresh milk industry.”

The new law has requirements for storing and selling raw milk and preventing sales if the cows, goats or sheep recently received antibiotics. It also outlines testing for bacteria and requires the records be made available to consumers and state officials.

A big thank you to dairy farmer Esther Arkfield who has lobbied patiently for allowing raw milk sales in Iowa.

With the bill’s passage, there remain only four states where farmers cannot provide raw milk in any manner: Louisiana, Hawaii, Nevada and Rhode Island.

We are also working to liberalize regulations in a number of states, particularly New York, where regulations allow only raw milk sales from the farm. New York raw milk farmers are prevented from delivering to the huge market of New York City, or from selling at farmers markets. 



Governor Kim Reynolds, flanked by raw milk supporters, signs SF 315, allowing on-farm sales of raw milk in Iowa.



## Caring for Fresh Milk

\$6/each (\$4/each for 10 or more)

Order at [westonaprice.org/order](http://westonaprice.org/order) (703) 820-3333.



# Healthy Baby Gallery

Beautiful Grace April was born into the world in April at thirty-seven weeks, weighing an incredible eight pounds, four ounces. It was a quick, first-baby, three-hour labor. Mom followed the WAPF diet from the start with daily cod liver oil, plenty of butter, daily eggs, liver paté twice weekly, bone broth, sourdough bread and raw milk from six months when she at last found a local farmer who delivered. Mom, age forty-two, and dad, age forty-six, avoided ultrasounds and even the recommended anti-D immunoglobulin, choosing to trust God throughout. The UK's National Health Service (NHS) didn't make it easy, especially as they deemed mom "high risk," but Grace's parents refused to back down. Grace is a very content baby thriving on breast milk, and mom is still following the WAPF diet for nursing mothers. What mom and dad wanted was to bring a healthy child into this world, free of vaccines and ultrasounds, fed on good nutrients—and this was achieved. The family wants to thank WAPF for sharing its wisdom.



Charlotte was born at home with just her father and grandmother as witness in November 2022 after a twelve-hour, pain-free labor. Her mother had a wild blissful pregnancy, with her prenatal care consisting of sunbathing, river swimming and walking. During her pregnancy, she focused on herbal infusions and lots of local eggs, raw milk and liver, with the majority of the family's food coming from a local farm. She nourished herself postpartum with organ meats, congee, broth and rest. On mom's plentiful milk, Charlotte has grown from eight pounds to over twenty pounds at six months. Charlotte is a strong-willed ray of sunshine who loves all the attention she gets as the first grandchild, as well as kicking her toes in the grass and spending time with other kids. When the family introduces solid food, Charlotte will start with egg yolk, liver, local root veggies and meaty bones.

**Breast is Best.**  
**But for those who can't, we recommend:**

## WAPF Homemade Baby Formulas

Developed by Dr. Mary Enig, with a PhD in nutritional sciences, and used successfully for twenty years.

- Safe and nutrient-dense.
- Milk-based formula developed to mimic human milk.
- Liver-based formula for those unable to consume milk.

<https://www.westonaprice.org/health-topics/childrens-health/formula-homemade-baby-formula>



# Local Chapters

Local chapters help you find locally-grown organic and biodynamic vegetables, fruits and grains; and raw milk products, butter, eggs, chicken and meat from pasture-fed animals. They also represent the Weston A. Price Foundation at local fairs and conferences and may host cooking classes, potluck dinners and other activities to help you learn to integrate properly-prepared whole foods into your life. Local chapters may be able to put you in touch with health practitioners who share our philosophy and goals. **IMPORTANT WARNING: This chapter list is meant for individuals to contact a local chapter for food sources and for small farms or food producers to contact chapters near them. It is not for use by vendors and marketers. If you use the chapter email addresses to promote a product, even a free product or giveaway, we will not allow your company to advertise in *Wise Traditions* journal nor exhibit at our conference.**

## COMMUNITY SUPPORT NEEDED

Shan Kendall (long-time chapter leader and member) lost her house in a fire. If wish to help, go to:  
[https://givesendgo.com/ShanandDavid?utm\\_source=sharelink&utm\\_medium=copy\\_link&utm\\_campaign=ShanandDavid](https://givesendgo.com/ShanandDavid?utm_source=sharelink&utm_medium=copy_link&utm_campaign=ShanandDavid)

### ALASKA

Anchorage/Eagle River: Anthony Rumsey (907) 336-0200, anchoragewapf@gmail.com  
Gustavus: Kelly McLaughlin (907) 723-5459, kellyrose.alaska@gmail.com

### ALABAMA

Auburn: Susan Ledbetter (334) 821-8063 gnomons@bellsouth.net  
Birmingham: Helen Ryan (205) 639-2092, info@theyanclinic.com & Jane O'Brien  
Huntsville: Amanda Woodard (865) 805-5210, wapf.huntsvilleal@protonmail.com & Alex Woodard

### ARKANSAS

Ark-La-Tex: Jerica Cadman (903) 665-7076 jericacadman@gmail.com  
Fayetteville: Toni Fairman (760) 522-5202, toni@tonifairman.com  
Rogers: Sharise Parviz & Michael Miyabara-McCaskey (310) 943-9214, sp@shariseparviz.com  
Washington/Benton Counties: Sydney Ripple (479) 422-5795, sydneyripple@gmail.com & Soni Kennedy

### ARIZONA

Flagstaff: Sarica Cernohous (928) 856-0660, Sarica@naturallylivingtoday.com & Lynn Beam (928) 856-0660, lynn@naturallylivingtoday.com  
North County San Diego: Gabriell Simons (770) 733-2796, dadsgab1@gmail.com chapters.westonaprice.org/sandiegonthcocca/  
Prescott-Quad City: Chelsea Bowling (928) 899-3224, chelseabowling@proton.me & Erin Warne (928) 925-1387, ejwarne8@gmail.com

### CALIFORNIA

Capay Valley: Lauren Ayers (530) 796-2463, lauren.yolocounty@gmail.com, chapters.westonaprice.org/CapayValleyCA  
Chico - Butte Valley: Portia Ceruti (530) 894-6235 portiaceruti@gmail.com  
Contra Costa Tri-Valley: Myra Nissen (925) 289-9388, myra@myranissen.com & Patricia Moore (925) 455-4255 email group sign up  
contracostacountyrequest@wapfgroups.org, chapters.westonaprice.org/contracostatrilvalleyca/  
Crescent City: Margaret Stokes (415) 686-8596, Kunekai@gmail.com & Sarah Rose (971) 400-7232 wendtsl@gmail.com  
East Bay: Nori Hudson (510) 847-3197, EastBayWAPchapter@protonmail.com  
Grass Valley/Nevada City: Cathel' Fish (530) 432-5109 sunshine.works@gmail.com & Shan Kendall shan.kendall@gmail.com, 530-478-5628,  
facebook.com/groups/GoldCountryWAPF/, chapters.westonaprice.org/goldcountrychapterca/  
Hemet/Winchester: Wendy McPhail (951) 764-8685 nethersprings2015@gmail.com Nethersprings.com  
Kern County: Morgan Schokman NTP (951) 201-9551, wholehealthmama@gmail.com  
Los Angeles-West & Santa Monica: Martina Gallagher (310) 418-9689 holisticmastery@mail.com  
Marin County: Karen Hamilton-Roth (415) 380-8917 marinwapf@gmail.com, chapters.westonaprice.org/marincountyca  
Monterey Bay: Maria Katharina Coble (408) 464-3501, westonpricemb@gmail.com  
Mountain View/Palo Alto, Northern Santa Clara County: Elaine Lou wapf.santaclaracounty@gmail.com westonapricenorcal.mn.co/feed  
Murrieta/Wildomar: Brianna Fernandez (951) 264-1659, WAPFmurrietawildomar@gmail.com facebook.com/groups/wapfmurrietawildomar  
Orange County: Amanda Gale-Bando (415) 295-1549, contact@drbando.com & Joe Bando  
Orange County-Laguna Niguel: Mona Lenihan-Costanzo (949) 637-4639, Mona\_vibrantwellness@protonmail.com  
chapters.westonaprice.org/lagunaniguelca/  
Pasadena: Joy De Los Santos (626) 641-0774, joyfarrar2007@gmail.com Aaron Zoher aaron@appropriateomnivore.com  
westonapricepasadena.wordpress.com  
Redondo Beach/South Bay: Angela Karlan MA FNTF ACN HTP (310) 291-3250 akarlan@yahoo.com & Shanna Cartmell (310) 519-8900,  
shanna@cartmellchiropractic.com  
Riverside/Corona: Suzette Chavers (951) 682-9680 schavers@gmail.com  
Sacramento: Megan McCue (916) 378-9383, sacwapf@gmail.com, & Angel McCormack angel@angelmc.org, sacwapf.org  
San Diego/East County: Nancy Teas-Crain (619) 733-5016 ntcraim@me.com chapters.westonaprice.org/sandiegoeastcocca/  
San Francisco: Dave Horn (724) 757-2180, chefdavehorn@gmail.com chapters.westonaprice.org/sanfranciscoca/  
San Jose, Santa Clara County: Pamela Lau WAPF.SiliconValley2@gmail.com westonapricenorcal.mn.co/feed



# Local Chapters

San Mateo County: Shelley Lane (805) 245-0577 shelleylaneomd@gmail.com & Elissa Hirsh (650) 269-7849 hirsh.yeend@sbcglobal.net facebook.com/groups/WAPFSanMateoCounty/, chapters.westonaprice.org/sanmateoca/  
Santa Barbara: Mycah Krefit (303) 945-5248, mycahkrefit@gmail.com & Justine Perrizo  
Santa Cruz County: Cynthia Campos (831) 239-2989, cmendoza99@yahoo.com  
Siskiyou County: Diane McGonigal (530) 467-5356 mcgfam@sisqtel.net & Geri Quintero (530) 468-5727, geriq07@gmail.com  
Solano County: Kirsty Rayburn (707) 249-5259 wapfsoano@gmail.com  
Sonoma County: Sushama Gokhale (415) 694-3502, sushama.gokhale@gmail.com, facebook.com/groups/westonapricesonoma, chapters.westonaprice.org/sonomacountycal/  
Ventura County: Dylan Boeken (310) 903-7292, Ventura.wapf@gmail.com  
Yolo County: Trish Trombly (530) 753-2237 tromblynutrition@gmail.com

## COLORADO

Aurora: LaShay Canady (303) 886-0673 herbalist@thebossgrp.net chapters.westonaprice.org/auroraco/  
Black Forest: Emmy McAllister (719) 494-1546 HealthSolutionsNow@earthlink.net  
Boulder: Erin Meschke (970) 402-1827, boulder.wapf@gmail.com chapters.westonaprice.org/boulderco/  
Colorado Springs: Anna Clonts wapfcos@gmail.com, facebook.com/groups/wapfcos  
Colorado Springs, South: Maria Atwood (719) 573-2053 traditionalcook@hushmail.com traditionalcook.com  
Denver: Susan Ilmberger (720) 951-9641, ilmbergersusan@q.com & Cheryl Harris (720) 231-3526, cheryl.harris@yahoo.com  
Eagle County: Hannah Ringenberg (740) 202-5034, hberg95@gmail.com  
Fort Collins: Nancy Eason (970) 310-3539 wapffc@gmail.com wapffc.org  
Grand County: Janine Farzin janine@offallygoodcooking.com  
La Plata County: Stacy Gonzalez (970) 764-0684, daisymay@tutanota.com  
Western Slope: Dawn Donalson CGC (970) 210-3980, dawndonelson@gmail.com dawndonelson.gapscoach.com/

## CONNECTICUT

Fairfield County: John Kriz wapfairfield@yahoo.com  
Hartford County: Jose Luis Diaz (860) 288-8699, admin@realfoodnourishment.com, realfoodnourishment.com/wapf-hartfordct-chapter  
New London: Cara Joseph (860) 334-3331, cjoseph@caramiawellness.com, chapters.westonaprice.org/newlondonct/  
Southington - Central CT: Catherine Shaw (386) 479-9019, catherine.shaw@mailfence.com RootWisdomHealth.com/resources  
Tolland County: Anna Simpson (860) 305-5888 wellbeyonddnutrition@gmail.com



### CALIFORNIA DREAMING

Chapter leaders sharing lunch and ideas! From left: Nori Hudson (East Bay); Elissa Hirsh (San Mateo); Karen Hamilton-Roth (Marin); Joy de los Santos (Pasadena); Tricia Moore (Contra Costa Tri-Valley); Kris Homme (honorary East Bay); and Elaine Lou (Mountain View/Palo Alto/Northern Santa Clara).



**CALIFORNIA CHAPTERS**  
LEFT: (Contra Costa Tri-Valley): A dog park meeting, with dogs, to listen to holistic veterinarian Dr. Bettina “Tina” Herter, DVM, and pet-sitter Kevin Selby. BELOW (Monterey/Santa Cruz): A sunny winter’s day gathering to learn about medicinal plants, led by member and herbalist, Lianne.



# Local Chapters

## FLORIDA

Altamonte Springs: Lee Burdett (407) 782-1414, jakespeed87@gmail.com & Steve Moreau kmt205@gmail.com  
Braselton: Michelle Polk (404) 291-5757 ajourneytowellness@me.com  
Brevard-South Volusia: Ginny Parker (386) 589-6931 ginny.hall@gmail.com spacecoastfbc.com  
Broward and South Palm Beach Counties: Anita Schubert (860) 997-7900, SPBBrowardWAPF@pm.me  
Dunedin: Anthony Johnson (727) 474-3926 tonyj1234@aol.com  
Fernandina Beach: Alec Meyer (224) 595-4948, AlecSMeyer212@gmail.com  
Gainesville: Angela Minno (352) 375-7999 angela.minno@protonmail.com & Karen Eberly kareneberly@hotmail.com  
facebook.com/groups/499501210152094/  
Jacksonville: Diane Royal (904) 396-6881 droyalsmiles@gmail.com & Raymur Walton (904) 386-2356, raymurwalton@yahoo.com  
Lake County: Heather and Brad Neff Farmercrafted@gmail.com  
Lee County: Thomas Scannell (561) 441-1378, tom@pineshinefarms.com  
Miami Beach: Durrell Handwerger (305) 799-1263 dhandwerger@yahoo.com  
Miami/Miami-Dade County: Gary Roush (305) 221-1740 garyaroush@aol.com  
Naples: Beth Greer (415) 497-1844, beth@bethgreer.com  
Ocala: Rachael Jean Harper (360) 301-3130, rjh4health@gmail.com  
Panhandle: Nina Elliot (571) 242-4775, ninaelliot@truewholehuman.com  
Pasco-Hernando: Karen Gay (240) 393-5625, karengreer@gmail.com & Carrie Perez carrie@mrsasupportgroup.org  
Sarasota: Anya Adams (571) 332-2052, anya.adams@icloud.com facebook.com/sarasotawapf/, chapters.westonaprice.org/sarasotaf/  
South Miami-Dade County and the Florida Keys: Mary Palazuelos-Jonckheere (305) 484-8402 marybenoit@aol.com  
St. Petersburg: Mandy Blume (727) 401-4070, mandy@RealFoodRecovery.org RealFoodRecovery.org/wap  
Suwanee & Lafayette Counties: Tammy Brece (386) 776-4019, LilRedBedNBreakfast@proton.me  
Tallahassee: Joanne Mendez (850) 339-0443, jcmendez@earthlink.net  
Vero Beach: Jody Old (772) 584-3424 jold@rbold.com  
Volusia & Flagler Counties: Mary Beth Michael (386) 675-6178 sharingnatural@gmail.com sharingnatural.com

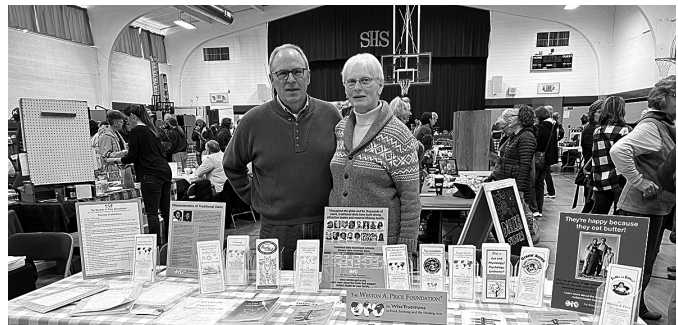
## GEORGIA

Atlanta: Marsha Thadison (404) 645-3778, yesterdayskitchen4today@gmail.com  
Braselton: Stephanie Zraggen (843) 214-2997, drzraggen@gmail.com  
Brunswick: Brittney Stalvey (912) 659-3180, brittneystalvey@gmail.com & Corey Dunn (301) 814-0917, coreysearles@gmail.com  
Cedartown/Polk County: Kathi Butz (770) 748-0729, goodlife19@protonmail.com  
Cherokee County: Cindy Morrow cindymorrow@protonmail.com  
Cumming: Ana Jane Ivacove (916) 598-5937, janewapfga@gmail.com  
Dunwoody/Perimeter: Marina Peck GotGutHealth@gmail.com  
Kennesaw & Acworth: Cynthia Tufts (770) 886-1509, Peonies222@protonmail.com  
Marietta: Debby Smith (404) 918-6368, dsatlanta@comcast.net Jennie Smith (206) 227-0264 jenniesmith@hotmail.com meetup.com/Atlanta-RealFood/  
Mitchell County/SW: Pamela Watts (435) 770-2153, pamelawatts@proton.me



### BRUNSWICK, GEORGIA

The chapter's first meeting was a beautiful evening with wonderful food, and lots of kids running around. Chapter leaders Brittney Stalvey and Corey Dunn hosted, discussing how to source, mill and prepare grains for optimal nutrition.



### DANE & SAUK COUNTIES, WISCONSIN

Local food exhibitors, farmers market members and information vendors returned to Reedsburg for a post-Covid Food Fair attended by three hundred. Long-time chapter leaders Rich and Vicki Braun enjoyed telling a delighted young family, recently moved to WI, that raw milk was available just seven miles down the road at Grazin' Acres.



# Local Chapters

North Georgia: Becky Plotner (423) 414-5425 [becky.nourishingplot@hotmail.com](mailto:becky.nourishingplot@hotmail.com) & Denise Burns (770) 402-7916, [burnsberries@yahoo.com](mailto:burnsberries@yahoo.com), [facebook.com/groups/619381541582471/?r](https://www.facebook.com/groups/619381541582471/?r)  
Warner Robins: Lori Freeman (478) 396-8379, [lorifree107@gmail.com](mailto:lorifree107@gmail.com)

## HAWAII

Waimea-Kamuela: Sara Montano & Aaron Sternberg, (305) 853-6118, [starmountainkitchen@gmail.com](mailto:starmountainkitchen@gmail.com)

## IDAHO

Bonnors Ferry: Kaitlyn Pestarino (208) 946-7883, [kaitlynpestarino@yahoo.com](mailto:kaitlynpestarino@yahoo.com)  
Coeur D Alene/Rathdrum: Barbara Geatches (208) 964-3770, [wapfcdaidchapter@yahoo.com](mailto:wapfcdaidchapter@yahoo.com)  
Meridian: Daniela Troia (410) 960-7589, [danielatroia@gmail.com](mailto:danielatroia@gmail.com)  
Rexburg: Peggy Edwards (202) 760-1686, [peggy6e@gmail.com](mailto:peggy6e@gmail.com)  
Sandpoint: Emily Neff (208) 360-7937, [anomaly412@yahoo.com](mailto:anomaly412@yahoo.com) & Jennifer Steinbachs (208) 946-2620, [jen@syringawellness.com](mailto:jen@syringawellness.com)  
[chapters.westonaprice.org/sandpointid/](http://chapters.westonaprice.org/sandpointid/)

## ILLINOIS

Bloomington/Champaign: Molly Meyer (217) 419-0858, [central.il.wapf@gmail.com](mailto:central.il.wapf@gmail.com) [chapters.westonaprice.org/bloomington/](http://chapters.westonaprice.org/bloomington/)  
Chicagoland: Sean and Talia Cork (608) 209-1126, [taliacork@gmail.com](mailto:taliacork@gmail.com)  
Decatur: Becca Dickens [regenlifefarm@gmail.com](mailto:regenlifefarm@gmail.com)  
Dixon: Vicki McConnell (815) 288-2556 [vlmconnell@gmail.com](mailto:vlmconnell@gmail.com)  
Freeport: Margaret Bardell (815) 908-1627 [freeport.il.wapf@gmail.com](mailto:freeport.il.wapf@gmail.com)  
Lake County/Northwest Suburbs: Linda DeFever (847) 722-4376 [ocfever01@yahoo.com](mailto:ocfever01@yahoo.com)  
Northern Dupage County: Kathy Pirtle (312) 969-7572 [kathypirtle@sbcglobal.net](mailto:kathypirtle@sbcglobal.net) & Olive Kaiser  
Oak Park: Gina Orlando (708) 524-9103 [ginaorlando8@gmail.com](mailto:ginaorlando8@gmail.com)  
Troy: Lisa Hermann (618) 580-2030, [info@hermannholistichealth.com](mailto:info@hermannholistichealth.com)

## INDIANA

Batesville/Madison: Julie Stockman (812) 307-9833, [julie.stockman@gmail.com](mailto:julie.stockman@gmail.com)  
Bloomington: Larry Howard (812) 876-5023 [info-wapf@betterlocalfood.org](mailto:info-wapf@betterlocalfood.org) [wapf.betterlocalfood.org/](http://wapf.betterlocalfood.org/)  
Fort Wayne Area: Angela Adams (260) 704-0132 [a.m.adams.82419@gmail.com](mailto:a.m.adams.82419@gmail.com)  
Hamilton County: Tim Szazynski (317) 457-8052, [timszazynski@gmail.com](mailto:timszazynski@gmail.com)  
Marshall & Fulton Counties: Ebony Nava (574) 952-8378, [ebony.nava@gmail.com](mailto:ebony.nava@gmail.com)  
Porter & LaPorte Counties: Nicole Florek (219) 575-0741, [nicolemflorek@gmail.com](mailto:nicolemflorek@gmail.com) & Ali Appel

## IOWA

Cedar Rapids/Iowa City: Elaine Michaels (319) 377-0040, [foodiefemale@gmail.com](mailto:foodiefemale@gmail.com)  
Dubuque: Jim Earles (565) 588-2935 [yogaspectrum@yahoo.com](mailto:yogaspectrum@yahoo.com)  
Madison County: Marcie Franzenburg (515) 462-6814 [kmplus2@gmail.com](mailto:kmplus2@gmail.com)  
Quad Cities: Lori Sullivan (563) 249-9989, [lori@nutritionworkswellness.com](mailto:lori@nutritionworkswellness.com) & Cathy Blok [qcwapfc@gmail.com](mailto:qcwapfc@gmail.com)



DALLAS, TEXAS  
Two chapters combined for a lovely tour of a local dairy farm. Among those present (left) were former and current chapter leaders Lisa Clark (former Dallas), Kali and Zach Johnson (Lewisville/Grapevine) and Amy De Vernon and Christine Muldoon (current Dallas and North Dallas) and their kids, who enjoyed the milking parlor (right).



# Local Chapters

## KANSAS

Abilene: Diane Loftness (501) 472-6197, [dloftness@gmail.com](mailto:dloftness@gmail.com)

Concordia: Annette Hood (785) 243-1923, [amghood@yahoo.com](mailto:amghood@yahoo.com)

Kansas City: Debra Mize (913) 568-1167; [mizedw@me.com](mailto:mizedw@me.com); [facebook.com/groups/KCWAPF/](https://facebook.com/groups/KCWAPF/)

McPherson/Hutchinson area: Connie Newcome (620) 585-2556 [cnewcome@gmail.com](mailto:cnewcome@gmail.com)

## KENTUCKY

Hardin County: Oaken McGinnity & Jacqueline Medicine Weaver (270) 325-2885, [jackimcginnity@yahoo.com](mailto:jackimcginnity@yahoo.com)

Lexington: Sally O'Boyle (859) 550-3862, [sallyoh@pm.me](mailto:sallyoh@pm.me)

Louisville: Toni Mobley (502) 390-5552, [whitefoxcleaningco@protonmail.com](mailto:whitefoxcleaningco@protonmail.com)

## LOUISIANA

Felicianas: Amanda Hanegan (225) 933-8619, [amandabhanegan@gmail.com](mailto:amandabhanegan@gmail.com)

Greater Baton Rouge: Savannah Fontenelle (850) 386-6595, [WAPGreaterBatonRogueArea@gmail.com](mailto:WAPGreaterBatonRogueArea@gmail.com)

Lafayette La Acadiana: Carrie Meers (504) 235-8572, [fit4mercy@gmail.com](mailto:fit4mercy@gmail.com) & Rachel Quattrone

Opelousas: Wendi Garrison (504) 784-3515, [drwendi@greenbartherapies.com](mailto:drwendi@greenbartherapies.com)

Ouachita Parish: Dana Milford (318) 791-5956, [forhistemple@gmail.com](mailto:forhistemple@gmail.com)

Shreveport: See TX: Ark-La-Tex

## MAINE

Androscoggin County, Auburn/ Lewiston: Sandy Parent (207) 225-6125 [Happycampers323@gmail.com](mailto:Happycampers323@gmail.com)

Oxford County: Donna Dodge (207) 890-3005 [eatsmart@fairpoint.net](mailto:eatsmart@fairpoint.net)

Somerset County: Christina Andersen & Omar Suarez, (207) 314-2886, [suarextina@gmail.com](mailto:suarextina@gmail.com)

## MARYLAND

Baltimore County: Mary Ann Ley (410) 628-9355, (443) 465-8787, [drmaryannley@gmail.com](mailto:drmaryannley@gmail.com)

Bethesda: Karen DeHaven (240) 439-8390, [info@karendehavenwellness.com](mailto:info@karendehavenwellness.com)

Columbia: Jaime Brooke (240) 298-8181 [jaimebrookewellness@gmail.com](mailto:jaimebrookewellness@gmail.com)

Frederick: Shelby Christopher (410) 802-5152, [shelbychristopher15@gmail.com](mailto:shelbychristopher15@gmail.com)

Queen Anne's County: Rhonda Keagy [info@rhondakeagy.com](mailto:info@rhondakeagy.com) [chapters.westonaprice.org/queenannescountymd](http://chapters.westonaprice.org/queenannescountymd)

Westminster: Amy DeVries (410) 789-1593 [hysenthlaydew@yahoo.com](mailto:hysenthlaydew@yahoo.com) [chapters.westonaprice.org/linthicummd](http://chapters.westonaprice.org/linthicummd)

## MASSACHUSETTS

Berkshires: Natanya Bittman (413) 464-4372, [natanya.bittman@gmail.com](mailto:natanya.bittman@gmail.com) [berkshireswapf.wordpress.com](http://berkshireswapf.wordpress.com)

Boston: Johanna Keefe (978) 290-0266, [johanna8@comcast.net](mailto:johanna8@comcast.net)

Franklin County: David and Sarah Benedict (413) 369-2516 [david@crickethillnutrition.com](mailto:david@crickethillnutrition.com)

### LOCAL CHAPTER BASIC REQUIREMENTS

1. Create a food resource list of organic or biodynamic produce, milk products from pasture-fed livestock (preferably raw), pasture-fed eggs and livestock and properly produced whole foods in your area.
2. Provide a contact phone number to be listed on the website and in our quarterly magazine.
3. Provide Weston A. Price Foundation materials to inquirers, and make available as appropriate in local health food stores, libraries and service organizations and to health care practitioners.
4. Provide a yearly report of your local chapter activities.
5. Be a member in good standing of the Weston A. Price Foundation.
6. Sign a contract on the use of the Weston A. Price Foundation name and trademark.

### OPTIONAL ACTIVITIES

1. Maintain a list of local health care practitioners who support the Foundation's teachings regarding diet and health.
2. Represent the Foundation at local conferences and fairs.
3. Organize social gatherings, such as support groups and pot luck dinners, to present the Weston A. Price Foundation philosophy and materials.
4. Present seminars, workshops and/or cooking classes featuring speakers from the Weston A. Price Foundation, or local speakers who support the Foundation's goals and philosophy.
5. Represent the Weston A. Price Foundation philosophy and goals to local media, governments and lawmakers.
6. Lobby for the elimination of laws that restrict access to locally produced and processed food (such as pasteurization laws) or that limit health freedoms in any way.
7. Publish a simple newsletter containing information and announcements for local chapter members.
8. Work with schools to provide curriculum materials and training for classes in physical education, human development and home economics.
9. Help the Foundation find outlets for the sale of its quarterly magazine.

# Local Chapters

North Middlesex County: Kathleen Lynch (978) 496-8064, WestfordWAPF@icloud.com chapters.westonaprice.org/westfordma/  
Winchendon: Beth Ingham noondayfarm@gmail.com

## MICHIGAN

Detroit Metro: Susan Randall (248) 563-7112 susan.m.randall@sbcglobal.net htnetwork.org, facebook.com/groups/HTNetworkWAPF/,  
facebook.com/HTN-The-Metro-Detroit-Chapter-of-the-Weston-A-Price-Foundation-152427555144/  
Dickinson County: Jeannine Swickler (734) 771-0354, swicklerfamily@yahoo.com

Escanaba Area: Teri and Andy Jorasz (906) 295-0588, joraszfamilyranch@gmail.com

Frankfort: Abby Beale (231) 352-7463 wapffrankfort@gmail.com

Genesee/Lapeer/N. Oakland: Kim Lockard (810) 667-1707 kimlockard@gmail.com

Grand Rapids: Melissa Malinowski melissamalinowski@hotmail.com meetup.com/Nourishing-Ways-of-West-Michigan/

Keweenaw Peninsula: Rachel Tenorio (586) 883- 0875, rachelanne47@yahoo.com & Steve Tenorio

Luzerne: Mysty Berry (989) 745-2898, thehealthhubllc@gmail.com

Midland: Grace Cummings (989) 687-5425 gracecummings@charter.net

Muskegon County: Mark Christenson (231) 740-0816 mark\_christenson@msn.com & Lisa Middlecamp-Lowder (231) 288-7221,  
lisa@thriveforreal.com

South Lyon/Brighton: Jessica Feeman (313) 231-4908 jafeeman@gmail.com

Texas Corners: Katherine Atkinson (269) 870-7152, kacomer@comcast.net

Zeeland: Delanie Aguilar (616) 240-6547 delanieaguilar@gmail.com

## MINNESOTA

Brainerd: Katelyn Thesing-Yezek (218) 251-6739, k\_thesing@hotmail.com

Minneapolis/St. Paul: Susie Zahratka (651) 329-8401 susanna.zahratka@gmail.com & Becca Griffith,  
spwapf@gmail.com stpaulminnesota.westonaprice.org

Moorhead/Fargo (Minndak): Todd Ferguson (218) 284-1188 drtodd@prairiend.com

Owatonna: Darren Roemhildt (507) 451-7580 darrenr@drdarrenowatonna.com

Princeton: Robin Suhsen rsuhsen@gmail.com, (612) 889-4318

Prior Lake: John Myser (651) 341-3431 johnmyser@me.com

Rochester: Kay Conway (507) 421-0865 kcmckc@aol.com

St. Cloud: Melissa Carlson (320)291-1421, wapfstcloudchapter@gmail.com & Liz Thares

Two Harbors/North Shore: Leah and Ron Bailey (314) 603-2126 richter.j.leah@gmail.com organic-mn.com

## MISSISSIPPI

Brandon: April Johnston april.r.johnston@protonmail.com

## MISSOURI

Columbia: Teri Linneman (660) 728-1445, terilinneman@hotmail.com, Barb Carr (314) 435-6322, bdcarr2@att.net, facebook.com/groups/WAP-  
FColumbiaCentralMissouriGroup

Eastern Missouri: David J. Henderson (573) 242-0739 quality.djh@gmail.com

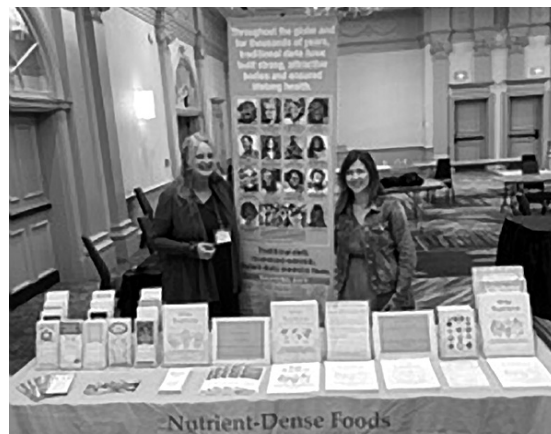
Farmington: Karin Ladd (573) 747-1889 laddkarin3@gmail.com

Springfield: Sherrie Hagenhoff (417) 300-9679 berriesrhealthy@gmail.com & Donna Garber Stewart dstewart2686@yahoo.com, facebook.com/  
groups/SpringfieldMOWestonAPriceChapter/

Wayne County: Elizabeth Kouma (573) 340-3774, curlyhairedcountrygal@gmail.com

## HEALTH FREEDOM SUMMIT, NASHVILLE, TENNESSEE

Maureen Diaz and Natalie Fisher exhibited at Nashville's Health Freedom Summit in April. They enjoyed educating lots of interested attendees about the work of Dr. Price and the Weston A. Price Foundation!



# Local Chapters

## MONTANA

Billings: Corinne Day (406) 210-6268 eatwell.livwell@gmail.com  
Bozeman: Nancy Tanner (406) 209-5949, bozemanwapf@protonmail.com chapters.westonaprice.org/bozemanmt/  
Kalispell: Gracie Hammer (714) 267-6178, gracie@beautifulandcleanliving.com  
Missoula: Bonnie Lauer (406) 241-1048 missoulawapf@gmail.com  
Polson: Amanda Darling amanda@thealpinealchemist.com, (406) 970-6117

## NEBRASKA

Lincoln: Gus Ponstingl (402) 770-2272 groggygroggy@yahoo.com  
Omaha South: Miranda Sherman (402) 637-8929 sparkysherman@msn.com

## NEVADA

Elko: Jodi O'Dell (530) 470-3109, elkocountywapf@gmail.com & Becca O'Dell  
Las Vegas: Kenneth Hardy (702) 897-3730 panacea1@peoplepc.com  
Reno: Bari Caine bluebird444@protonmail.com

## NEW HAMPSHIRE

Amherst-Nashua: Susan Stefanec (603) 673-0890 thinkglobal@ligett.com  
Keene: Celeste Longacre (603) 756-4152 info@celestelongacre.com  
Lakes Region: Jacqueline Garcia (603) 706-8787, jackiern156@gmail.com  
New London: Linda Howes (603) 526-8162 linda@nourishingwellness.net

## NEW JERSEY

Bergen-Passaic Counties: Charlotte Hiller (201) 819-2677, bergenpassaicwapf@gmail.com Pilar Shilad (201) 403-1086, GAPSRN@outlook.com  
Hudson-Essex Counties: Jessica Annunziata (201) 788-4367 jessica.cultureden@gmail.com  
Monmouth County: Kevin Spyker (917) 254-0573, kevin.cultureden@gmail.com  
Princeton: Sandeep Agarwal (609) 785-9100 sandeep@pureindianfoods.com wapfnj.org, chapters.westonaprice.org/princetonnj/  
Southampton: Judy and Mike Mudrak (609) 859-3828 reversemydisease@gmail.com

## NEW MEXICO

Albuquerque: Thomas Earnest (505) 899-2949 tcearnest@comcast.net  
Las Vegas: Delia Garcia (505) 690-2787, dgarciasf@gmail.com & Elisabeth Rimann (505) 920-5516, erimann@ix.netcom.com  
Magdalena: Krista Arias (503) 750-1415, krista@tierrasoul.com  
Santa Fe: Charlotte Kikel (505) 954-1655, eatinpeace@protonmail.com

## NEW YORK

Adirondacks, Northern: Cathy Hohmeyer (518) 891-1489 cathy@lakeclearlodge.com & Lynn Cameron (518) 353-0800, noptcamp@gmail.com  
Broome County: Liz Hull (607) 768-5499, lizhullnp@yahoo.com & Margaret Florini  
Buffalo: Carol Poliner (716) 544-4157, carol.poliner@gmail.com  
Columbia County: Ashley Shea Legg (518) 392-0214 trillium75@gmail.com  
Cortland: Cindy Davis (607) 745-1920, NHICofCortland@yahoo.com  
Delaware County: Ashley Rossi (845) 674-3535, redkillmountain@gmail.com & redkillmountain@gmail.com  
Dutchess County: Zoe Sippel (914) 582-7905, zoesupina2@gmail.com  
Holley: Yi and Terrance Rogelstad (585) 520-7174, yi@mockingbirdbell.com  
Ithaca: Joyce Campbell (610) 334-4205 jycmpbll@gmail.com



**KENYA THANK-YOUS**  
Dalmas Tiampati of the Maasai Center for Regenerative Pastoralism (left) was able to buy lambs thanks to support from the Weston A. Price Foundation. Geoffrey Ouma of the Mabinju Powerhouse Youth Group (right) was able to buy a dairy cow.





# Local Chapters

New York City: Angela Cimo (718) 413-8800 wapf.nyc@gmail.com facebook.com/WAPF.NYC  
Niagara County: Margaret Zaepfel (716) 523-3761 margaretaepfel@gmail.com  
Rochester: Laura Villanti (585) 451-0038, laura@athomewithwellness.com & Jennifer Toth (303) 518-7089 jtoth@leadersinspire.net, rochesterny@wapfgroups.org  
Rockland County: Glenn Serkis (845) 517-3600, rocklandcounty.wapf@suuri.us chapters.westonaprice.org/rocklandcountyny/  
Southern Erie and Cattaraugus County: Danielle Celani (716) 870-3091, georgia7cel@aol.com  
Ulster County - Hudson Valley: Dina Falconi (845) 687-8938 info@botanicalartspress.com botanicalartspress.com  
Westchester: Marizelle Arce (914) 315-9596 naturomari@gmail.com & Louis Belchou chapters.westonaprice.org/westchesterny/

## NORTH CAROLINA

Asheville: Maria Parrino (828) 357-7570, nourishingfoodconnection@protonmail.com facebook.com/groups/676301812818898/?r  
Boone: Paige Smith (912) 309-9991, paige@wildhair-ranch.com  
Buncombe, West: Janna Gower (828) 231-7014 WestonPriceWestBuncombe@gmail.com Rachel Blalock (718) 614-2793, rachel@naturallyconnectedlife.com, chapters.westonaprice.org/westbuncombe/  
Charlotte: Anna Harper (210) 478-9393, annaharper@gmail.com  
Fayetteville/Cape Fear River Basin: Tommy Rains (910) 876-2040, life4unne4ever@gmail.com  
Hillsborough / Chapel Hill: Mary Julia Walker (704) 996-7747, maryjuliawalker@gmail.com  
Liberty/Pleasant Garden: Rayleen Grim (704) 564-0272, libertywapfchapter@gmail.com  
Morganton: Ryan Gagliardo (828) 334-3505 ryan.gagliardo@gmail.com & Siobhan Gagliardo  
The Triangle: Nonna Skumanich webnsku@gmail.com & Steven Ashton (727) 687-2866, steven@nutritionasrx.com  
Union Mills: Abigail Gerber (303) 916-5984, abigail.rose.gerber@gmail.com  
Winston-Salem: Scott Gillentine (336) 331-2430, gillentine@triad.rr.com

## NORTH DAKOTA

Minot: Peter and Nicole Bartlett (701) 580-2100 lifecoachingbynicole@gmail.com  
Moorhead/Fargo (Minndak): Todd Ferguson (218) 284-1188 drtodd@prairiend.com

## OHIO

Cincinnati: Anthony Bianco (513) 470-6863, WAPFCincinnati@gmail.com  
Cuyahoga/Summit: Dawn Tarka (216) 502-1482, Dtarka21@aol.com  
Dayton: Jim & Joan Roberts (937) 898-5063, jtroberts@usa.com chapters.westonaprice.org/daytonoh/  
Defiance: Ralph & Sheila Schlatter (419) 399-2799 rschlat@bright.net  
Franklin County: Nancy Brownfield (614) 578-3386 nancyleebrownfield@gmail.com  
Geauga County: Irene Miller (440) 321-0935, miller.irene48@gmail.com  
Kenton Hardin County Area: Jane Kraft (419) 674-6561 kraftjane826@gmail.com  
Knox, Richland & Morrow Counties: Marc and Jocelin Whitaker (614) 506-8461 contactus@whitakersnaturalmarket.com  
Medina/Cuyahoga: Carisa Walcott (234) 525-7873, cookieililysmokey@yahoo.com  
Portage County: Jill Wright (330) 614-6561, wrightmommy6@gmail.com  
Rawson: Wayne Feister (419) 963-2200 wayne@feiway.com  
Toledo: Karen Lyke (404) 993-7097, karen.lyke@gmail.com & Maggie Arnold, (419) 376-7246, mharkison@buckeye-express.com  
Wayne County: Julia & Greg Gasser (330) 641-2293, gnjgasser@gmail.com & Janis Steiner (330) 201-1613, stonessprings@protonmail.com

## OKLAHOMA

Ardmore/Lone Grove: Sandy Steele (580) 513-0728 sgcs79@outlook.com  
Madill: Mary Friedlein (580) 795-9776 BreathofLifeClasses@gmail.com  
Shawnee Area: Danielle Akins (405) 694-6365, Essentially.intuitive@gmail.com  
Tulsa: Joanna Francisco (918) 850-8015, joannafrancisco@att.net  
Wagoner County: Jessica Zamora (949) 280-9297, zamora.jessica11@gmail.com

## OREGON

Bend: Nicolle Timm-Branch (541) 633-0674 nikipickles@gmail.com & Terrie Atkin (949) 235-4994, terrie\_atkin@yahoo.com chapters.westonaprice.org/bendor/  
Crook/Jefferson Counties: Billie Johnson (541) 447-5389, windyacres26@gmail.com & Mary Lewis (541) 504-3254  
Douglas County: Jennifer Grafiada (541) 236-8264 jennifer@jennifergrafiada.com RealFoodRoseburg.com  
Eugene: Lisa Bianco-Davis (541) 344-8796 info@eugenewestonaprice.org eugenewestonaprice.org/, krautpounder.com  
Klamath Falls: Teresa Penhall (541) 281-8821 Food4life@fireserve.net  
Medford: Austin DeVille (541) 301-5760, 8lovemylife8@gmail.com Summer Waters info@summerwaters.com (541) 326-8952 facebook.com/rvwapf, groups.google.com/g/traditionalfoods  
Portland: Sandrine Perez portlandchapter@sandrineperez.com nourishingourchildren.org/portland-chapter

# Local Chapters

## PENNSYLVANIA

Berks County: Stacy Keely (610) 451-4229, Berkschapstacyk@proton.me  
Bucks County: George Quinn (609) 367-4213, g\_quinn9@protonmail.com  
Cambria County: Jennifer McCormick (814) 244-1718, mccormickfarming@gmail.com  
Chester County: Annmarie Cantrell (215) 499-8105 ambutera@verizon.net  
Elizabethtown: Debbie Jackson (917) 449-1880 bodyinbalance99@yahoo.com  
Erie: Anna Rachocki (718) 662-6138, annazoemusic@hotmail.com  
Franklin County: Patti Owens (717) 600-6132, PattiOwens8@comcast.net  
Lancaster: Raymond Stoltzfus (717) 442-9208, Dairy@dutchmeadowsfarm.com  
Lititz: Brook and Sarah Stutzman (717) 606-3797 srae03@hotmail.com wellfolkrevival.com  
Luzerne and Lackawanna Counties: Sara Walkowiak (570)-235-5809, wapfnepa@gmail.com  
Montgomery County: Jennifer Miskiel (267) 664-4259, miskieljen@gmail.com  
Northern Bedford County: Ella M. McElwee (814) 766-2273 emcelwee@healthbychoice.net & Kathleen Brumbaugh (814) 928-5135, kmbrumb@comcast.net  
Philadelphia County: River Yeo (908) 873-4172, jabezandriver@gmail.com  
Pittsburgh: Celanie Jones (412) 996-7689, celaniejones@protonmail.com  
Towanda: Mary Theresa Jurnack (570) 265-9641 mjurnack@hotmail.com  
Waverly, North: Gail K Weinberger (570) 561-6970 gailweinberger@gmail.com  
York/Adams County: Matt Osborne (717) 451-3248, osborne7453@comcast.net

## RHODE ISLAND

Washington County: Aimee Gardiner (401) 741-0386, aimeeg@activist.com

## SOUTH CAROLINA

Charleston: Stephanie Zraggen (843) 214-2997, drzraggen@gmail.com  
Lowcountry-Beaufort: James and Emily Quandahl (810) 624-7703, emilyquandahl@gmail.com  
Spartanburg: Morgan Andrews & Teresa Andrews (803)608-6362, crossanchorchiro@gmail.com  
Summerville: Sarah Ruiz (843) 743-5263, info@catholicmememaker.com  
Sumter: Robby Elmore (803) 469-0824 robbey\_elmore@msn.com

## SOUTH DAKOTA

Beresford: Nancy Carlson (605) 253-2109, basket@valyousat.net  
Yankton: Mary Walkes (605) 661-6726 mwalkes@gmail.com & Crystal LaBrake, wapfyankton.sd@gmail.com  
chapters.westonaprice.org/yanktonsd/

## TENNESSEE

Brentwood/Franklin: Shawn Day (615) 336-2286 shawndady@me.com tennesseansforrawmilk.com  
Chattanooga: Michele Reneau michele.reneau@gmail.com facebook.com/groups/ChatanoogaWAPF/  
Columbia: Kyle Erickson (425) 761-9155, support@farmacyfoods.org  
Cookeville/Sparta: Sherri Stickler (931) 510-5201, synergyherbal1@gmail.com & Lini Wall  
Greene County: Stephanie Aberlich (828) 747-3315, nourishedinharmony@protonmail.com & Holly Lamons (423) 329-6720  
Hawkins County: Sophie Eng (423) 500-4852, wapfhawkins@proton.me  
Johns City/Bristol/Kingsport: Dierdre Beard (423) 202-5685 mother nourishment@gmail.com  
Knoxville: Georgette K Jones (865) 851-1304, wapf.gette@gmail.com facebook.com/groups/537765869718746/about/  
Robertson County: Gina Webb (515) 778-9245, gina.webb@gmail.com

## TEXAS

Ark-La-Tex: Jerica Cadman (903) 665-7076 jericacadman@gmail.com  
Austin: Kristen Files (214) 986-6059, wapfaustin@gmail.com & Madison Howard (512) 623-0439  
Bosque and DeWitt Counties: Caroline Taylor (512) 850-7951, pureranching@gmail.com  
Brazos Valley: Desiree L (979) 229-0913, wapf@compost.anonaddy.me  
Corpus Christi: Molly McNamara (903)240-3344, ccchapter@protonmail.com  
Dallas-Central & Northern Suburbs: Amy De Vernon (530) 407-3148, amy@barefootinthegrass.org & Christine Muldoon (972)-839-9261, christine@nourishthelittles.com  
Denton: Michelle Eshbaugh-Soha (940) 536-4443, ravensphere@gmail.com  
Edinburg: Eliza Garcia & Andres Navarro (956) 360-5470, lizag61@hotmail.com  
Fort Worth/Mid-Cities: Hannah Setu (817) 590-2257 elshaumbra@yahoo.com  
Hopkins, Hunt and Rains Counties: Alisha Netz (903) 634-5326, netzfamil05@gmail.com  
Houston: Brice and Carolyn Biggerstaff (281) 694-5612 info@wapf-houston.org & Kristi Foreman (618) 410-2272, kristi@wapf-houston.org, facebook.com/groups/houstonwapf wapf-houston.org, realfoodhouston.com  
Lavaca County: Bonnie Kuhlman (480) 529-7581, neel.bonnie@gmail.com

# International Chapters

Lewisville/Flower Mound/Grapevine: Kali and Zack Johnson (256) 590-8914, northtxwapf@protonmail.com  
Nacogdoches: Britney Toomey (508) 954-2444, britneytoomey@gmail.com  
Navarro County: Kathy Frisch (214) 417-6583, kathytx@pm.me  
Rockwall: Kelsey Holmes (281) 796-4579, kelseyholmes89@gmail.com  
San Angelo: Marcella Welch (916) 240-2354, marcella.r.welch@gmail.com  
San Antonio: Debra Roach (408) 390-7435, eggsandbutterDR@proton.me Danielle Roach, (916) 889-4634, dmcintosh.botany@gmail.com  
Southlake & Surrounding Cities: Kevin and Lisa Clark (817) 600-5146, lisawapf@gmail.com & Kevin Clark  
Taylor County: Ashley Hurley taylorcountywapf@gmail.com & Jennifer Bell  
Tyler: Jeannie Conneen (907) 209-3999, nourishetx@gmail.com  
Waco-McLennan County: Rachael Castillo wapfmcclennan@gmail.com  
Wichita Falls: Jada Rankin (940) 839-9644, jvontung@gmail.com  
Wise County: Pamela Klein (940) 627-5055, wapf@trinityholistichealthcenter.com trinityholistichealthcenter.com/newsletter

## UTAH

Alpine: Michelle Lye (801) 362-6933 mickylve@comcast.net  
Box Elder/Cache County: Lindsey Meadows meadows.wapf@gmail.com & Andrew M  
Morgan County: Shauna Shumway Walker (801) 388-9939, shaunaswalker@icloud.com  
Utah County: Betty H. Pearson (801) 477-7373 cellolady2@gmail.com facebook.com/groups/337490273004397/

## VERMONT

Northwest: Doug Flack (802) 933-7752 bflack@together.net & Lehte Mahoney, (802) 528-5000, info@nutritionvermont.com  
flackfamilyfarm.com  
Randolph Center: Marilyn Lambert (802) 249-1714, MarilynLambertntp@gmail.com  
Southwestern Vermont: Cynthia Larson (802) 645-1957 cynthialarson32@gmail.com  
West River/W. Townshend: Leigh Merinoff (802) 874-4092, leigh@meadowsbee.com & Betsy Thompson

## VIRGINIA

Alexandria: Janice Curtin (571) 235-4872 janicecurtin@gmail.com see local resources & Alana Sugar chapters.westonaprice.org/alexandriava/  
Augusta County, Staunton & Waynesboro: Susan Blasko (202) 230-3501, ntpconsultations@gmail.com & Isabel Bauer ibauer@yahoo.com  
Bedford County: Ben & Carly Coleman (434) 299-5193 mtnrunfarm@gmail.com  
Blacksburg: Kim Bears (540) 239-7496, kim.bears@generalmail.net wapfblacksburg.org  
Campbell County: Lisa Serapiglia homeandlifeabundantly@verizon.net  
Charlottesville: Robin Shirley Robin@tbyhguide.com  
Danville: Bianca Klein-Bretele seasonbotanica@gmail.com, (843) 343-3848  
Fairfax: Jane Kadish (917) 804-8375, jane.kadish@gmail.com & Florissa Reynoso, (703) 537-0964, westonpricefairfax@gmail.com  
chapters.westonaprice.org/fairfaxva/  
Floyd: Ruth Amanda floydwapf@proton.me  
Front Royal area: Maureen S. Diaz (717) 253-0529 mamasfollies@gmail.com & Paul Frank  
Greater Richmond Area: Christina Sava rvawapf@gmail.com  
Hampton Roads: Laura Harrison (757) 589-8920, itsawonderfullife8@verizon.net  
Marshall: Leila Leoncavallo wapf.marshall@gmail.com, (540) 753-1334 chapters.westonaprice.org/marshallva  
Purcellville: Valerie Cury fotoner2@aol.com  
Rockbridge County: Emily Achin (540) 460-5417, shenandoahwellness@protonmail.com & Becky Almy (540) 462-6022,  
becky@owlmoonfarm.com  
Stafford-Fredericksburg: Natasha Fields nefields3@gmail.com

## CHAPTER RESOURCES

Resources for chapter leaders can be accessed at [westonaprice.org/local-chapters/chapter-resources](http://westonaprice.org/local-chapters/chapter-resources), including our trifold brochures in Word format, the chapter handbook, PowerPoint presentations, business cards and more.

The Weston A. Price Foundation currently has 429 local chapters:  
358 serve the District of Columbia and every state in the U.S. except  
West Virginia and 71 serve 24 other countries!

## LOCAL CHAPTER CHAT GROUP

Our chapter leaders have a wonderful secure platform to carry on our many beneficial discussions, developed by Jay Hamilton-Roth, the husband of one of our chapter leaders. We encourage all chapter leaders and co-leaders to join if interested in learning and growing as leaders and individuals. To join, contact Maureen Diaz: [outreach@westonaprice.org](mailto:outreach@westonaprice.org).

# International Chapters

Vienna: Amber Condry [viennawapf@gmail.com](mailto:viennawapf@gmail.com)

Winchester/Frederick County: Amelia Martin (304) 288-1454 [ameliamartin630@gmail.com](mailto:ameliamartin630@gmail.com)

## WASHINGTON

Bellevue and Eastside: Kristina Paukova (425) 922-4444, [kpaukova@gmail.com](mailto:kpaukova@gmail.com)

Bellingham: Linda Fels (360) 647-8029, [gr8fels@msn.com](mailto:gr8fels@msn.com) [bellinghamrealfood.com](http://bellinghamrealfood.com)

Clark County: Madeline Williams (360) 687-4578, [clarkcountywapf@gmail.com](mailto:clarkcountywapf@gmail.com)

East Snohomish County: Rene Munday (805) 428-3771, [mindbodybloomu@gmail.com](mailto:mindbodybloomu@gmail.com) & Tara Cameron

Jefferson County: Nala Walla (360) 643-3747 [nala@bwellnow.org](mailto:nala@bwellnow.org)

Lincoln and Stevens Counties: Madison Throop (509) 359-0895, [madisonthroop@gmail.com](mailto:madisonthroop@gmail.com)

North Kitsap: Keri Mae Lamar (360) 633-5008, [kerimae@protonmail.com](mailto:kerimae@protonmail.com) & Dr. Thomas Lamar, D.C.

Tacoma/Olympia: Rebeka Vairapandi [rebeka@vairapandi.com](mailto:rebeka@vairapandi.com)

Whidbey Island: Sandra Rodman (425) 214-2926 [rightbrain2@protonmail.com](mailto:rightbrain2@protonmail.com)

## WISCONSIN

Ashland/Washburn/Bayfield: Julie Casper (715) 779-3966 [westonprice@healthelite.org](mailto:westonprice@healthelite.org) [chapters.westonaprice.org/ashlandwi/](http://chapters.westonaprice.org/ashlandwi/)

Clark & Wood Counties: Elizabeth Schlinsog (715) 389-1013 [liz.walkabout@gmail.com](mailto:liz.walkabout@gmail.com)

Dane & Sauk Counties: Richard Braun (608) 495-6117 [richbraun70@gmail.com](mailto:richbraun70@gmail.com)

East Troy: Brandon LaGrecia (262) 642-4325 [brandon@easttroyacupuncture.com](mailto:brandon@easttroyacupuncture.com), [chapters.westonaprice.org/easttroywi/](http://chapters.westonaprice.org/easttroywi/)

Fremont: Ruth E. Sawall (920) 850-7661

Green Bay: Marian Schmitz (920) 865-7479 [lehrermf@netnet.net](mailto:lehrermf@netnet.net)

Madison & Surrounding Areas: Saritah WAPF.MADison@gmail.com

Milwaukee: Joan McGovern Tandler (414) 828-3637, [tandler5@sbcglobal.net](mailto:tandler5@sbcglobal.net)

Oconomowoc: Bill Lensmire [localfood@exnihl.net](mailto:localfood@exnihl.net)

Ozaukee/Washington County: Susan Wichman (262) 853-8000 [wapfozwash@gmail.com](mailto:wapfozwash@gmail.com) & Laurie Meyer [facebook.com/ozwashwapf/](https://www.facebook.com/ozwashwapf/)

Sheboygan County & South Manitowoc: Emily Matthews (920) 286-0570 [realtoremilyrn@gmail.com](mailto:realtoremilyrn@gmail.com) & Cassie Wild [wildc115@gmail.com](mailto:wildc115@gmail.com), [facebook.com/groups/1042122412592106/](https://www.facebook.com/groups/1042122412592106/)

Viroqua: Laura Poe Mathes (816) 309-8708, [laurapoerd@gmail.com](mailto:laurapoerd@gmail.com)

## WYOMING

Buffalo: Susan J. Pearce (307) 751-8505 [spearce@vcn.com](mailto:spearce@vcn.com)

Laramie: BJ Edwards (307) 399-4893, [BJ@tasteofthewind.com](mailto:BJ@tasteofthewind.com)

## AUSTRALIA

### NSW

Bega Valley: Emily Stokes 0407 192 899 [thewordgarden@hotmail.com](mailto:thewordgarden@hotmail.com)

Lismore: Deborah Perry [doryanthes41@gmail.com](mailto:doryanthes41@gmail.com) [facebook.com/WAPFNorthernrivers/](https://www.facebook.com/WAPFNorthernrivers/) 0429 781 392

Stuart Town: Hal & Sally Harris 0268 468 261 [merrimount@hotmail.com](mailto:merrimount@hotmail.com)

Sydney - North West: Brenda Rogers 61 4097 74790, [brenda@qwomen.com.au](mailto:brenda@qwomen.com.au)

### QLD

Gold Coast: Julie Phillips 0417 470 799 [mail@wisefood.com.au](mailto:mail@wisefood.com.au), [wisefood.com.au](http://wisefood.com.au)

Sunshine Coast & Noosa Region: Jennifer Steinhardt (07) 5488 6952, [freedomorganics@gmail.com](mailto:freedomorganics@gmail.com)

Tamborine Mountain/Mudgeeraba: Kyle Grimshaw-Jones 0423 647 666 [kyle@conscioushealing.com.au](mailto:kyle@conscioushealing.com.au)

### TAS

Hobart & Huon Valley: Jillaine Williams 0407 403 787 [jillainepp@gmail.com](mailto:jillainepp@gmail.com)

### WA

Albany: Mike and Barbara Shipley 0414 351 304 [shipleysorganics@bigpond.com](mailto:shipleysorganics@bigpond.com)

Bunbury: Susan Galea (045) 219-1665, [dek matt@outlook.com](mailto:dek matt@outlook.com)

Nannup: Bee Winfield 61 + 0897 561 408, [beewinfield@westnet.com.au](mailto:beewinfield@westnet.com.au)

## BARBADOS

Barbados: Russell Davison +1 246 283 8566, [russellwapf@gmail.com](mailto:russellwapf@gmail.com)

## BELGIUM

Ghent: Sofie De Clercq 32 496 93 39 89, [info@sofiedeclercq.be](mailto:info@sofiedeclercq.be) [holisticnutrition.be](http://holisticnutrition.be)



# International Chapters

## CANADA

### AB

Calgary: Susan Quirk (403) 483-4338 squirkx@icloud.com

Edmonton: Elaine Doucette theherbalmama@gmail.com & Jem Honey, Jemhoney@protonmail.com chapters.westonaprice.org/edmontonab/

Olds: Rick Kohut (403) 507-5890, rick@healthstreet.ca foodgenie.ca

Peace Country: Peter & Mary Lundgard (780) 338-2934 plundgard@telus.net & Levke Eggers (780) 568-3805, levke@telusplanet.net

### BC

Chilliwack: Anna Bonde (604) 819-4101 anna\_mvm@telus.net

Duncan: Andrea Larsen (778) 422-2286 info@andrealarsenrncp.com

Powell River, Sunshine Coast: Dirk De Villiers 6044890046, dirkdevilliers@telus.net

Sooke: Linda Morken (250) 642-3624, SookeWAPF@protonmail.com sookewapf.org/

Vancouver: Sonya McLeod (604) 677-7742 LMhomeopath@gmail.com facebook.com/

westonapricefoundationvancouverbcchapter/groups.io/g/WAPFVancouver, chapters.westonaprice.org/vancouverbc/

Victoria: Andrea Dam (250) 661-8275, GratefulLiving@protonmail.com

### MB

Interlake Region: Debbie Chikousky (204) 202-3781, debbie@chikouskyfarms.com, facebook.com/groups/347912590282481

### NS

Annapolis Valley: Marvin Weber (902) 538-4318, marvin@bountywoodsfarm.ca

### ON

Guelph/Wellington: Sharon O'Sullivan (519) 848-2084, osharon18@yahoo.com

Hamilton: Kenneth and Claire Dam (905) 580 1319 kenandclaire@gmail.com

Kingston: Sue Clinton (613) 888-1389 suek0h2t0@gmail.com & Bob Clinton, DDS, (613) 376-6652, bobk0h2t0@gmail.com wapfkingston.org

Muskoka: Alli Manzella MuskokaWAPF@gmail.com

Oakville: Rachael Thiessen (416) 605-4377, thiessen.rachael@gmail.com

### SK

Swift Current: Pamela Wolanski (306) 560-3258 sunbeampgf4@outlook.com

## COSTA RICA

San Jose: Gina Baker +(506)2289 8806, regeneratewithgina@gmail.com (506) 84941407 Whatsapp

## CROATIA

Samobor: Domagoj Dzojic 00 385 95 5681 881, info@mudrepredaje.com & Josipa Dzojic mudrepredaje.com, skype: dzojiczcgro

## CZECH REPUBLIC

Prague: Jakub and Zaneta Kremsa +420603101807 zaneta@kremসা.cz zanetakremসা.cz

## FRANCE

Provence Cote d'Azur: Beatrice Levinson +33494840503 BeatriceLevinson@gmail.com Beatrice-levinson-gaps.com, facebook.com/BeatriceLevinsonNaturopath/

## GERMANY

Munich: Marlon Bonazzi marlonbonazzi90@gmail.com

## GREECE

Athens: Antonis Sarantakis +30(69)45792910, sarantak@icloud.com & Anna Papakosta

## HUNGARY

Budapest: Katalin Kokavecne Nagypal medkozpont@gmail.com, chapters.westonaprice.org/budapesthungary/

## IRELAND

Dublin: Linda de Courcy 08 7225 3820, linda@nutritionforlifeireland.com

Limerick: Deirdre MacMahon +1 00353863766787 deirdremacmahon@gmail.com

Tipperary: Anne Maher +1 353877927311 maher.anne1@gmail.com

# International Chapters

## KOREA, REPUBLIC OF

Seoul: Youngshin Kim 82 1091855246, [harry8487@naver.com](mailto:harry8487@naver.com)

## MEXICO

Guadalajara: Enrique Alonzo (331) 863-0935, [greenray.bienestar@gmail.com](mailto:greenray.bienestar@gmail.com)

Mexico City: Galia Kleiman +52 5543608713, [babylovesfood@yahoo.com](mailto:babylovesfood@yahoo.com)

San Miguel de Allende: Jorge Catalan 52 415 151 0577, [wapfsma@gmail.com](mailto:wapfsma@gmail.com) [facebook.com/people/Wapf-San-Miguel/100009625892932](https://www.facebook.com/people/Wapf-San-Miguel/100009625892932),  
[chapters.westonaprice.org/sanmigueldeallendeguanajuatomexico/](http://chapters.westonaprice.org/sanmigueldeallendeguanajuatomexico/)

## NETHERLANDS

Limburg: Tanja Stevens +31616474192 [tanjastevens@hotmail.com](mailto:tanjastevens@hotmail.com) [limburg.westonprice.nl/](http://limburg.westonprice.nl/), [westonprice.nl/waar-vind-ik-goed-eten/](http://westonprice.nl/waar-vind-ik-goed-eten/)

## NEW ZEALAND

Tauranga: Catherine Garney +64275701184, [catherine@nutritionforhealthnz.com](mailto:catherine@nutritionforhealthnz.com)

Otago Region: Tracey Pita +64 22 5002292, [tracey@rawandreal.co](mailto:tracey@rawandreal.co)

Hawkes Bay: Phyllis Tichinin +(64 27) 4651906 [phyllis@truehealth.co.nz](mailto:phyllis@truehealth.co.nz)

Northland: Janie Cinzori (09) 601 1110, 021 0267 3517, [janiecinzori@gmail.com](mailto:janiecinzori@gmail.com)

South Canterbury: Carol Keelty +03 6866 277 [bckeelty@outlook.com](mailto:bckeelty@outlook.com)

NZ Resource List: Deb Gully [deb@frot.co.nz](mailto:deb@frot.co.nz) [wapfwellington.org.nz](http://wapfwellington.org.nz)

Wellington: Ian Gregson +0064 934 6366 [wapf@frot.co.nz](mailto:wapf@frot.co.nz) & Deb Gully (04) 934 6366, [deb@frot.co.nz](mailto:deb@frot.co.nz) [wapfwellington.org.nz](http://wapfwellington.org.nz)

## NORWAY

Innlandet: Sindre Vaernes [sindre.vaernes@engage-now.org](mailto:sindre.vaernes@engage-now.org) & Tom Olsen 4847 1030

## POLAND

Brodnica: Adam Smiarowski +1 01148606209914 [szkolarycerska@gmail.com](mailto:szkolarycerska@gmail.com)

## PORTUGAL

Algarve: Julia de Jesus Palma [julia@onlinedesign.info](mailto:julia@onlinedesign.info)

Lisboa and Beira Baixa: Duarte Martins [duartecmartins@gmail.com](mailto:duartecmartins@gmail.com)

## SINGAPORE

Singapore: Alexander Mearns +65 9239 7427 [alex@levitise.com.sg](mailto:alex@levitise.com.sg)

## SOUTH AFRICA

South Africa: Eastern Cape: Lowell Vickers +27 76 387 4872, [lhv777@gmail.com](mailto:lhv777@gmail.com)

## SPAIN

Madrid: Ana de Azcarate 34 616 821039, [aquilina68@yahoo.com](mailto:aquilina68@yahoo.com)

Marbella: Svetlana Lotman +447931581002, [contact@dynamize.co](mailto:contact@dynamize.co)

Malaga: James Fehr +0034 622506214 [jamiefehr@fastmail.es](mailto:jamiefehr@fastmail.es) & Craig Chanda

## SWITZERLAND

Bern: Judith Mudrak - Wasem [rohmilchjudith@gmail.com](mailto:rohmilchjudith@gmail.com)

Neuchatel: Ann-Sophie Clerc 41 79 128 22 17, [asclerc.gaps@gmail.com](mailto:asclerc.gaps@gmail.com)

## UNITED KINGDOM

Derby: Russell Davison +44 7973 123836, [russellwapf@gmail.com](mailto:russellwapf@gmail.com)

London: Philip Ridley [phil@westonaprice.london](mailto:phil@westonaprice.london), [westonaprice.london](http://westonaprice.london)

Sussex: Lyann Kemal (0) 447. 310 601143, [lyannkemal@gmail.com](mailto:lyannkemal@gmail.com)

West Wales: Naomi Smyth +441559384876, [wapf.westwales@protonmail.com](mailto:wapf.westwales@protonmail.com)

Scotland: Central Belt: Urara Donohoe 07812 606 272, [uhiroeh@gmx.com](mailto:uhiroeh@gmx.com)

South East Hampshire: Mart Speyers 07939 084888, [SouthEastHampshireChapter@hotmail.com](mailto:SouthEastHampshireChapter@hotmail.com)

Surrey and Hampshire: Diana Boskma +44 1252 510 935 [dboskma@gmail.com](mailto:dboskma@gmail.com) [facebook.com/groups/336421596766813/](https://www.facebook.com/groups/336421596766813/)

# The Shop Heard 'Round the World

Dedicated to Helping the Consumer Obtain Nutrient-Dense Foods and Accurate Nutrition Information

## CO

Meadow Maid Foods, 100% grass-fed, grass-finished beef. On pasture year-round at the family ranch in WY. Production practices detailed on our website. Custom beef, Farmers markets, and food co-op in Fort Collins. meadowmaidfoods.com, (307) 534-2289.

Rafter W Ranch, Simla, CO. A family-owned ranch, practicing regenerative agriculture, bringing you nutrient-dense food. Our animals are **100% certified American Grass-fed**. Our beef is 30-day dry-aged. We also offer pasture-raised lamb and broiler chickens. Bones, offal (liver, tongue, oxtail, kidney, cheek, heart) and other choice cuts available. Bulk and piece orders. *We are part of the Harvest Host*. Pick-up locations along the Front Range and **NOW shipping** in CO. (719) 541-1002, rafterwranch.net.

## FL

Beyond organic, regenerative family farm selling raw goat milk, yogurt, kefir and cheese locally in Lake County Florida, along with probiotic skincare using live cultured yogurt, extracts and herbs from our chemical-free farm. We ship our skincare products. www.farmercrafted.com farmercrafted@gmail.com.

Ecofarm Florida Diverse Earth & WAPF-Friendly Farm serving the Tampa Bay area. Pastured water buffalo products, organically grown vegetables and seasonal fruits, edible container plants and trees. Farm buying club and produce available at two markets. ecofarmfl@yahoo.com, (813) 708-3179.

## GA

Broad River Beef, LLC, tender, flavorful Angus beef, 100% grass-finished, toxin-free and mineral rich. Cuts you actually use available in sizes that actually fit in your refrigerator. Produced seasonally with nature. Delivery available from Atlanta through northeast Georgia. broadriverbeef.com, (706) 310-8060.

## ID

Idaho Food Coop specializes in providing pasture raised meats and wild caught fish. Beef and lamb are grass finished and our poultry is pasture raised. Pastured meats, organs and bones are available. Pickup locations are located throughout southern Idaho. idahofoodcoop.com.

## IL

Honeysuckle Farm, Morris, Illinois is a family-owned and operated small-scale, pasture-based farm. We offer pastured eggs, chicken, turkey, and pork, raw honey, syrup, and raw A2 milk. Locally milled non-GMO feed, antibiotic and chemical-free. Order online at honeysucklefarm.net. (574) 323-7919.

## IN

DEVON BEEF, 100% grass fed, no antibiotics, no growth hormones. Full cow, 1/2 cow or individual cuts from my ranch in St. Leon, Indiana. Pastured pork, 100% antibiotic free, fed minimum amount of organic corn, 100% outdoors on pasture and woods. All meat USDA inspected. Information on how we raise our beef and pork plus important health links at abundantgreenpastures.com or Mike at (513) 646-8739.

HILL N DALE, RED DEVON 100% grass fed beef, RED WATTLE non-gmo pork, ROBUST WHITE pastured chickens, BRONZE pastured turkeys. On Farm Store open six days a week, delivery available. 12683 South 300 East, North Manchester, IN (260) 578-7294.

## MA

Many Hands Organic Farm in Barre, MA. All products certified organic and free range. Lard, pork, chicken and turkey stocks, pork, chicken, turkey and 26 weeks of CSA. No till, nutrient dense. mhof.net; (978) 355-2853; farm@mhof.net.

## MD

Chesapeake's Bounty: A local foods market in North Beach and St. Leonard. Local seafood, produce, meat, dairy, baked goods and plants. All products are grown, caught or processed in the Chesapeake Bay region. Chesapeakebounty.com StL: (410) 586-3881 (7 days week) or NB: (443) 646-5700 (Fri, Sat, Sun).

Nick's Organic Farm, since 1979 offering quality products to Washington, DC, suburban MD, No. VA, Baltimore and Frederick areas. 100% grass-fed beef (no grain ever), pastured chicken, turkey, eggs. Using a regenerative 12 year crop rotation, we constantly move our livestock to fresh pastures to build our soils. Our animals receive only organic feed raised on our farm, no hormones, no antibiotics, no animal by-products, no GMOs. Beef and poultry liver, organ meats, fat, and bones, chicken/turkey feet, beef sausage and jerky. Hay, straw, poultry feeds, food grade grains, popcorn, stone ground heirloom cornmeal (301) 983-2167; nicksorganicfarm.com; nicksorganicfarm@comcast.net. **JOIN our mailing list** to receive **order forms** and an invitation to our annual **Buckeystown Farm Tour**.

100% soy-free chicken, eggs, pork and beef. Chicken livers, chicken feet and heads. Bacon and sausage. Raw pet milk. Raw milk blue and cheddar cheese by cheesemaker Sally Fallon Morell. **Will ship** whole cheese wheels. Southern Maryland, within 1 hour of downtown Annapolis and Washington, DC. Saturday farm tours. Store open Thursday to Saturday 10-6 or by appointment. P. A. Bowen Farmstead, 15701 Doctor Bowen

Road, Brandywine, MD. (301) 579-2727, pabowenfarmstead.com.

## MN

Farm On Wheels offers animals raised green grass-fed & organic. USDA inspected. Nutrient-dense beef, lamb, chicken, eggs, turkey, goose, duck, and pork, no corn or soy or GMOs. Farmers Market year around in St. Paul, Prior Lake. Linda (507) 789-6679, farmonwheels.net, farm\_on\_wheels@live.com.

## NC

Little Way Farm, Siler City, NC is a family-owned farm, practicing regenerative agriculture and operating on a human scale. We offer 100% grass-fed and grass-finished beef and lamb, woodland-raised pork, pasture-raised poultry and eggs, wild caught seafood, and 100% natural and raw honey. We follow intensive rotational grazing practices, with no hormones, antibiotics, GMOs, or pesticides. Shipping available nationwide, as well as home delivery and local pick-ups in central NC. Order online at littlewayfarmsilercity.com.

## NY

Dutch Meadows brings you the finest in high-quality grass-fed meats and organic dairy products, raised in harmony with the land. Order online and choose from hundreds of farm products, **WE SHIP**. Convenient pick-up locations in NYC. (717) 442-9208 info@dutchmeadowsfarm.com – DutchMeadowsFarm.com.

Grass fed Farm Fresh food to help you achieve vibrant health by enjoying high quality, nutritious, 100% grass fed raw dairy from sheep and Jersey cows. 100% grass fed/finished beef and lamb, Soy Free pasture raised pork, turkey and chicken, and lots more. Order online and utilize our convenient home delivery or pick up locations. Shop farmmatch.com/pleasantpastures or call (717) 768-3437.

## OH

COPIA FARM, Dan & Caitlin, Short drive from Columbus, Johnstown Ohio. Farm store open daily, 9 am-7 pm. Raw milk herdshares, grass-fed meats, pasture-raised eggs, organic produce, organic sourdough bread & more! Regenerative, GMO-free, organic, paleo. (614) 915-9269, CopiaOhio.com.

Sugartree Ridge Grassfed Herdshare/PMA, located 60 miles east of Cincinnati in Highland County. We deliver 100% grass-fed milk, optional A2-A2 milk and many other products to sixteen delivery sites in Cincinnati. Farm and contact address is: Scott Richardson, STRG Herdshare 6851 Fair Ridge Road, Hillsboro, OH 45133-9548.

# The Shop Heard 'Round the World

Dedicated to Helping the Consumer Obtain Nutrient-Dense Foods and Accurate Nutrition Information

## OR

Grass-based biodynamic raw milk dairy offering Jersey Hi-creamlime milk, cream, golden butter, cottage cheese and aged cheeses. Soy-free veal and pork seasonal. On farm sales and membership club. **Can ship.** Sherry and Walt (541) 267-0699.

Windy Acres is a raw milk dairy. It provides families with raw cheeses, Gouda, Jack, Jalapeno Jack, Tri Colored Peppercorn Jack, White Cheddar, Swiss (Jarlsberg style), Feta, Camembert, etc. We make hand-pressed butter, cream, yogurt, kefir, lamb, pork and beef. Grass-fed, raised without GMO or soy. (541) 613-5239 Windyacres26@gmail.com.

## PA

Dutch Meadows brings you the finest in high-quality grass-fed meats and organic dairy products, raised in harmony with the land. Order online and choose from hundreds of farm products, **WESHIP.** Visit our farm store. 694 Country Lane Paradise, PA. (717) 442-9208 info@dutchmeadowsfarm.com – DutchMeadowsFarm.com.

GAP VIEW FARM MARKET Raw milk, raw milk cheese, cream butter, eggs, including duck eggs and fresh vegetables from our chemical free farm. Call (484) 667-1382 or visit our farm market in the heart of Lancaster County, PA at 5230 Newport Rd, Gap, PA 17527.

100% grassfed organic A2A2 raw milk and dairy products plus beef, pastured soy-free pork, chicken, turkeys, eggs, beef and chicken stock, fresh and fermented vegetables. Mount Tabor Farm. New Holland, PA (717) 354-3753.

Raw milk cheese from our grass-fed Jerseys, made on our family farm with Celtic sea salt. Cows are fed no grains. Also grass-fed beef and pastured chickens, turkeys and eggs. All soy-free, no hormones or synthetics. On-farm sales, **will ship cheese.** Wil-Ar Farm, Newville, PA (717) 776-6552.

Visit our farm and choose from our selection of grassfed beef and lamb, and pastured soy-free pork, chicken and eggs. Hours: Wednesday and Saturday 9 am-11 am; Friday 3 pm-7 pm. **We ship.** Locust Grove Farm, 619 Locust Grove Road, Port Trevorton, Pennsylvania 17864.

## SC

S C VEGETABLE FARM EQUIPMENT SELL-OUT. Sold as a package only. IH 531 plow, IH 574 Tractor, only 300 hrs., Pico 10/20 disk cultivator, Lely spreader, 6' scrape blade, 6' lift arm, older Cole planter/cultivator w/ seed plates, 5' Bushog, IH Farmall Super "A" tractor with front cultivator. \$35,900. (864) 292-5001.

## TN

Echo Valley Farm, Madisonville, Tennessee Organic grass fed, herd shares for raw milk, raw cream, raw butter, raw yogurt, raw kefir, beef and raw pastured free-range eggs. Our herd share owners have enjoyed a 100% safety record for over 15 years. (865) 399-8320 www.echovalleyfarms.net.

Martin Family Farm - located between Knoxville and Chattanooga. Offers pastured pork, eggs, 100% grassfed lamb, pasture raised meat chickens, 100% grassfed - grass-finished beef, veal, and whole raw A2A2 milk from 100% grassfed Jerseys. Everything is organically raised in harmony with nature, and is sold at the farm. Contact address and farm location: Martin Family Farm 959 Co Rd 423, Athens, TN 37303.

## VA

Salatin family's Polyface Farm has salad bar beef, pig-aerator pork, pastured chickens, turkeys and eggs, and forage-based rabbits. Near Staunton. **Nationwide delivery available.** Call (540) 885-3590, polyfacefarms.com.

Grass fed Farm Fresh food to help you achieve vibrant health by enjoying high quality, nutritious, 100% grass fed raw dairy from sheep and Jersey cows. 100% grass fed/finished beef and lamb, Soy Free pasture raised pork, turkey and chicken, and lots more. Order online and utilize our convenient home delivery or pick up locations. Shop farmmatch.com/pleasantpastures or call (717) 768-3437.

## WY

Meadow Maid Foods, 100% grass-fed, grass-finished beef. On pasture year-round at the family ranch in Goshen County. Production practices detailed on our website. Custom beef, Cheyenne farmers markets and local delivery. (307) 534-2289, meadowmaidfoods.com!!

## APPRENTICE/EMPLOYMENT

**HOME COOK.** Looking for a HOME COOK for a small community of seven people near Colorado Springs, Colorado. Beautiful, calm and pleasant environment. Five days per week from 11AM to 5PM, to develop weekly menus and prepare and serve main meal along with evening snack. Special attention to be paid to dietary allergies and sensitivities. Extra shifts available as requested. Kitchen support staff on premises for cleaning and support of pantry. Apply by email: rbward57@gmail.com; or call (303) 807-1780.

**GARDENER/COOK** Organic regenerative ranch near Olympia Washington seeking seasonal gardener/cook through end of har-

vest. Room, board, stipend, travel expenses. Email qualifications and interest to Lawren@wellaroo.com.

**Internships: 300-acre family farm in Live Oak, Florida** with 20 years of success and over a half million in gross sales wants to share their success secrets. We have on-farm housing to rent and classes in butchery, cow and goat milking, pastured poultry, pigs, permaculture, gardening, silvopasture and broad acre food forest, and more. We offer internships with hands-on experience for a weekend, week long, month or 6-months. Contact us for prices and bookings thisisdennis@startmail.com.

**MILKER AND FARM HAND** Organic regenerative ranch near Olympia, Washington seeking seasonal cow milker through end of fall. Room, board, stipend, travel expenses. Email qualifications and interests to Lawren@wellaroo.com.

**Praire foods is seeking a marketer.** We are a group of plain select farmers currently growing and shipping Dairy beef pork chicken and eggs. We are seeking a dedicated individual that is passionate about healthy food to create and manage a website for us (570) 855-3715.

**Temple Wilton Community Farm in Wilton, NH is seeking aspiring or experienced vegetable farmer apprentices for the 2023 season.** We are one of the country's two oldest CSA farms, offering organic vegetables, grass-fed dairy and cheese from our on-site creamery. Apprentices will be paid monthly and offered housing, food, and dairy from April-November. Learn biodynamic, regenerative, and no-till farming methods mostly done by hand on our 4-acres of cultivated land. For more information, visit twcfarm.com or email blanknoriega@gmail.com with a brief resume and statement of interest. We look forward to growing with you!

## CRAFTS & CLOTHING

**Beautiful crafts by local artists.** Keep your gift-giving dollars in the USA. Alpaca blankets, socks and yarn; hand painted decorations, paintings by award-winning artist David Zippi; handmade quilts. Exclusive source of Nourishing Traditions posters. Saturday farm tours. Store open Thurs-Sat 10-6 or by appointment. P. A. Bowen Farmstead, 15701 Doctor Bowen Road, Brandywine, MD. (301) 579-2727, pabowenfarmstead.com.

## DVDS/ON-LINE VIDEOS/BOOKS

**DVD "Nourishing Our Children"** recently launched a DVD that may be used for



# The Shop Heard 'Round the World

Dedicated to Helping the Consumer Obtain Nutrient-Dense Foods and Accurate Nutrition Information

one's self-education or to present to an audience. You will learn how to nourish rather than merely feed your family. [nourishingourchildren.org/DVD-Wise.html](http://nourishingourchildren.org/DVD-Wise.html) **Free shipping!**

**For sale: 67 Wise Traditions journals;** 2001-2020 in good to excellent condition. Will sell all for \$400 including shipping (OBO). Missing W2003, Su2005, W2007, Su2009 and F2012. (540) 626-5287, [ldt.pwp@gmail.com](mailto:ldt.pwp@gmail.com).

**View all UK & Irish WAPF conference videos,** many European speakers never seen in the USA, in our large and growing video library that will host and fund future events. Subscribe for just £2 a month. (about \$2.50). <https://westonaprice.london>.

## FARMING VENTURE

**Grassroots Farmers (GRF) is leading a life changing Colorado movement** cultivating local organic sustainable solutions through co-farming 41 acres in southern Colorado. We are looking for farming nonprofits and organizations to bring into the folds as we break ground on our 6 acre Fountain property as proof of concept as we expand into our 35 acre Las Animas property. We are starting with two 1,024 square foot structures to provide farmer lodging/housing, community bathrooms and showers in April weather dependent. Sign up for April Volunteer Sundays here: <https://www.grassrootsfarmers.org/april-build-volunteer-sign-up> We are a new birthing nonprofit farm, donations are graciously accepted! Here is our donation link: <https://www.grassrootsfarmers.org/donate> We are looking for a storage container(s) to start growing chicken fodder feed. If anyone has a connection/access/wanting to get rid of theirs we'd love to connect with you.

## HEALTHY FOOD/PRODUCTS

**Beyond organic, regenerative family farm** selling raw goat milk, yogurt, kefir and cheese locally in Lake County Florida, along with probiotic skincare using live cultured yogurt, extracts and herbs from our chemical-free farm. We ship our skincare products. [www.farmercrafted.com](http://www.farmercrafted.com) [farmercrafted@gmail.com](mailto:farmercrafted@gmail.com).

**AFFORDABLE HERBAL PRODUCTS.** Superfood Plus 14 oz \$50. Green Drink 8 oz \$37. Colon/Intestinal Formula #1: 90 vegan capsules \$15; 250 vegan capsules \$31. Colon/Intestinal Formula #2: 8 oz Bulk Powder \$13; 250 vegan capsules \$19. Plus shipping. Call (352) 277-6645.

**FIBROMYALGIA?** I can help! I'm an Anabaptist woman who suffered for 12 years but now I can walk, read, write, socialize, cook, hold babies and live my life WITHOUT pain shooting through my body. For help, call me at (352) 277-6645.

**FLUORIDE FREE AMERICA** Mission: Enhancing communication between individuals and organizations to exchange information and create strategies to end water fluoridation. [facebook.com/waterliberty](http://facebook.com/waterliberty) \* [Twitter.com/FluorideFreeAmerica/waterliberty](http://Twitter.com/FluorideFreeAmerica/waterliberty) \* 70% of Americans are fluoridated. JOIN IN THE EFFORT TO END FLUORIDATION - You have the right to safe drinking water.

**HEARTH AND HOMESTEAD LLC** Hand-crafted fine soaps, balms, butters, postpartum and baby products featuring pastured goat milk, tallow, lard, organic herbs and essential oils. Family owned in Hurt, VA. Visit [www.hearthandhomesteadstore.com](http://www.hearthandhomesteadstore.com) and use coupon code: WAPF for 20% off your first order! (434) 324-0106.

**Truly non-toxic baby cribs** for sale by fifth generation Mennonite woodworker, cribs like I made for my daughter. Completely free of all chemicals and unnatural smells. Made of only wood, olive oil, nontoxic wood glue and screws. Adjustable and extremely strong. \$850 plus shipping. Call, text (717)917-6826 or email [jasonkristensauder@gmail.com](mailto:jasonkristensauder@gmail.com).

**USA Fermentation Weights** - Shop high quality glass fermentation weights made in the USA at [usafermentationweights.com](http://usafermentationweights.com). They are easy to stack, sterilize, and won't take on odors or stains.

## HOMES/FARMS/BUSINESS SALE

**Food Business For SALE** Established fermented food wholesale business (10 years operation) for sale. Distribution area covers all of Florida—sold at Whole Foods, other grocery stores and around 20 mom-and-pop stores. Product, mainly sauerkraut, is sold through two distributors: United Natural Foods Inc. (UNFI) and Albert's Fresh (a subsidiary of UNFI). Great potential for expanding product line, increasing business with current clients, and adding new clients. Flexible on terms. For more information, email [KPCats@live.com](mailto:KPCats@live.com) or call (941) 812-2771.

**S C VEGETABLE FARM EQUIPMENT SELL-OUT.** Sold as a package only. IH 531 plow, IH 574 Tractor, only 300 hrs., Pico 10/20 disk cultivator, Lely spreader, 6' scrape blade, 6' lift arm, older Cole planter/cultivator w/ seed plates, 5' Bushog, IH Farmall Super "A" tractor with front cultivator. \$29,000. (864) 292-5001.

## RESEARCH

**Do you have a child with a chronic health or developmental condition?** The Documenting Hope FLIGHTTM Study is recruiting participants in Northern Virginia! Nutritious food, doctor/practitioner visits, supplements, lab tests, etc. provided at no cost. To learn more: [documentinghope.com/flight-study](http://documentinghope.com/flight-study).

## SERVICES

**Professional EMF assessments & remediations.** We detect, measure, assign risk and provide proven solutions and protocols to reduce/eliminate your EMF exposure. Many clients feel better instantly. Eric Windheim BBEC, EMRS, RFSO Certified Building Biologist & Electromagnetic Radiation Specialist. [www.WindheimEMFsolutions.com](http://www.WindheimEMFsolutions.com).

**Seeking adoption connection.** We wish to welcome a baby into our family and rural Wisconsin homestead. We follow WAPF health practices and are looking for a birth mother or adoption agency with similar values. Please send responses or suggestions to Gabby at [wiseadoption@gmail.com](mailto:wiseadoption@gmail.com).

## TRAVEL/LODGING

**Book your stay at Mulberry Lavender Farm and B&B** in Tennessee to experience a simpler life and watch heritage animals thrive. Visit the farm store or stay in the Historic Farmhouse or Cottage, with all-organic farm breakfast. Book online at [mulberrylavender.com](http://mulberrylavender.com).

**Holiday in beautiful English countryside - 18th Century Quince Tree Cottage** is in a quiet village in the Chalke Valley in Wiltshire, sleeps five. Local supplies of pasture raised meat, organic vegetables and raw milk. Contact and more details: [quincetree.uk](http://quincetree.uk).

**WEST MICHIGAN Couples retreat** set on 35 wooded acres. 5 contemporary, luxury suites in a relaxed, romantic setting. All suites have a king size bed, whirlpool tub and glass block enclosed shower. For online videos go to <https://www.pigeoncreekinn.com/> (616) 836-4088.

# The Shop Heard 'Round the Worlds

Dedicated to Helping the Consumer Obtain Nutrient-Dense Foods and Accurate Nutrition Information

## CRAFTS / PASTURE-RAISED PRODUCTS



### Wise Traditions Alpaca Vest

WAPF Gold Sponsor **Villa de Alpacas** is proud to offer this super-soft, ultra-warm Alpaca vest to our friends at WAPF! These beautiful, high-quality vests are tailored for an attractive fit, easy care, and a lifetime of wear. Sizes S-M-L-XL in a variety of natural & hand-dyed colors.

#### SPECIAL MEMBER PRICE:

**\$100 each** (regularly \$150)

Order online [westonaprice.org](http://westonaprice.org)  
By phone: (703) 820-3333



**Villa de Alpacas Farm**  
AT HISTORIC VILLA DE SALES  
[MarylandAlpacaFarm.com](http://MarylandAlpacaFarm.com)

### WILLOW VIEW WHOLESOME FOODS

(717) 464-2238

#### Organic Grown, Fermented Vegetables

- Raw Sauerkraut
- Raw Bread & Butter Pickles
- Raw Kimchi
- Beet Kvass
- Sauerkraut Juice
- Kombucha
- Raw Dill Pickles

More fermented vegetables in season.  
Organic citrus January, February, March.  
Grass-fed Beef, Pork, Chicken, & Turkey



### HELP US BRING NOURISHING ANIMAL FOODS BACK TO AFRICAN VILLAGES

We are crowdsourcing the purchase of cows, chickens, goats, and pigs to go DIRECTLY to tribes we have personal contacts with.

We visited many tribes in Tanzania & Uganda who have been pushed off their land and/or are not able to afford their ancestral diet. School children go all day with only porridge from corn flour, vegetable oil, and sugar. Please contribute along with us to get them these much-needed animals.

Thanks so much!  
- Mary Ruddick & Brian Sanders

[COWS4KIDS.COM](http://COWS4KIDS.COM)



Raw milk blue and Cheddar cheese by cheesemaker Sally Fallon Morell.

Raw Pet Milk  
100% soy-free chicken, eggs, pork and beef.

Within one hour of downtown Annapolis and Washington, DC.  
Saturday farm tours.  
Will ship full cheese wheels.

Store open Thurs-Sat 10-6  
or by appointment.

301-579-2727  
15701 Doctor Bowen Road  
Village of Aquasco  
Brandywine, Maryland 20613  
[www.PABowenFarmstead.com](http://www.PABowenFarmstead.com)



### Miller's Organic Farm

PRIVATE MEMBERSHIP ASSOCIATION  
*The land where milk and honey flows*

648 Millcreek School Road, Bird-In-Hand, PA 17505 • Phone (717) 556-0672 • [amosmillerorganicfarm.com](http://amosmillerorganicfarm.com)

Our cows are on a high forage diet and are not fed grain to ensure high-quality better tasting and more nourishing food.

grass-fed raw water buffalo, cow, sheep, goat, and camel milk • grass-fed raw butter from cow, sheep, and goat • pork lard, beef and sheep tallow • grass-fed beef, lamb, turkey and soy-free chicken, whey-fed pork • pork sausages and bacon • broth from turkey, fish, chicken, duck, goose, pork, and beef • fermented vegetables including sauerkraut and kim-chee • sprouted breads including sourdough and gluten-free.



PRIVATE CLUB MEMBERS ONLY

Please call for membership contract form and pricelist.



**Serenity Farm Bread**

Old World Sourdough Brick Oven Bakery

SHIPPING TRUE SOURDOUGH BREADS, FOCACCIA, COOKIES AND MORE, DIRECTLY TO YOUR HOME.

No bakers yeast, oils, or sweeteners

LESLIE, ARKANSAS (870) 447-2211  
[WWW.SERENITYFARMBREAD.COM](http://WWW.SERENITYFARMBREAD.COM)

Quality ingredients, properly prepared, no substitutions.



CHILDREN'S IN-PERSON & REMOTE LEARNING AVAILABLE  
TEACHING HOMESTEADING AND BASIC FARMING SKILLS



VISIT OUR FARM STORE FOR RAW A-2 COWS MILK  
WEST RIVER VT. CHAPTER OF WAP

[www.meadowsbee.com](http://www.meadowsbee.com) • [leigh@meadowsbee.com](mailto:leigh@meadowsbee.com)





# The Shop Heard 'Round the World

Dedicated to Helping the Consumer Obtain Nutrient-Dense Foods and Accurate Nutrition Information

PASTURE-RAISED PRODUCTS / NATURAL FOODS



**DUTCH MEADOWS** brings you the finest in high quality, grass fed meats and organic dairy products, raised in harmony with the land. Order online and choose from hundreds of farm products!

Delivery available in PA, NJ, and NY  
*Come visit the Farm Store!*

694 Country Lane, Paradise, PA 17562  
(717) 442-9208  
info@dutchmeadowsfarm.com  
DutchMeadowsFarm.com



**Best Ghee You'll Ever Taste!**  
**Always Grass-Fed.**  
**Eternally Grass-Roots.**



**A2A2 Grass-Fed Ghee**  
Free of Glyphosates  
**Domestic Grass-Fed Ghee**  
www.SimplyGhee.com  
Save 10% on first order. Promo code: **WAPF10**

Pick-up locations along the front range.

**30-day dry-aged grass-finished beef, eggs, poultry and lamb. Bulk and Piece orders.**

Shipping available in CO.



*Taste The Difference!*

(719) 541-1002 [www.rafterwranch.net](http://www.rafterwranch.net)  
**Facebook:** Rafter W Ranch at Peak View  
Certified American Grass-fed Association producer

## Life-Enhancing Acres

very high quality 100% grassfed  
**CHEESE & BUTTER**  
**Beyond ORGANIC!**

from Beautiful Jersey Cows  
grazing a mixture of  
grasses on nutrient-rich soil  
**WILL SHIP**

**717-768-7848**



**Grass-Fed Farm Fresh FOOD**

## To Help You Achieve Vibrant Health

- Nutrient Dense Raw Dairy from 100% Grass-Fed Jersey Cows
- 100% Grass-Fed Beef & Lamb
- Pastured & Soy-free Pork, Chicken, Turkey
- Bone Broth, Meat Pie
- Fermented Drinks & Veggies

*and more...*

**Nationwide Home Delivery**

Shop [farmmatch.com/pleasantpastures](http://farmmatch.com/pleasantpastures)  
or call 717-768-3437

**Completely Unprocessed, Unfiltered, Unrefined, Unheated & Utterly Delicious.**



Still contains pollen, propolis, vitamins, live enzymes, trace minerals.

**Now available! Fermented Honey**

Toll free 800-REAL-RAW (732-5729)  
410-675-7233 [www.reallyrawhoney.com](http://www.reallyrawhoney.com)



**- TOUR - DINE - LODGE - SHOP -**

Visit us to experience  
pastured, humane, regenerative farming

Shop online: [www.whiteoakpastures.com](http://www.whiteoakpastures.com)

# The Shop Heard 'Round the World

Dedicated to Helping the Consumer Obtain Nutrient-Dense Foods and Accurate Nutrition Information

PASTURE-RAISED PRODUCTS / NATURAL FOODS / SUPPLEMENTS



organic • whole grain

## SPROUTED FLOUR, GRAINS & BEANS

Sprouted goods delivered to your  
doorstep so you can share in  
nourishing whole food traditions.

[secondspringfoods.com](http://secondspringfoods.com)

## Plain Grain LLC All Natural Oberkulmer Spelt [plaingrainllc.com](http://plaingrainllc.com)

Michigan family farm selling a traditional  
Oberkulmer spelt grain by the pound.  
We also offer a grind service for your  
grain purchase if needed.

[plaingrainllc@gmail.com](mailto:plaingrainllc@gmail.com)  
(248) 496-6141

## Nutrition In a Pinch



Pluck is an all-purpose,  
organ-based seasoning that  
transforms any food into a  
superfood.

Simply add a pinch as you  
cook or to your finished  
product and enjoy!

[eatpluck.com](http://eatpluck.com)



## OysterMax® Pure Oyster Extract

Nutrient dense oyster extract  
from Ireland

100% pure, nutrient dense oyster extract powder from the pristine  
Atlantic coastal waters of Ireland. Excellent source of naturally  
occurring Zinc from oysters and also a source of Copper, Selenium  
and Iodine from Oyster.

- Normal cognitive function.
- Maintenance of normal vision.
- Normal fertility and reproduction.
- Normal immune function.
- Reduces tiredness and fatigue.
- Normal carbohydrate metabolism.
- Normal DNA synthesis.



AVAILABLE ON-LINE & THROUGH U.S. AGENTS.  
DISTRIBUTORS WANTED. DETAILS ON REQUEST.

[marinehealthfoods.com](http://marinehealthfoods.com)

## WILD FOR SALMON

*Sustainably Harvested in Alaska*

**NOURISH YOUR FAMILY  
WITH THE PERFECT PROTEIN**



- Wild Caught Seafood
- fisherman direct
  - superior quality
  - sustainable
  - healthy

**10% OFF  
YOUR FIRST  
ORDER CODE:  
FAMILYHEALTHIO**

570-387-0550 | [wildforsalmon.com](http://wildforsalmon.com)  
DOOR TO DOOR SHIPPING

Eating is an  
agricultural act.

*Wendell Berry*

## Baja Gold Sea Salt

Unrefined Sea Salt for the Kitchen and Table



- Complete mineral & trace element profile
- Reduced sodium
- Tastes great!

## Baja Gold Solé Solution

Ionic Trace Minerals



- Hydration aid
- Bacteria detox support
- Energy enhancement
- Bone health support


(770) 361-6092 | [bajagoldseasalt.com](http://bajagoldseasalt.com)



# The Shop Heard 'Round the World

Dedicated to Helping the Consumer Obtain Nutrient-Dense Foods and Accurate Nutrition Information

SUPPLEMENTS / SUPER FOODS / HEALTHY PRODUCTS



**GREEN PASTURE®**

**Fermented  
Cod Liver Oil  
Vitamin A & D  
Antioxidants  
Omega Fatty  
Acids**

Call today  
for your  
discount!

**FERMENTATION = THE DIFFERENCE**

GREENPASTURE.ORG | (402) 858-4818

## FINALLY, I CAN ENJOY A GLASS OF WINE WITHOUT A HEADACHE!

### WHAT'S REALLY IN YOUR WINE?

#### CLEAN-CRAFTED WINE

- Grapes
- Usually less than 50ppm of sulfites\*
- \*Always less than 100ppm

#### SCOUT & CELLAR WINES ARE ALWAYS CLEAN CRAFTED



#### MASS-PRODUCED WINE

- Grapes
- Up to 350ppm of sulfites
- Up to 16g of added sugar
- Ferrocyanide
- Ammonium phosphate
- Copper sulfate
- Mega-Purple
- GMO ingredients
- Synthetic pesticides

ScoutandCellar.com/goodwine

SCgoodwine@outlook.com

## Buy Your High Quality, WAPF Recommended Supplements with Friendly Service & Fast Delivery.

#### SUPER FOODS

COCONUT OIL • COD LIVER OIL  
CHLORELLA • SBO PROBIOTIC  
DESICCATED LIVER • SPIRULINA

#### ORGANIC & 100% PURE

Save \$5 with Coupon Code: WiseFive

**Perfect Supplements**

perfect-supplements.com • 1-866-802-3860

WAPF Local Chapter Leader of South County RI • Gold Sponsors Wise Traditions Conference



Probiotic Suppositories are a Simple, Direct Approach to Restoring your Gut/Bowel Flora and Immune System. BumBiotics Probiotic Suppositories contain 15 strains of Live Bacterium and over 240 billion Beneficial Probiotics Cultured to Enliven the Human Microbiome.

Also available with CBD

Raw • Lactose Free • Gluten Free

**30% OFF**  
with coupon code **WP30**

**BumBiotics.com**  
The Therapeutic Body Center LLC  
129 N Halcyon Rd #B, Arroyo Grande, Ca 93420  
800-381-8057 805-440-4334

## Order Standard Process Products Online



- Authorized Online Retailer
- Full Standard Process Catalog
- MediHerb Catalog Now Available
- No Exam or Consult Required
- Lowest Online Prices
- Shipped Directly from the Farm to You
- Free UPS Ground Shipping

LEARN MORE OR SHOP AT:  
[HealthPlusSupplements.com](http://HealthPlusSupplements.com)

True health is the harmony of life within us, consisting of a mind full of true knowledge to live by, happiness of heart from living by this knowledge with integrity, and physical well-being also from living by this knowledge. Therefore, if we really want health, we must be willing to work for it the same as we do for wealth, education, or any other accomplishment in life.

*Dr. Randolph Stone*

# The Shop Heard 'Round the World

Dedicated to Helping the Consumer Obtain Nutrient-Dense Foods and Accurate Nutrition Information

SUPPLEMENTS / SUPER FOODS / HEALTHY PRODUCTS

## THE ENERGY TUNER

Radionic Therapy



**Sending you good vibes, literally.**

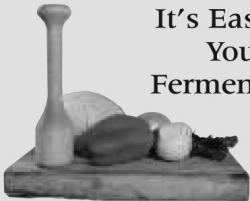
Radionic sessions can aid you in all aspects of life, with lasting change. The impossible not only becomes possible, but seems like the natural path. When the coherence of your system (body, mind, soul, hearts desire, souls desire) is at a higher resonance, the world becomes your oyster.

For humans, pets, crops, gardens, businesses, homes, dreams, and more\*.

theenergytuner.com  
podcast: The Energy Tuner

## Kraut Pounder®

It's Easy to Make  
Your Own  
Fermented Foods!



Perfect for making sauerkraut, ginger carrots, kimchee and more!

[www.krautpounder.com](http://www.krautpounder.com)

Produced By the Eugene Oregon Chapter, WAPF



[www.RadiantLife.com](http://www.RadiantLife.com)  
888.593.8333

Ancient Wisdom for Modern Health

Nutrient Dense Foods • Superfood Supplements  
Healthy Fats • Water & Air Purification  
Homemade Baby Formula Kit



Free bottle of desiccated liver capsules  
with \$100 minimum order.

Item #102001, Limited time offer.

Use code: **WTDL**

## EMF Remediation Big Problem – Easy Solutions!

FREE EMF Assessment\*



**Use Technology with  
Peace of Mind**

Superior, unique remediation products for cell, wireless devices, car, house, office and on the go.

Devices **proven to work** with independent testing and hand-crafted with natural materials in USA

**Free EMF Assessment (\*zoom)**

[coedynamics.com/emf-remediation](http://coedynamics.com/emf-remediation)

**CoeDynamics**

Tracy Coe, CQRA, CEMF, functional health practitioner

## NEW ZEALAND BEEF ORGANS

AND MORE...

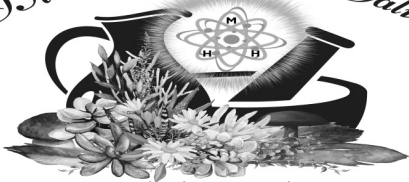


**10% OFF**  
USE CODE: WISE10

Visit [OneEarthHealth.com](http://OneEarthHealth.com)  
WHOLESALE AVAILABLE



## Bloodroot Black Salve



FrankinThyme Formula  
by Matrix of Holistic Health

[www.bloodrootsalves.com](http://www.bloodrootsalves.com)  
928-713-5617 [blacksalves@gmail.com](mailto:blacksalves@gmail.com)



**Smart DOTs** for all your smartphones and electronics

**Practical EMF Products**

[www.BestEMFProducts.com](http://www.BestEMFProducts.com)

949 551-3397

[Marcus@SmartDOTs.us](mailto:Marcus@SmartDOTs.us)

# The Shop Heard 'Round the World

Dedicated to Helping the Consumer Obtain Nutrient-Dense Foods and Accurate Nutrition Information

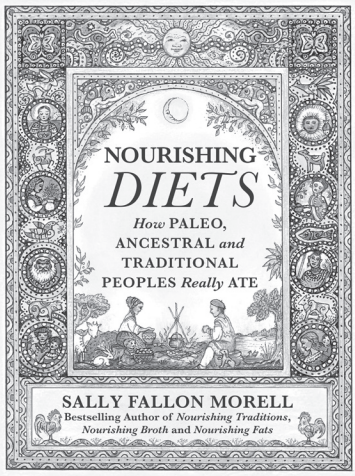
SUPPLEMENTS / SUPER FOODS / HEALTHY PRODUCTS / INFORMATION



**VINTAGE TRADITION** AND **GREEN PASTURE™**  
Tallow Balm

**HAVE CREATED THE FIRST ALL-ANIMAL-OIL SKIN CARE AND MUSCLE & JOINT CARE PRODUCTS!**

GET YOURS NOW AT [WWW.VINTAGETRADITION.COM](http://WWW.VINTAGETRADITION.COM)



**NOURISHING DIETS**  
How PALEO, ANCESTRAL and TRADITIONAL PEOPLES Really ATE

SALLY FALLON MORELL  
Bestselling Author of *Nourishing Traditions*, *Nourishing Broth* and *Nourishing Fats*

**Nourishing Diets**  
How Paleo, Ancestral and Traditional Peoples Really Ate

Available through booksellers



Honey, we're out of butter again.

That's okay!

Are you... eating your face cream?

SKINCARE SO NOURISHING YOU'LL WANT TO EAT IT

**texas tallow SKINCARE**

- GRASS-FED & FINISHED NUTRIENT-DENSE TALLOW
- SLOW-RENDERED TO PRESERVE VITAMINS
- GENTLY FORMULATED WITHOUT ESSENTIAL OILS

SHOP ALL OUR SALVES & WHIPS AT [texasallow.com](http://texasallow.com)


\*NOT INTENDED FOR CONSUMPTION

**Cooking with Sally DVD**

**Master Cooking Class of Wise Traditions Cooking**

Fish Filets, Roasted Chicken with Arrowroot-Thickened Sauce, Leg of Lamb, and More!

**\$20 DVD or USB flash drive**  
Order at [westonaprice.org](http://westonaprice.org)



Nutrient-dense pre-conceptual, pregnancy and lactation diets ensure a healthy pregnancy, easy delivery and robust beautiful babies.

**THE WESTON A. PRICE FOUNDATION®**  
[WESTONAPRICE.ORG](http://WESTONAPRICE.ORG)

**All-Natural Immune Booster**

- Simple Ingredients
- Immunity Builder
- Detoxifying
- Opens Sinuses
- Locally Fermented
- Old Time Remedy



**Swiss Villa**

SHOP ONLINE! [swissvillallc.com](http://swissvillallc.com)

No Lead  
No Aluminum  
No Non-stick Chemicals!

Easy • Fast • Top Rated • Safe

**Smart Organic Multi-Cooker**

Plus Low Temperature Yogurt Maker!

VitaClay makes it all—germinated rice, quinoa, stews, nutritious bone broths, steamed fish or veggies and even yogurt.

Meals are super nourishing and extra flavorful because VitaClay seals in the beneficial nutrients and enzymes with an ancient secret—organic unglazed Zisha Clay. — DR. MIKE FENSTER  
CARDIOLOGIST/AUTHOR/CHEF

**www.VitaClayChef.com**  
Visit us today for FREE clay pot recipes!



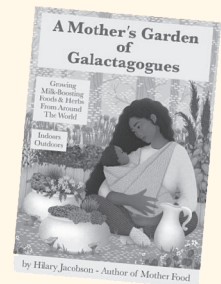
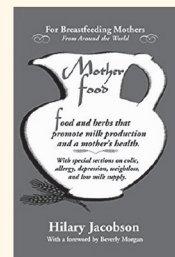
# The Shop Heard 'Round the World

Dedicated to Helping the Consumer Obtain Nutrient-Dense Foods and Accurate Nutrition Information

INFORMATION / TRAINING



2022 -  
learn and discuss -  
**A Lactogenic Diet**  
with Hilary Jacobson



[hilaryjacobson.com](http://hilaryjacobson.com)



Experience the Most Comprehensive,  
Nonconformist  
Nutrition Education & Whole Food Culinary  
Training

In-Person & Online Class Options

[ntschool.com](http://ntschool.com)

Call: (303) 284-8361

Text: (720) 637-1497

Email: [admissions@ntschool.com](mailto:admissions@ntschool.com)

Mention This Ad for \$98 Off Your First Course

NUTRITION  
THERAPY  
INSTITUTE

GLOBAL ...  
LOCAL ...  
COMMUNITY ...  
**Get involved!**

List  
**EVENTS**  
FREE  
forever

**The NATURAL MEDICINE**  
Resource & Events Directory

[www.natural-medicine.directory](http://www.natural-medicine.directory)

## The New Zealand Journal of NATURAL MEDICINE

Have you seen **THE NEW ZEALAND JOURNAL OF NATURAL MEDICINE** yet?

If you haven't yet read *The NZ Journal of Natural Medicine*, you're missing one of the best health magazines in the world!

Now in its fourth year of publication, each issue of *The NZ Journal of Natural Medicine* is 100 pages of some of the most useful, often life saving information you won't get from mainstream media, or orthodox, pharmaceutical-based (corporate) medicine.

From authentic cancer breakthroughs, documented vaccine dangers, first class dietary advice, detoxification techniques, and herbal and nutritional medicine – the Journal is totally dedicated to bringing you the news of research and important discoveries that are relevant to your life and the lives of your family.

**Well worth a look!**

**SUBSCRIBE NOW**

*The NZ Journal of Natural Medicine*  
[www.naturalmedicine.net.nz](http://www.naturalmedicine.net.nz)



[barefootinthegrass.org](http://barefootinthegrass.org)

*A transformational journey*  
AUGUST 2023 & FEB 2024  
ONLINE GROUP/WEEKLY CALLS

- Learn to make simple nourishing meals fast
- Learn ancestral food nutrition & cooking for your family!
- Create a personalized family meal plan & routine
- Help picky kids and spouse get on board!
- Find a community of like-minded moms
- 9 online course modules over 16 weeks

GET PAMPERED!  
ONE MONTH'S  
PERSONALIZED  
NUTRITION  
COACHING  
JUST FOR YOU!

Book your spot today: [amy@barefootinthegrass.org](mailto:amy@barefootinthegrass.org)

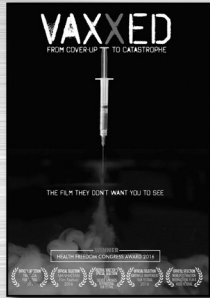


# The Shop Heard 'Round the World

Dedicated to Helping the Consumer Obtain Nutrient-Dense Foods and Accurate Nutrition Information

INFORMATION / TRAINING

## DO VACCINES HAVE RISKS? DECIDE FOR YOURSELF.



\$ 24.95

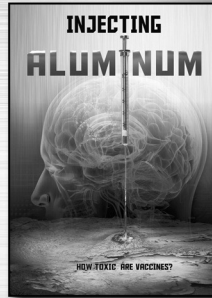
Get **15% OFF** DVDs  
and public screening licenses.

Use code **WP15OFF** during checkout.

Go to: [www.tinyurl.com/WPoffers](http://www.tinyurl.com/WPoffers)

CINEMA  
LIBRE

(Code must be used to receive discount and only valid  
on purchases made at [www.tinyurl.com/WPoffers](http://www.tinyurl.com/WPoffers))



\$ 19.95

JOIN US on the QUEST for REAL IMMUNITY!

# REAL IMMUNITY

"FEAR IS JUST A PRAYER FOR  
WHAT WE DON'T WANT."  
- DR. DEBRA GAMBRELL



WHATWORKS PRESENTS A COLLA WHITCOTT FILM "REAL IMMUNITY" WRITTEN BY COLLA WHITCOTT AND SUSAN HEFFA  
ORIGINAL MUSIC BY LUKE J. DORFMAN AND PETER DORFMAN EDITED BY LUKE J. DORFMAN ASSOCIATE PRODUCER DR. JEANNE D'AM  
IN ASSOCIATION WITH THE INTERNATIONAL CHiropractic Pediatric ASSOCIATION CREDITED BY COLLA WHITCOTT

EMPOWER yourself and experience HEALING today!

**REALIMMUNITY.ORG**

**IRT**  
INSTITUTE FOR RESPONSIBLE TECHNOLOGY  
The Most Comprehensive Source of GMO Health Information on the Web  
**LEARN | EDUCATE | ACT**

[ResponsibleTechnology.org](http://ResponsibleTechnology.org)



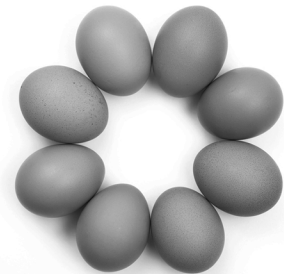
Vax Damage? Detox?  
Get your NANO SOMA at

[ImmuneAdvantageSolution.com](http://ImmuneAdvantageSolution.com)

The results of man's trying to improve on Nature is deteriorating the human race, especially in America where people are accustomed to so-called luxuries, including fast, convenient and junk food.

*Jethro Kloss*

### SUPPORT FOR PARENTS



### NOURISHING OUR CHILDREN

We focus on timeless principles for supporting learning, behavior and health through optimal nutrition. We have an active social media presence and a private Facebook group for parents where you can ask questions and receive communal support on topics such as infertility, how to feed infants, how to make the homemade baby formula, natural remedies for ear infections and constipation, what foods to pack for travel and how to address picky eating.

[nourishingourchildren.org/groups](http://nourishingourchildren.org/groups)

Enjoy Caustic Commentary?  
Then you'll love Sally's blog  
[NourishingTraditions.com](http://NourishingTraditions.com)

# The Shop Heard 'Round the World

Dedicated to Helping the Consumer Obtain Nutrient-Dense Foods and Accurate Nutrition Information

INFORMATION / TRAINING

Discover the new book by Misna Burelli and Lena Krätz  
**Polarized:** a homeopathic detective story...

about history, Mother Nature and archetypes

the immune system...

health and disease...

polarity, self-awareness, nutrition...

and finding yourself...



Join the conversation!  
Order now on Amazon  
and take charge  
of your health!

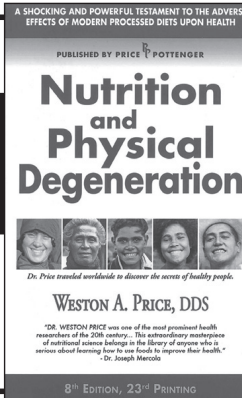
## ESSENTIAL INFORMATION

For patients and healthcare practitioners.

The perfect gift for family or friends.

## PRICE-POTTENGER NUTRITION FOUNDATION™

Preserving the work of Weston A. Price DDS and other health pioneers. Providing access to accurate information on nutrition for over 65 years.



PUBLISHED BY THE PRICE-POTTENGER NUTRITION FOUNDATION™

## EIGHTH EDITION

- 528 pages, 6 maps
- 179 photos and charts
- Expanded index

ORDER TODAY **1-800-366-3748** (in US)  
619-462-7600

QUANTITY PRICING AVAILABLE

YOUR SOURCE FOR BOOKS, AUDIO & VIDEO

[price-pottenger.org](http://price-pottenger.org)



Farm-to-Consumer  
Legal Defense Fund®

Raw Milk  
Raw Butter  
Herdshares  
Cottage Food

## 24-Hour Emergency Hotline

for members

Join, support, or learn more at  
[www.farmtoconsumer.org](http://www.farmtoconsumer.org)



**No More Guessing What to Buy!**  
WAPF "approved" foods & brands are IN this guide!

**THE WESTON A. PRICE FOUNDATION'S**  
Shopping Guide to the Highest Quality Foods

## Find Real Food App



[www.FindRealFood.info](http://www.FindRealFood.info)



The **go-to podcast**  
for good health

Place an ad on the podcast [podcast@westonaprice.org](mailto:podcast@westonaprice.org)

A Production of the Weston A. Price Foundation



## FREE Report

\$1500  
value

Scams  
**EXPOSED!**

Learn the truth about  
distilled, mineral, tap, spring,  
filtered, bottled, well,  
alkalized, reverse osmosis  
and more...

Which one is best for you?  
[www.waterwise.com/wise](http://www.waterwise.com/wise)  
—or call for **FREE**  
Report & Catalog



Waterwise Inc PO Box 494000 Leesburg FL 34749

**800-874-9028** Ext 728

© 2007-2018 Waterwise Inc



# The Shop Heard 'Round the World

Dedicated to Helping the Consumer Obtain Nutrient-Dense Foods and Accurate Nutrition Information

INFORMATION / TRAINING

**2023 ANNUAL C-MPOSIUM CONFERENCE**  
**CLEARWATER BEACH, FL**  
 COVID, CANCER, CVD, CAVITATIONS AND VITAMIN C CONNECTION

VCICI

14-16 SEPTEMBER 2023  
 OUR ANNUAL C-MPOSIUM IS NOW OPEN TO THE PUBLIC

ELIGIBLE FOR CONTINUED EDUCATION CREDITS

REGISTER NOW

WWW.VCICI.ORG/CONFERENCE

Discover, Learn, Connect  
 International Medical Experts Present:  
 Vitamin C for Cancer, COVID, & Beyond  
 IPT for Lyme, Rheumatoid Arthritis, and BPE.  
 Mistletoe, HBOT, Biological Dentistry, for Chronic Disease, Acute Conditions, and More!

**LEARN CONNECT THRIVE!**



**national center for homeopathy™**

Keep your **WHOLE** family healthy & happy with homeopathy!

Visit [www.homeopathycenter.org](http://www.homeopathycenter.org) for FREE resources about natural ways to help with colds, flus, sprains, headaches, stomach aches, anxious feelings and more!

Limited time offer - Join NCH today and download a FREE Summertime Infographic  
 Save \$10 using code 10WP2023 if you join by 8/31/2023

Scan here





**THE HIGHWIRE**  
 WITH DEL BIGTREE  
 BRAVE /// BOLD /// NEWS

GET THE FACTS.  
 LOSE THE FEAR.  
 WATCH NOW AT  
**THEHIGHWIRE.COM**

**THE GREATER GOOD**

*If you think you know everything about vaccines...Think Again.*

A must see award winning documentary film.

Visit our site to stream or purchase the DVD Amazon Prime no longer wants you to see.

**WWW.GREATERGOODMOVIE.ORG**



DALLAS-FILM DOC NYC WATERFRONT SIDEWALK LAD MATTERS

Unless we put medical freedom into the Constitution, the time will come when medicine will organize into an undercover dictatorship to restrict the art of healing to one class of men and deny equal privileges to others; the Constitution of the Republic should make a special privilege for medical freedoms as well as religious freedom.

*Benjamin Rush, MD (1746-1813)  
 America's "Father of Medicine"  
 Signer of the Declaration of Independence.*

**OFFALLYGOODCOOKING.COM**

Actually cooking organ meats week after week

**@offallygoodcooking**



**2023 Shopping Guide**

For finding the healthiest foods in supermarkets, Health Food Stores, and by Mail Order

THE WESTON A. PRICE FOUNDATION™  
 for **Wise Traditions**  
 IN FOOD, FARMING AND THE HEALING ARTS

Education • Research • Activism  
 WESTONAPRICE.ORG • (202) 420-3333

**Electronic Version of our 2023 Shopping Guide**

**\$5 for both the Flipbook and PDF**


[www.westonaprice.org/store](http://www.westonaprice.org/store)

# The Shop Heard 'Round the World

Dedicated to Helping the Consumer Obtain Nutrient-Dense Foods and Accurate Nutrition Information

INFORMATION / TRAINING / PRACTITIONERS

Foreword by Mike Ramsey, MD  
Chairman, Department of Anesthesiology and Pain Management  
Baylor University Medical Center



**JUST  
BREATHE  
OUT**  
Using Your Breath  
to Create a New,  
Healthier You

BETSY THOMASON, BA, RRT

**Manage anxiety, fear, pain, and stress  
with YOUR OUTBREATH—not drugs.**

Call for free 10-minute consult with Betsy Thomason  
—breathing coach, speaker, respiratory therapist, author.  
Educational info at [www.outbreathinstitute.com](http://www.outbreathinstitute.com)  
Ph: (551) 265-7561

*Just Breathe Out* received *Thumbs Up* review,  
*Wise Traditions*—Summer 2017.

Dr. Tom Cowan  
is pleased to introduce



**New Biology  
CLINIC**

Virtual Wellness Consults  
and Fitness Sessions  
for a Monthly Membership Fee  
(or Pay per Appointment)  
Reclaim sovereignty over  
your own health!

[newbiologyclinic.com](http://newbiologyclinic.com)


**THE STOCKMAN  
Grass Farmer**

The International Monthly  
Publication for a Healthy Planet  
and People through Profitable  
Grass-Based Livestock Production

—SGF Editor: Joel Salatin—

1-800-748-9808 • P.O. Box 2300 Ridgeland, MS 39158-2300

Sign up to get a free sample issue at:  
[WWW.STOCKMANGRASSFARMER.COM](http://WWW.STOCKMANGRASSFARMER.COM)



**Farm to Consumer  
Foundation**

**DIRECTORS NEEDED**

The Farm-to-Consumer Foundation is looking for individuals willing to serve as volunteer directors on their board of directors. They need farmers or consumers who support their mission on their [f2cfnd.org](http://f2cfnd.org) website and have skills that will further their goals.

If interested, please e-mail a paragraph about yourself including name and contact information, the areas of their mission that energize you and the interest and skills you can share. Send to [President@f2cfnd.org](mailto:President@f2cfnd.org)



**Southeast Natural Medicine**  
Providing telehealth consults with a natural approach

Dr. Jenna Scott is a naturopathic doctor who works to find the root cause of illness. Rather than suppressing symptoms with medications, she works with the patient to identify and remove "obstacles to cure".

Once those obstacles are removed (poor diet, stress, environmental toxins, and more), then the body can start to heal.

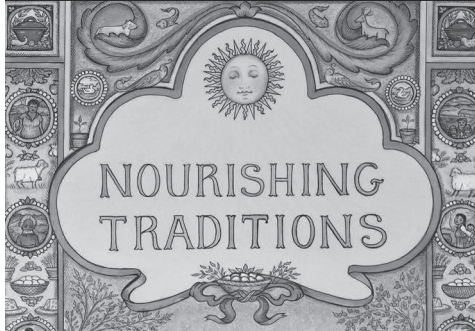
Visit us online to learn more and book a free meet and greet today!

Use the coupon code **WISETRADITIONS23** for 10% off your first visit!

678-999-3474 [www.SoutheastNaturalMedicine.com](http://www.SoutheastNaturalMedicine.com)



**THE AUDIO EDITION**




**NOURISHING  
TRADITIONS**

Listen to the book you love  
(or always wanted to read).

A comprehensive and accessible dive into the nutritional merit of traditional foods, this audiobook is the perfect introduction to Sally Fallon's seminal work— or a convenient refresher for those who've already read it.

This audiobook includes introductions, sidebars, and a supplementary PDF with selected recipes from the book, chosen by Sally.



Find it on Audible at <https://rb.gy/sbzeuq>



# The Shop Heard 'Round the World

Dedicated to Helping the Consumer Obtain Nutrient-Dense Foods and Accurate Nutrition Information

INFORMATION / TRAINING / PRACTITIONERS

## ALTERNATIVE PSYCHIATRY

DR. PAMELA SHERVANICK



- Personalized nutritional and orthomolecular solutions to mental health issues.
- Therapeutic help with navigating the complexities of staying well in a misinformed world.

[office@syntropyglobal.com](mailto:office@syntropyglobal.com)  
207-489-9480

[www.syntropyglobal.com](http://www.syntropyglobal.com)

## HOMEOPATHY HAVEN

homeopathyhaven [www.homeopathyhaven.com](http://www.homeopathyhaven.com)



### OUR OFFERINGS

Consultations  
Live & Recorded Classes  
Monthly Learning Group

ALL LEVELS WELCOME!

homeopathyhaven

## MEDFORD FUNCTIONAL MEDICINE

At Medford Functional Medicine, Dr. Charlotte Nussbaum, MD, a board-certified pediatrician and internist combines functional medicine and ancestral health to help people achieve optimal health.

### SPECIALTIES INCLUDE

AUTOIMMUNE DISEASES  
CARDIOVASCULAR & METABOLIC HEALTH  
CHRONIC OR RECURRENT INFECTIONS

DIGESTIVE HEALTH  
ENDOCRINE & HORMONAL BALANCE  
NEUROLOGIC/ MENTAL HEALTH  
SKIN HEALTH

[medfordfunctionalmedicine.com](http://medfordfunctionalmedicine.com)

Medford, NJ

WAPF Nutrition + Homeopathy  
= Genuine Health

Arrange a Free 15-min. conversation to learn why homeopathy needs to be part of your health strategy. Call and receive a free CD.

*More important than ever in today's health care environment!*

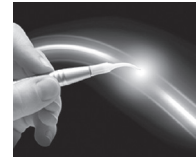


Author - Lecturer - Consultant  
[www.joettecalabrese.com](http://www.joettecalabrese.com) Ph: 716 941 1045



Wise Traditions + Advanced Technology  
= Awesome Dentistry!

### Laser Dentistry is Better Dentistry



- No Anesthesia
- No Injections
- Faster Recovery
- No Pain
- No Drills
- IAOMT SMART protocols

Call Dr. Sheri Today!

**Dr. Sheri Salartash**  
DDS, MAGD, NMD, IBDM,  
AIAOMT, FICOI, FAAIP  
Board of Dental Sleep  
Medicine, Certified **Holistic**  
**Mouth Doctor**



703-775-0002

[www.dynamicdentalwellness.com](http://www.dynamicdentalwellness.com)  
[care@dynamicdentalwellness.com](mailto:care@dynamicdentalwellness.com)

20755 Williamsport Place, #300, Ashburn, VA 20147



## The Center for Natural Healing

- ✦ Naturopathy
- ✦ Homeopathy
- ✦ Chiropractic Care
- ✦ Natural Professional Supplements

1721 Lafayette Road | New Enterprise PA 16664 | (800) 858-3288  
[www.healthbychoice.net](http://www.healthbychoice.net) | Email: [questions@healthbychoice.net](mailto:questions@healthbychoice.net)

# The Shop Heard 'Round the Worlds

Dedicated to Helping the Consumer Obtain Nutrient-Dense Foods and Accurate Nutrition Information

INFORMATION / TRAINING / PRACTITIONERS / WEBSITE DESIGN



**SCHOOL OF TRADITIONAL SKILLS**

The Skills You Need.  
Taught by Instructors  
You Trust!

## Simple and Down-to-Earth Homestead Courses

Make the School of Traditional Skills your chosen path to self-sufficiency. By joining today you'll unlock the following:

- Access to a growing library of self-paced, easily accessible courses
- Training from expert teachers all in one place
  - Downloadable course materials
- Access to all previous live event content

Visit [SchoolOfTraditionalSkills.com](http://SchoolOfTraditionalSkills.com) to learn more!

**Laura Poe Mathes, RD**



**Integrative  
Gut Health  
Dietitian**

Online health coaching & nutrition counseling

[laurapoerd@gmail.com](mailto:laurapoerd@gmail.com)

Visit [www.laurapoerd.com](http://www.laurapoerd.com) to make an appointment



**BEAUTIFUL  
POWERFUL  
PROFESSIONAL**

mobile-friendly websites that you can control (& afford)

[RUBYRADISH.COM](http://RUBYRADISH.COM)

Life in all its fullness is  
Mother Nature obeyed.

*Weston A. Price, DDS*

## John Kozinski's Diagnosis+Nutrition

Health & Healing with Traditional Foods  
Classes, Trainings, Lectures  
Personal Health Consultations  
**413.623.5925**  
[www.macrobiotic.com](http://www.macrobiotic.com)



## Nourishing Wellness

Move beyond the struggle  
and into vibrant health!

At Nourishing Wellness, we listen, identify the root causes of your health concerns, and take you step-by-step to show you how to improve your health with real, whole foods and proper nutritional support.

- Our process utilizes tools including tissue (hair) mineral analysis, nutrition response testing, bioresonance scanning, and the training and wisdom that comes from being registered nurses.
- Expertise in men's, women's and children's health, infertility, prepping for baby, thyroid, hormonal, adrenal challenges, and autoimmune issues.

### Supporting Clients Nationwide

Sara, RN, CNC, CGAPS    Jamie, RN, CNC  
Delafield, WI

262.244.6324 • [nourishingwellness4u.com](http://nourishingwellness4u.com)  
[info@nourishingwellness4u.com](mailto:info@nourishingwellness4u.com)



## SOUND FREQUENCIES FOR HEALTH CONDITIONS

Cardiovascular, Autoimmune, Digestive, Respiratory and more!

Email me for the link to the

**FREE 8-MINUTE VIDEO**

[jcmendez@earthlink.net](mailto:jcmendez@earthlink.net)

More Info: 850-339-0443



- G** - Grass-fed for Bison & Beef (Pastured for chicken, eggs & pork)
- O** - Organic (Vegetables, Grain - especially bread & beer)
- D** - Dairy (Milk, Butter & Cheese - raw dairy NOT processed)

**NEW**

Loose 20% of your body weight?  
Gain 20 years life expectancy?

**BOOK**

\$1.99 Amazon Kindle pricing available only at Mike's website  
<https://thegodfoddiet.com>

# The Shop Heard 'Round the World

Dedicated to Helping the Consumer Obtain Nutrient-Dense Foods and Accurate Nutrition Information

## ADVERTISING IN WISE TRADITIONS

**DEADLINES:** Spring: Feb. 20th, Summer: May 20th, Fall: Aug. 20th, Winter: Nov. 20th

Name of Farm/Company: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Country: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Website: \_\_\_\_\_

**TOTAL:** \_\_\_\_\_ **Payment method:** \_\_\_\_\_ Check (Payable to WAPF) \_\_\_\_\_ Credit Card

Card #: \_\_\_\_\_ Exp: \_\_\_\_\_ CVV: \_\_\_\_\_

**SUBMIT Payment, questions, classified ad copy and/or advertisement graphics:**

Phone, fax, email or mail: (703) 820-3333; Fax (571) 777-8932; info@westonaprice.org

WAPF 4200 Wisconsin Ave, NW, #106-380 Washington, DC 20016

**CLASSIFIED**  
ADVERTISEMENTS  
TEXT ONLY,  
BY STATE & CATEGORY  
\$40 per year for 40 words

**TALL COLUMN**  
4" tall by 2.5" wide  
\$360 per year,  
4 insertions.  
(\$400 for non-members)

**MEDIUM**  
**COLUMN**  
2" tall by 2.5" wide  
\$200 per year, 4 insertions.  
(\$240 for non-members)

**WIDE COLUMN**  
2" tall by 4.5" wide  
\$360 per year, 4 insertions.  
(\$400 for non-members)

**DESIGN INFO:** Images must be 500k or larger to print well. Files should be grayscale tiff or press quality pdf/eps minimum 300 dpi. There is an additional fee of \$50 for us to design your advertisement.

The Weston A. Price Foundation reserves the right to refuse advertising space to anyone. We do not accept ads for coffee, tea, chocolate, hemp (as a food) or protein powders, nor products offered by Multi-level Marketing Companies.

# Membership

NEW OR RENEWAL

**Yes!** I would like to become a member or renew my membership in the Weston A. Price Foundation and benefit from the timely information in **WiseTraditions**, the Foundation's quarterly magazine!

U.S. membership \$40  
 International membership \$50  
 U.S. Reduced membership (financial hardship) \$25

**Yes!** I would like to support the work of the Weston A. Price Foundation with an additional donation.

\$10     \$25     \$50     \$100     \$250     \$500  
 \$1,000     \$2,500     \$5,000     \$10,000     other \$ \_\_\_\_\_

**Yes! Count me in!** I would like to help spread the word!

Please send me \_\_\_\_\_ copies of the Weston A. Price Foundation informational brochure at \$1.00 each, so I can pass them along to my family, friends and colleagues, and be true to Dr. Price's dying words:

"You teach, you teach, you teach!"

(Health professionals are encouraged to provide this brochure to their patients.)

**Yes!** I would like to provide my family and friends with the gift of membership in the Weston A. Price Foundation.

(Please attach information on gift memberships.)

U.S. gift membership(s) \$40     Canadian and overseas gift membership(s) \$50

**Yes!**  Please send me details about starting a Weston A. Price Foundation local chapter in my community.

Chapters are listed on our site: [westonaprice.org/find-local-chapter/](http://westonaprice.org/find-local-chapter/)

I'm enclosing \$ \_\_\_\_\_ for brochures and \$ \_\_\_\_\_ for \_\_\_\_\_ annual membership(s), a total of \$ \_\_\_\_\_

Payment method:  Check or money order (Please do not send cash)  Mastercard  Visa  Amex  Discover

Card Number: \_\_\_\_\_ Exp Date: \_\_\_\_\_ CVV: \_\_\_\_\_

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Please copy or remove this page and fax or mail to:

The Weston A. Price Foundation

PMB #106-380 4200 Wisconsin Avenue, NW Washington, DC 20016

PHONE: (703) 820-3333 FAX: (571) 777-8932



# Calendar

2023

- JUL 7-8**      **MIDDLEFIELD, OH:** Farm & Family Homesteading Expo featuring Sally Fallon Morell, James Yoder, Henry Bieler and Isaac Yoder. **CONTACT:** (440) 474-0004, [summersalive@ibyfax.com](mailto:summersalive@ibyfax.com).
- JUL 22:**      **FARMVILLE, VA:** Nourishing Traditional Diets with Sally Fallon Morell, 10 AM, Golden Valley Farms, 8 Asal Road, Farmville, Virginia. **INFO:** <https://www.goldenvalleyfarmsllc.com/farm-events/farmday2023>.
- AUG 6-8**      **SAN MARCOS, TX:** Southern Family Farmers and Food Systems Conference featuring Gary Paul Nabhan. **INFO:** [southernfamilyfarmersconference.org/](http://southernfamilyfarmersconference.org/).
- OCT 5-8**      **OAXACA, MEXICO:** Fermentation Conference. **INFO:** [www.fermentoaxaca.com](http://www.fermentoaxaca.com).
- OCT 6-7**      **PITTSBURGH, PA:** International College of Integrative Medicine “Food Fight” conference featuring Sally Fallon Morell, David Brownstein, MD, Sam Fillingane, MD and Joel Kahn, MD. **INFO:** [IntegrativeMedicineConference.com](http://IntegrativeMedicineConference.com).
- OCT 19-23**      **KANSAS CITY, MO:** Wise Traditions Conference. **INFO:** [wisetraditions.org](http://wisetraditions.org).
- NOV 3-5**      **SAVANNAH, GA:** Children’s Health Defense Conference: Rise & Resist: People Over Profits, Truth Over Lies, Courage Over Fear. **INFO:** <https://childrenshealthdefense.org/chd-2023-conference/>.
- NOV 10-12**      **ORLANDO, FL:** Documenting Hope Conference: Adventures in Healing: The Ultimate Field Guide to Restoring Health in our Children. **INFO:** <https://conference.documentinghope.com/>.

## Wise Traditions 2023

23<sup>rd</sup> Annual Conference of the Weston A. Price Foundation  
Kansas City, Missouri • October 20-22 (with extra events Oct 19 & 23)

### FEATURING

Dr. Naomi Wolf, Keynote Speaker

Alec Zeck, William Trebing,  
Tom Cowan, Natasha Campbell-McBride,  
Sally Fallon, Morell, Bill Schindler, Anthony Jay, Alex Miller,  
Leslie Manookian, Jim Stephenson, Blance Grube  
and many other fine speakers on diet and health!

[wisetraditions.org](http://wisetraditions.org)

THE WESTON A. PRICE FOUNDATION®



for **Wise Traditions**  
IN FOOD, FARMING AND THE HEALING ARTS  
*Education • Research • Activism*

PMB 106-380, 4200 WISCONSIN AVENUE, NW  
WASHINGTON, DC 20016

Non Profit Org.  
U.S. Postage  
PAID  
Suburban, MD  
Permit 4889

**Damaged journal?**

For a free replacement, contact us  
at [info@westonaprice.org](mailto:info@westonaprice.org)

THE WESTON A. PRICE FOUNDATION®

for **Wise Traditions**

IN FOOD, FARMING AND THE HEALING ARTS  
*Education • Research • Activism*

NUTRIENT-DENSE FOODS  
BROTH IS BEAUTIFUL  
PREPARED PARENTING  
NON-TOXIC LIVING

TRADITIONAL FATS  
A CAMPAIGN FOR REAL MILK  
SOY ALERT!  
PASTURE-BASED FARMING  
COMMUNITY SUPPORTED AGRICULTURE

LACTO-FERMENTATION  
TRUTH IN LABELING  
LIFE-GIVING WATER  
NURTURING THERAPIES

**You teach, you teach, you teach!**

Last words of Dr. Weston A. Price, January 23, 1948



Printed on Recycled Offset  
Printed with soy ink - an appropriate use of soy