TRADITIONAL FATS



Cleansing Myths and Dangers Toxicity and Chronic Illness Gentle Detoxification Great Nutrition Pioneers Cooking with Blood The Fats on MyPlate

> A PUBLICATION OF THE WESTON A. PRICE FOUNDATION® Education Research Activism www.westonaprice.org

NON-TOXIC FARMING

SOY ALERT!

TRUTH IN LABELING

WiseTraditions

in Food, Farming and the Healing Arts Volume16 Number 1 Spring 2015

> EDITORS Sally Fallon Morell, MA Katherine Czapp

ARTISTIC EDITOR Lynda Smith Cowan

COVER DESIGN Angela Eisenbart

COPY EDITORS

Janice Orion Roger Windsor Kaayla Daniel, PhD Kathy Kramer

LAYOUT/DESIGN Liz Pitfield

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Weston A. Price Foundation PMB 106-380 4200 Wisconsin Avenue, NW Washington, DC 20016 Phone: (202) 363-4394 Fax: (202) 363-4396 Email: info@westonaprice.org Website: www.westonaprice.org

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THE WESTON A. PRICE \bigcirc FOUNDATION[®] \bigcirc

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 nutrientdense 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.

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Wise Traditions IN FOOD, FARMING AND THE HEALING ARTS

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President's Message

This issue of *Wise Traditions* addresses the subject of toxins in our environment—how to avoid them and how to support the body's efforts to get rid of them—with three excellent articles by speakers at our recent conference.

In the midst of working on this issue, the story of the Disneyland measles outbreak hit the newspapers, along with strident calls to eliminate the religious and philosophical exemptions that help concerned parents avoid vaccinations in forty-eight out of fifty states. The Foundation has sent several action alerts having to do with signing petitions, posting comments and protesting proposed legislation. (Good news: draconian proposed bills have already been withdrawn in three states: Oregon, Washington and Maryland.)

We have also sent out two press releases (they are posted at the Press tab on our website), which point out that vaccinated individuals can spread disease, especially the live viral vaccinations such as chicken pox, measles, rubella, flu, polio and smallpox. In addition, we have posted numerous memes and links to information about the dangers of vaccinations on our Facebook page.

These efforts have generated thousands of comments, most of them in support; but several have criticized the Foundation for straying from our fundamental message of nutrition, while others express surprise at our stance opposing vaccinations.

The promotion of non-toxic therapies is part of the WAPF mission statement, and we published an article in 2005 outlining the dangers of vaccinations (westonaprice.org/health-topics/vaccinations-parentsinformed-choice/), so none of our members should be surprised that we have joined with other groups to publicize the dangers of vaccinations. In fact, our board of directors is unanimous and adamant about using the WAPF's influence and organizational skills to warn parents about what can happen to children when they are vaccinated.

We will be devoting our Summer issue to this subject. We would especially appreciate hearing from parents of vaccine-injured children. We know that it can be painful to share your story, but the world needs to hear what happens when vaccinations go wrong so that other children may be saved.

Childhood diseases are either mild or nonexistent when parents practice the kind of good nutrition that we advocate. Diets rich in vitamins A and C can protect children against disease much better than vaccinations, and with side effects that are good, never harmful. Public health policy should be aimed at accurate information about nutrition, not the promotion of vaccinations that actually suppress the immune system and often have tragic side effects.



I was distressed to receive the press release from the Weston Price organization (westonaprice.org/press/ studies-show-that-vaccinated-individuals-spread-disease/). I recently joined, as I think it is a valuable voice in the advocacy for a traditional, nonprocessed food diet—this despite some of the articles and assertions on your site appearing to be only loosely related to scientific evidence.

In this time of polarization and high emotions surrounding the issue of vaccinations, to publish a piece titled "Studies Show that Vaccinated Individuals Spread Disease" only serves to further the impression that the Foundation is a "fringe" organization, despite any more balanced opinions within the article itself.

Please consider carefully your press releases and articles, so as not to undermine the very good work you are doing to educate people about maximizing health.

> Julie Kern, MS,OTR New York, New York

I AM AN ANTI-VAXER

I am an "anti-vaxer."

I wish my child had lived long enough to get measles, but sadly she died a few hours after receiving a vaccine. At a routine "well baby" appointment, she had her first shots. I had no idea adverse reactions were even possible. I trusted my doctor completely. I trusted my doctor blindly.

The doctors believed it was the pertussis vaccine that caused her death, but they did not know for sure because she was given a combination of four vaccines, all at the same time. How could we possibly know which one caused her death?

I lost the most precious gift of all, to "the greater good." I sacrificed my beautiful child. . . for your child.

What did I get in return? I was labelled an "anti-vaxer." You see, I have a very healthy eleven-year-old son who is completely unvaccinated. He is alive!



Did I attend Google University? Or get my advice from Jenny McCarthy? Absolutely not! I spent years poring over the peer-reviewed medical journals, FDA, CDC, WHO and Health Canada files and speaking to doctors and politicians. I had to pay to access my daughter's vaccine records through Freedom of Information at Health Canada. I did all this to figure out the facts, so that my other child did not also die! I did this so that your children do not die from vaccines!

In Canada we do not have a vaccine injury compensation program, so legal recourse is not an option. In the U.S., the vaccine compensation program has paid almost three billion dollars for injuries and deaths, while Canada has paid nothing! They simply deny that vaccine injuries exist. A company that publicly reports yearly profits—in the billions—is not held accountable for vaccine injuries and deaths. The manufacturers of vaccines conduct their own, very limited, safety studies, and many vaccines are licensed and used without any safety studies at all. Health Canada told me it is more cost-effective to release vaccines and then watch for reactions later.

There are serious problems with many of the vaccines starting with the fact, which their own studies show, that vaccines are often ineffective. After the previous pertussis vaccine caused thousands of deaths and brain injuries, many mothers worked together to demand change. The pertussis vaccine was then replaced with a different one, which was less reactive but also turned out to be less effective. As a result, we began to see many whooping cough outbreaks in North America. At first they blamed the outbreaks on "anti-vaxers," but then it became undeniable that the vaccine was failing, the vaccine was responsible!

There has not been a measles death in over a decade in North America, while there have been deaths from vaccines. We have measles outbreaks in North America every year. Many years ago they increased the MMR shot recommendation from once to twice, and we have a vaccination rate of over 90 percent, yet they still have outbreaks of measles! At first they blamed the "antivaxers," but according to their own studies, the measles vaccine is failing and is responsible!

In a three-year study, in Ontario Canada (March 2006-April 2009), it was discovered that several infants died and one in 168 Canadian children end up in



Parents need to stop pointing fingers at other parents and work together, for the greater good, for the good of our children. Parents everywhere need to ask questions and demand safer and more effective vaccines for our children. Pharmaceutical companies should be given a clear message that we want them to put more money and research into the existing, basic vaccines, which are presently failing to protect our children, instead of rushing to develop and license dozens of new, untested vaccines for non-life-threatening illness. Parents everywhere need to demand that the manufacturers of vaccines be held liable and accountable, to ensure the quality of the products they manufacture. Canada needs to create a vaccine injury compensation program for the thousands of children killed and injured by vaccines. Pharmaceutical companies should be monitored by an unbiased committee, or council of watchdogs, to ensure they are putting the health and safety of our children before profits. Our children deserve to be protected! Our children deserve better!

Measles has not killed a child in over a decade in North America but vaccines have killed and injured thousands. That is a painful fact I live with. Rather than "anti-vaccine," I am pro-health and pro-safety of my children and your children.

Do your research and demand better

vaccines. From the heart of one mother to another.

Christine Colebeck Canada

MEASLES HYSTERIA

What is going on regarding measles is truly frightening and clearly wellcoordinated. It is clear that the rate of non-vaccination has reached such a level that the powers that be will do anything to strip us of our rights, spread fear, and yes, lie, or at the very least withhold the truth.

The last I looked there were about fourteen hundred news stories on Google related to a measles outbreak affecting seventy people. That is it, just seventy people. To put this in context, there are about one million kids in this country with autism, but that does not seem to be an emergency. And roughly 18-20 percent of all children have learning disabilities or developmental delays.

Health authorities have been conspicuously quiet about where the outbreak began, perhaps because it might have started with a vaccinated person who transmitted it to others-the science is clear, vaccinated folks can and do transmit disease, though this is an uncomfortable truth. What we do know is that two of the original five workers who got measles were fully vaccinated; status of the others was not known last I looked. What is also clear is that original reports said most folks who got the measles were unvaccinated but recent reports say that some of the folks who got it were unvaccinated, which implies that most were vaccinated.

When we combine this information with Fox News' call for a federal man-

date to force vaccines, and CNN's assessment that non-vaccinators are as dangerous as drunk drivers, and recent legislation in several states to rescind philosophical exemptions to vaccines, my takeaway is that this is a coordinated effort to scare the public, defend a wrongheaded public policy statement, and take away our rights.

There are simply too many folks doing their research and opting out, and health authorities have lost control. They have lost control because too many families have seen first-hand the damage vaccines can wreak.

In addition, we now understand that the premise upon which vaccines originally were built is flawed: antibodies (the reason we vaccinate) do not mean a person is immune. A person can be immune and have no antibodies or conversely have antibodies but not be immune. Moreover, the promise of life-long vaccine-induced immunity was empty: we now know that vaccines wear off, often much faster than admitted and that the only true immunity is natural infection. These unfortunate truths that stand in the way of the vaccine market going from twenty-seven billion dollars in 2012 to a forecast one hundred billion dollars by 2020.

There is another major issue, which is that vaccines damage the immune system, making it more vulnerable to future challenges. Research in the past couple of years has demonstrated that getting the flu vaccine makes one more vulnerable to flu. Our understanding of the immune system is vastly improved from the time when vaccines were originally conceived. It is time medical authorities admitted this fact that

vaccines harm the immune system.

When one considers the fact that vaccines cause gut damage, autoimmune disease, brain damage, autism, death and more—and that they are filled with toxins and are impermanent—it is hard to defend them.

Although I used to think that there were many shades of gray in relation to vaccines, I have come to the conclusion that they are never safe, although in many folks the damage is subclinical or delayed so that one never connects the two.

Leslie Manookian, Producer of the film, "The Greater Good"

CONTAMINATED VACCINES

Thirty years ago, I worked in the vaccine industry as a quality control PhD scientist. I was responsible for testing vaccines and assayed them regularly to look for contamination in accordance with FDA regulation. I found contamination and then personally experienced the industry's corruption to cover up these issues. I will never forget the horror and disdain that I felt when they told me, "This vaccine is all over the world; it's too big to recall," and "Don't worry, we will send the rest of that batch to the Third World." I reacted strongly. Then I was abruptly removed from my position.

The company that I was working for doesn't exist anymore. Soon after I was removed, it was acquired by a larger pharmaceutical company. That was the strategy back then when vaccine companies were still liable for bad drugs they merged with other companies so that they could not be sued. In recent years, these companies lobbied for and got a federal law passed making them above the law for any injuries due to vaccines, so that they are not liable and cannot be sued.

> Beverly Rubik, PhD Emeryville, California

ANAPHYLACTIC CHILD

My first-born daughter was very little; she was never "quite right." She was pale and very lean. She had dark rings under her eyes. She would often cry for hours and have meltdowns daily, seemingly without cause.

However because she was reaching all her developmental milestones, the medical profession made me feel that I was a paranoid first-time mother.

I thought we had a healthy diet: she was breastfed until twenty-one months. But the rest was lowfat, lots of fruit, rice crackers, sugary homemade sweets, gluten-free pasta, cheap meat, commercial yogurt, rice cereal, etc.

As a veterinarian who had been indoctrinated by mainstream medical and pharmaceutical practices I didn't think twice about the recommended childhood vaccination regime.

However after my daughter's eighteen-month vaccinations her demeanor was worse: crying, irritable, and I was terrified that her language had regressed. A month after this vaccination she had an acute, systemic anaphylactic reaction to one-fourth of a cashew nut. Holding her blue, floppy body in my arms was the worst day of my life. Living with an anaphylactic child is living on edge.

This started us on an amazing journey of real food discovery and healing. Although it took us almost two years to find WAPF, we have never looked back. Bone broths, ferments, organ meats, no processed foods, no sugar, raw dairy, grass-fed meat, pastured eggs, organics, real fat and lots of it, cod liver oil, etc. And needless to say there were no more vaccinations.

My daughter's disposition and health continued to improve over the years. Then in November last year, when she was six, we did our final nut challenge without a reaction! No more EpiPens, action plans or medical alerts.

Thank you, WAPF, for your continued dedication to finding the truth about food and commitment to our future generations.

> Rebecca Taylor Brisbane, Australia

DISEASE FROM A VACCINATED CHILD

They say you can't get the disease from a vaccinated child—yeah right! My pal Doug—a super strong, healthy guy—had his kid get a whooping cough booster to get into seventh grade. Within days the boy developed whooping cough. Within more days both his sisters developed whooping cough (they did not get the booster). And within days, Doug got whooping cough (no booster).

Doug told me that the whooping cough itself was nothing more than a nuisance—a chronic cough that took a month or so to clear.

But then Doug developed a Guillaine-Barré sequelae to whooping cough or his kid's shot, became paralyzed, was in intensive care for twenty-one days, barely escaped with his life, and had a medical bill approaching three hundred thousand dollars.

He slowly recovered, first a wheelchair, then crutches, then a cane. It took



Bruce West, DC Monterey, California

QUORUM-SENSING BACTERIA

A few years ago, I watched Natasha Campbell-McBride's WAPF presentation, in which she talked extensively about the microbes in our body and especially our gut. She suggested we have hundreds of species of bacteria, fungi, and viruses, friendly as well as pathogenic, and the reason we did not get disease from the pathogenic bacteria was because the largely healthy bacteria "crowded" out and neutralized the effect of the minor numbers of pathogenic bacteria. She said that it was only when this healthful balance was subverted that pathogens took over and that having this immense diversity of friendly as well as unfriendly microbes was critical to good health.

This was a beautiful idea that made instant sense to me, especially because I was in the midst of inundating my family and imbuing my house with ferments of every description.

Mainstream medicine in the mean time has continued its blitzkrieg on pathogenic bacteria, treating them as "infections" instead of symbiotic colonizations. Then I came across the research of microbiologists hot on the trail of something called quorumsensing bacteria. It appears that many, if not all, bacteria communicate with each other through hormone-like signaling molecules called auto-inducers. These auto-inducers transmit information to the bacteria about their co-located brethren. That is, they signal population density to the microbe. This molecular signaling brings about the expression of certain bacterial genes that were previously switched off. This "knowledge of their numbers" in turn guides all new bacterial behavior.



This behavior can be friendly to the host environment, or it can be toxic. Thus, it can be harnessed for good or for bad. For instance, when pathogens reach certain critical numbers, they can start to exude toxins in concert, which make their host very sick. These are the bacteria that were previously dormant or commensal, living in harmony within their host's ecosystem and secreting non-toxic metabolites that were either neutral or healthful. Thus the lowly bacteria can change their fundamental behaviors in response to their increasing population density. They have remarkable and sophisticated ability to communicate and

synchronize their behaviors based upon these signaling mechanisms.

This is what occurs in marine bacteria called *Vibrio fischeri*. These bacteria colonize the light organ of a certain squid's body. When gathered in large enough numbers, they possess the ability to generate luminescence and enable the squid to mask its shadow, thereby preventing detection by predators. This is a friendly action. On the other hand,

the bacterium *Staphylococcus aureus* is normally a harmless resident in our nose and on our skin, and exudes benign proteins—until it reaches a certain population density. When it does, it turns from a quietly commensal bacterium into a malignant bacterium, and exudes toxins that can infect the skin and lungs, cause endocarditis, inflame organs and kill us. The questions to ask ourselves are: Why does it turn against us? What causes its numbers to increase suddenly? And how should we treat it when it proliferates?

The important point here is about

balance between the commensal and the pathogenic. The bad can become good under the right circumstances, and vice versa. Our body houses an immense and healthy microcosm of these tiny creatures.

The quorum-sensing mechanism explains why killing off bacteria with antibiotics is so harmful to health. Our body, and as a matter of fact, the entire world, contain mainly friendly, symbiotic bacteria. But it is these larger quantities of friendly microbes that get killed in programs designed to massacre the minority of the pathogens. The pathogenic bacteria that survive turn into mutated, drug-resistant microbes, and

come back, ever more ferociously, into a largely competition-free environment. But far more deadly is what happens when their numbers grow. Once their numbers grow, their quorum-sensing mechanism signals these microbes to express genes that cause them to secrete toxins they were previously unable to exude. These previously harmless creatures now become deadly to their host. This is because there aren't enough commensal bacteria left to curb their destructive forces. In a two-pronged attack on our health, our body becomes deprived of the life-giving metabolites these friendly bacteria once served up, and at the same time we become viciously attacked by pathogens that are now capable of doing immense damage.

All this of course was as yet undiscovered by science for many decades. In the meantime, we poured on the antibiotics. But our wise ancestors figured out these complex relationships with great perception over the centuries. They might not have spoken to us in terms of quorum-sensing bacteria, nor did they have access to genomic sequencing, but they were giving us the right counsel make and eat ferments, add commensal bacteria to your internal and external biome, and you will live in health.

Somewhere between refrigeration and our arrogance in the belief that science has discovered all there is to know, we got lost on eating and medication. While double-blind studies and genomic analysis will carry on for decades, it is unwise to put our health on hold as we wait for results to trickle in.

In eating fully with our senses, in eating the way nature intended us to eat, and in eating the way our wiser ancestors ate, we are not taking a leap of faith in the dark, but rather operating on the sound premise that the laws of nature are far more important to follow than the dictates of partially understood science. Sushima Gokhale Larkspur, California

FERTILIZE OR DEFERTILIZE?

I saw this on ScienceDaily: "Longterm nitrogen fertilizer use disrupts plant-microbe mutualisms" (sciencedaily.com/releases/2015/02/150223142254. htm).

When exposed to nitrogen fertilizer over a period of years, nitrogen-fixing bacteria called rhizobia evolve to become less beneficial to legumes, the plants they normally serve, researchers report in a new study.

Fertilize or defertilize? Another snafu. Can we beg for forgiveness, for we knew not what we did? But how much longer can we go on discounting Nature's ways, because we know better—and there's money to be had from it—and then pleading ignorance when the lessons come home? Science supposedly should let us appreciate the consequences before we act, but sadly that's not how it's being applied.

Poco a poco, enlightenment!

Henry Becker Kingston, Ontario

PASTEURIZATION ALWAYS BAD

I just finished watching the debate sponsored by the Harvard Law School with Sally Fallon Morell and David Gumpert debating Fred Pritzker and Heidi Kassenborg. I have a couple of observations to share (www.youtube. com/watch?v=iLRdihFi6gwsponsored).

First, I was amazed the attorney got away with saying the Constitution does

not give us the right to eat what we want. This is a staggering misunderstanding, and is either intentional deceit or this lawyer is a tribute to the misinformation being taught in law schools. The Constitution is not the source of any of our rights. Those are explicitly defined as coming from God (see the Declaration and other early writings of the Founders). The Constitution is mainly there to limit government. According to the enumerated powers clause and the Tenth Amendment, the federal government can only function in the areas listed in the enumerated powers, nowhere else. Therefore most of the actions of the federal government today are criminally illegal. Apparently the public is so dumbed down we don't even notice. This is a really important issue. Ignoring it has allowed almost the complete destruction of our inherent freedoms. How could the two of you in the debate not have jumped on this as soon you had the opportunity to rebut this nonsensical statement?

Second, I have been an independent holistic health scientist since 1965 and have done decades of deep research and experimentation into nutrition, detoxification and other health aspects in order to see how to prevent and cure most or all degenerative diseases as well as most of what is now considered normal "aging."

What I have found is that the arguments you have in favor of raw milk are one hundred percent correct. Even organic milk is in my opinion not edible after pasteurization and becomes a health-destroying food. Commercial poisoned milk is far worse. Yes, I am one hundred percent against pasteurization, whose only real use is to allow the sale

of contaminated food. Even once the bacteria are dead, the "food" is still not fit to eat.

Not only is the process of pasteurization itself a complete scam, but so is the theory that all these conditions are caused only by micro-organisms. According to that theory, a totally sterile world would be completely healthy. One of the strongest attributes of fresh organic raw milk is its ability to inoculate the body with helpful living microorganisms. Pasteurizing milk is wrong for the same reasons that antibiotics destroy your body's immune system. The entire foundation of the medical paradigm in looking at disease is wrong. Those organisms come in and cause harm because the body's normal balancing defenses are not working. This is the case now in many people who are medical drug addicts or otherwise damaged by medicine and sub-standard poisoned food and water. For them, unfortunately, good food becomes dangerous in some cases, although bad food will also hurt them. Their systems have to be healed by someone who knows how to oversee this, but it can be done, and has been done successfully, after which they can eat food with lots of good microorganisms safely.

Also, no one mentioned that when good raw milk sours, it does not "go bad" but becomes very beneficial as long as it is clean.

Now here is a point that you may not like, but my interest is in telling the truth, and then seeing the best way to deal with it. This requires courage and honesty. What applies to raw milk also applies equally to other natural organic fresh whole foods. When you cook them, their value is mostly destroyed. Not only that, but as in the case of milk, they become a source of a lot of waste for the body in what used to be full of vibrant life energy. I have spent decades experimenting with the implications of this. By using a combination of various forms of fasting and raw live foods, most diseases can be cured, even in late stages.

This is completely known to those at the top of the power structure, and the information is hidden very carefully from the public. Those unwittingly helping our malevolent top-level rulers are mostly oblivious to what they are doing, and they don't understand how thoroughly they have been brainwashed by their wonderful "education." I do; I've been through it.

No one jumped on the attorney for making fun of conspiracy theories. Yet conspiracy is the rule in real life, not the exception, especially at the high levels of power (collaboration toward a common end). The reason the non-thinking public has come to believe there is no such thing as conspiracy is because they just repeat what they hear all the time, and the media have worked hard to make fun of this concept. Now the religion of the day is "science," which is full of misconceptions and used as a weapon by big corporations (members of conspiracy to carry out agendas constructed at top power levels, partly elaborated in Agenda 21 documents and many other places, assuming the public will never read this material). Conspiracies are not only real, they are a major threat to the survival of the entire biosphere, and at the top, they are not about money.

So the bottom line is, I am sorry no one brought up the point our rights exist without being specifically listed in the Constitution, and that is a super-

important point that no one stood up for. Second, not only is raw milk a superhealth food (as is proven by the SWAT team attacks on raw milk producers and vendors, when the same authorities are fine with the unlimited production of deadly drugs by the medical industry which kills millions), but it is a clue which all of you should be following to its logical conclusion. That is, the correct use of raw foods with other associated measures like fasting, etc. could almost totally eliminate disease in America, and make the criminal "health care" system irrelevant other than in cases of accident and a few necessary surgeries. **Richard Sacks**

Sedona, Arizona

Thank you for your interesting letter. However we have to disagree that the "logical conclusion" to the fact that pasteurization is bad for milk is that cooking is bad for all foods. Many foods-such as grains and many vegetables—are indigestible or even toxic when not cooked. And all healthy populations studied by Dr. Price cooked some or even most of their foods. Meat and fish were consumed both raw and cooked. To balance any enzymes lost by cooking foods, we suggest eating "super-raw" lacto-fermented foods which are so rich in enzymes (and good bacteria) that they more than compensate for the enzymes lost in cooking meat, grains and vegetables.

NOURISHED BY BLOOD

My family and I have eaten a WAPF-style diet for more than ten years now. About six years ago we started a micro-dairy and began raising our own meat, vegetables and staple crops like

heirloom corn, sweet potatoes and cassava. We have always tried to eat liver about once a week. Even so, I still take supplements like calcium and magnesium, feeling like I need them after ten years of breastfeeding and/or being pregnant (all my kids are at least three years apart though).

We have processed our own chickens, turkeys, rabbits and pork for years now, and we always like to get the most out of everything. Recently we slaughtered our first beef steer. He was an American milking Devon, raised from birth on only grass, hay, mama's milk, kelp and various natural mineral licks. We saved the blood from our beef steer and I made black pudding with lard, bread crumbs, eggs, cream and spices. I am writing to say it is the most nourishing, intense food I've ever tasted, even more so than liver, and I think it bears mentioning in the WAPF literature.

After just one single serving of black pudding, I felt so totally nourished, I didn't feel like I needed anything extra—supplements felt extraneous that night, as did even cod liver oil!

I know there are many traditional recipes that use blood beyond black pudding-the traditional French coq au vin, for example, as well as a Hungarian duck soup made with blood. I keep telling people I know who are struggling (despite a good WAPF-style diet) with nutritional shortfalls about this, because it just felt so incredibly, intensely nourishing. All week after the black pudding was gone, I would look at other foods and think to myself how poor they seemed to be, nutritionally speaking. We ended up freezing the rest of the blood (we got about two gallons) so we can have black pudding about once

a month. I am hoping this will rebuild my nutritional stores, and I have already felt like just that one black pudding has helped me feel healthier!

I am sending along a photo of my WAPF baby stirring the cooling beef blood so it would not coagulate. She is wearing a t-shirt extolling the virtures of white blood—raw milk!



Angie Minno Gainesville, Florida

WAPF has published an article about cooking with blood: westonaprice. org/health-topics/cooking-with-bloodboudin-noir-and-czarnina/. For recipes by Angie Minno and others, see our Food Feature, page 70.

LEDs

I want to thank Julia Hattori for bringing to our attention additional information on the subject of lighting choices and their benefits and drawbacks (Letters, Winter 2014). Some of it we already planned to address and have written about in a forthcoming article on the issues and dangers of blue light. Some we will briefly respond to here.

First, it is important to note that at least one of the major studies used to cite the dangers of LEDs involved albino rats (I was unable to get an original copy of the Madrid study to evaluate its experimental design), whose unpigmented eyes are far more sensitive to damage from all types of light, including blue. In commentary on the article a number of researchers pointed out that additional study is needed to determine how great the risk is and under what circumstances and for which people. Some scientists have expressed skepticism at a link between blue light and AMD (age-related macular degeneration), especially given that what matters is not just the light spectrum in question, but the intensity (strength) of the light and the duration of exposure. As one article noted, even incandescents can cause damage to the eye LEDs are just able to do this more quickly. This single albino-based study does little to illuminate what will probably end up being a very complex final picture.

Two, the damage the study found wasn't caused by blue light in general, but by looking directly at the light. As the Madrid scientist herself put it, "Eyes are not designed to look directly at light—they are designed to see with light." Given that this is how light bulbs function (people rarely look directly

at them), the greater issue isn't with lighting choices but with the technology many people use. Also, the studies and research are not at all totally clear or in agreement. A number of studies show significant benefits to exposure to this portion of the light spectrum, such as protection from myopia, help with SAD (seasonal affective disorder). and for those who have no choice but to work indoors and receive little sunlight exposure, help with regulating circadian rhythms, among others. They have also found other possible drawbacks, some dependent on the timing of exposure to this particular wavelength of light. If blue diffuse light in general is a concern, we are in very big trouble not solely from the light indoors but the sun outdoors, which produces this spectrum as well.

Third, given that incandescent bulbs are now banned in many countries (and had their own drawbacks), and given the drawbacks I discussed regarding CFLs (which also have the blue light issue, albeit to a slightly lesser degree), people have little choice but to use LEDs unless readers can point us all to yet another new (and untested?) option.

In a future article, I will address how to use all blue light-emitting devices as wisely as possible. It is also good to note that the LED industry is aware of these concerns and is studying the issue and actively making changes as they do risk assessments in conjuction with a number of European regulatory bodies. Who knows? In another decade, we may have lights that adjust their brightness throughout the day to better mimic natural light and its effects.

Finally, the researchers also pointed out that the most likely mechanism for damage is oxidative stress. We may end up discovering, as with sun exposure, that the culprit isn't the light, but the poor nutritional and health status of those exposed to it. Thus, a traditional, nutrientrich (especially in the all important fat soluble vitamins, but especially vitamin A) and antioxidant-laden diet is really the best option for people who have little choice but to look at light, along with employing commonsense (learn to sit farther away from technological gadgets when being used, read real books instead of e-books) technological fixes that we will discuss in the forthcoming article John Moody Irvington, Kentucky

COD LIVER OIL & DENTAL DECAY

I have a personal story about cod liver oil. Twelve years ago, when I had just turned forty and was experiencing the breakup of my family, I was also in the process of adjusting to proper nutrition à la WAPF, after years of being a

JOHN RUSSELL SILVER

I would like to report the death of my husband, John Russell Silver, a chapter leader in Layton, Utah. He died on January 20, 2015.

Thankfully, Russ was always very health conscious and became even more so when he was introduced to the WAPF protocol at age sixty-six. From that day until his death at age seventy-eight, he not only followed this program faithfully, but he became a hero advocate in getting the word out to anyone who would listen.

He lectured locally, in cities along the Wasatch Front, and in several states as he promoted the program in person. DVDs were made during his active lecture time. And at home he was often on long phone calls assisting those with questions about this protocol.

b P A t t v v g i i n n I

Our eight children, thirty-seven grandchildren and the twenty-one plus great-grands have been and are, thankfully, influenced by the WAPF program due to Russ' example.

Thank you all so much for your enthusiasm and dedication in keeping the Weston A. Price Foundation going. Our lives are so much better for having had our membership in it.

And though Russ is not with us physically, his powerful influence will always be felt for good through the generations to come. And, those of us who continue to follow what he taught will always be grateful that he "happened" on to this program because we have all benefited greatly from it.

This tribute is in gratitude for him who lived and promoted this program. And it is also in gratitude for all of you who are now still dedicated to spreading the WAPF word. You have made, and are still making, lives better through your dedication to this wonderful program. I thank you. Norma N. Silver, Layton, Utah

tall, skinny vegetarian—six foot six inches tall and one hundred sixty-five pounds. I plunged into a diet that included lots of raw meat and raw organ meats, and I discovered that too swift of even a dietary change–even a positive one–seemed to plunge me into further mid-life chaos. After a terrible year, I learned to take it easy with adopting the new regimen, as well as all else.

The point being that, some five years later when I started taking cod liver oil, I only took about one-fourth teaspoon daily. Better than nothing, right? And so it went for another five years, until a few months ago, when I started to have severe dental pain due to long-neglected teeth. I had begun seeing a dentist months prior and I had several cavities. Priority was placed on the most urgent issues, but my ability to pay for the procedures has slowed progress.

When the pain became chronic, I was forced to survive on ibuprofen while waiting for my next dentist appointment, ten days away! Then one day, I remembered reading about Dr. Price's work in reversing cavities in his patients with improved diet using cod liver oil and butter oil. I suddenly realized that I needed to increase my cod liver oil intake, and did so—to two full teaspoons per day.

After two days of this, my dental pain began to subside! I soon didn't need painkillers, and within a week or so, I could comfortably eat foods that previously would have caused me great pain.

I'll complete the remaining dental work, of course, which is amalgam-free. My dentist says other than the cavities, my gums and teeth mineralization are excellent. By the way, my weight these days is around two hundred fifty pounds. Thanks for everything you do! Wade Larson Bellingham, Washington

ANTI-SMART METERS

Thank you for covering the electromagnetic radiation (EMR) issue so well in your latest edition (Winter 2014).

I am an anti-"smart" meter activist in Arizona and longstanding WAPF member. When I first got into the "smart" meter issue four years ago I thought the health/EMF aspect of the issue was our weakest argument against the meters. I thought that perhaps the people with EMF-related health problems were hypochondriacs. But I kept an open mind and became aware of the huge health impacts that EMF has on all of us, not just those currently manifest -ing symptoms.

As someone who has spent his life focused on diet as the source of good health or ill health, it was quite an eye opener to realize that something we cannot even detect with our senses, EMF, could have such an effect.

I have a friend who measures EMF and remedies home and workplace environments for a living. The consistent before-and-after stories he has of people's health are nothing short of miraculous—but not really since it is all based on sound science.

I urge everyone to heed the advice in the Winter 2014 edition of *Wise Traditions*. Also, consider finding an EMF professional in your area and get measurements and remediation for your place, especially your bedroom since it is extremely important to get good, rejuvenating sleep, something your body will not get under constant EMF bombardment. Professionals can often be found by doing an Internet search for your location and Bau Biologist.

> Warren Woodward Sedona, Arizona

SNAKE OIL

Amy Worthington's article on smart meters (Winter, 2014) is an opinion not based on any scientific evidence. It's basically snake oil. It is based on hysterical stories from women who clearly do have issues, but they have little if anything to do with smart meters

A far greater worry should be our use of cell phones and cordless phones (worse than cell phones) which we all have in our homes.

We also like to go wireless and now use WiFi for our TVs, our computers, wireless keyboards and mouse. We spend hours sitting in front of our computers, and don't recognize the radiation from them. We also fail to be concerned about the microwave ovens in our homes because we are so used to them and are basically ignorant of their harmful radiation we expose ourselves to daily. But we now create hysteria over a smart meter because it is new, and we are basically clueless. So we attribute all our ailments to the smart meter.

I have one and since it emits far less radiation than my cell phones or my cordless phones, my attention goes to limiting my cell phone use and putting my cordless phone on "speaker" and put it on the table. I have checked your site and so far agree with everything I have read with the exception of your smart meter article.

> Geraldine Vaccaro West Palm Beach, Florida



I am a sixty-nine-year-old master carpenter who was conceived and raised on raw milk and nutrient-dense food, as were all of the farmers before me.

When I was five or six, a supermarket came to the area, and things seemed to change overnight. People who refused to switch to the industrial food were called "old-fashioned." My parents had a difficult time getting me to eat the new food, particularly the pasteurized milk, which I still dislike. I literally lived for the times I could eat food that tasted good at my grandparents' house.

It was a time when most of our people had either forty or eighty acres, before they bought into the mantra "Get Big or Get Out." Neighbors shared and helped with planting and harvesting, and took up the slack to keep things going if a farmer died or was incapacitated.

The most intoxicating smell I have known was the rich Midwestern humus as it warmed in the morning sun. By the time I was eight or nine, those smells were gone. After reading *The Unsettling Of America* by Wendell Berry, it became clear what I had lived through.

About eight years ago I was beginning to have knee pain and stiffness (even though I ate organically), and considered giving up carpentry. About that time I was introduced to WAPF, and began drinking at least two cups of bone broth a day. In a little more than six months, all of my joint problems were gone, and today I enjoy hard work more than ever.

If you have the capacity, please get out on the farms, pitch in and stand beside real heroes. In the time I have left, my purpose is to do everything I can to help build a future where more children wake up to that most intoxicating smell. Mike Ward Longmont, Colorado

HEALTHY ANCESTOR GALLERY

How about an ancestor gallery so this generation knows what people used to look like? This is a photo of my parents, Catherine and Del Wilson, (Dad once published an article in the *Wise Traditions* journal about the farm



food) taken in 1951 when Mother was pregnant with my younger brother.

I love to see their radiance, beautiful smiles and beautiful teeth. Both were raised on farm food and Dad was a farmer. No orthodonics here, no makeup but lipstick, and no hair dye, unlike today's crowd. This picture always makes me happy.

> Janice Curtin Alexandria, Virginia

This is a great idea! Please send your ancestor photos with caption to us at liz@westonaprice.org

LARD FOR WEIGHT LOSS

Here is a true story an Amish friend told me today about lard. He has a non-Amish friend who weighed about four hundred pounds whose doctor was always on him to eat healthier foods. Problem is this guy was into fishing and hunting, and he deep-fried all the food he ate—meat, fish and vegetables—and he was *not* going to change.

Last year he bought a hog and asked my Amish friend to fatten it and then butcher it, which he did. The guy was going to throw the back fat away but my friend asked if he could render it. In turn he gave the large friend enough lard to replace the vegetable oil in his fryer.

That was last June. Come October the guy goes to his doctor who commends him for finally taking his advice and changing his diet because his cholesterol was the best it had been in over ten years! However he told the doctor he had not changed his diet except swapping the vegetable oil for *lard*. And not only had he *not* cut back on his fried food, he was eating more since the food tasted so much better when fried in lard. He had also lost sixty pounds!

> Jim Fiedler Rome, Indiana

MEAT, EGGS AND BROTH

My husband and I have been watching this melodramatic period series (1900s), "Gran Hotel," produced in Spain 2011-2013. In episode sixteen the young maid Belen gives birth to twins and almost dies, losing lots of blood. The doctor examines her and says, "She's very weak. She needs meat, eggs and broth." Loved that! Would like to know the screenwriter who put that line in!

> Lynn Wright Tucson, AZ and Fort Jones, CA



As a dancer, I always struggled to maintain my energy levels and my physical and mental health. My health hit an all-time low the summer before my senior year, while I was living in Phoenix dancing with Ballet Arizona. I was attempting raw veganism, and I grew very thin and had no energy for ballet, let alone energy to put towards living a vibrant, joyful life. I searched for answers, and finally I discovered the Weston A. Price Foundation.

I spent last year recovering by applying the Foundation's teachings and my life has dramatically turned around. I have never experienced such vitality and happiness in my entire life! I am so grateful for WAPF. I have become so passionate about physical and mental health as well as farmer rights, and I'm so eager to become involved in sharing knowledge about these things.

> Eden Garcia Thaler Leesburg, Virginia

JUNK FOOD IN ARGENTINA

I am English travelling in Argentina. Argentinian people are warm and friendly and I am made to feel welcome whereever I go. It saddens me to notice how many of the indigenous people are seriously overweight. They seem to be reacting badly to modern foodstuffs, in particular refined carbohydrate and sodas.

I have just been lucky enough to spend time in the home of a mixed Argentinian and Paraguayan family, the kindest, most generous people, but suffering from all types of illnesses. The mother has type 2 diabetes, which she is not looking after as the demands of the family come first; she has what I suspect is gout, very painful. I did talk to her about it. She told me that her doctor advised her not to eat meat or fat, only vegetables and fruits, impossible for her in the land of beef production. I asked about the diet of her grandparents. It was soups, vegetables, fish, a little meat and fruits. They used to keep a cow so they had raw dairy for sure. I suggested eating what they ate in those days but that is too radical a concept; they are fixated on the all-American supermarket diet. Huge bottles of Coca Cola and jars of mayonnaise appear at every meal time. On the other hand, they are farmers and prepare a lot of food from their own animals.

I believe it would not be such a huge jump to the Weston Price-type diet but I didn't have enough time with them or the language to explain. I would like very much to send them Spanish translations of *Nourishing Traditions*.

> Lesley Alkin Southampton, England

Our main brochure and our Healthy 4 Life *booklet are available in Spanish*.

KOTARE VILLAGE

We are a group of people in beautiful New Zealand who are developing an eco-village, Kotare Village (kotarevillage.co.nz), where we are committed to regenerating our health and the health of the ecosystem we live in. This means we are creating our own food culture out of the Weston Price principles and it also means the land use design for the entire village is based around our food requirements put together with what works on this land in this climate.

It all looks something like this: A small dairy farm producing raw milk

which meets all of our dairy requirements, the dairy also provides curds to feed poultry and whey for pigs, poultry follow cows around the pasture or they are in forest gardens, pigs are free-range or in perennial polyculture systems, we catch fish in our river, we eat our own lamb, beef, pork, poultry and wild goat, all grazed following holistic management practices, and perennial polycultures. We grow nutrient dense vegetables and fruit and nuts and are experts in this field. We are all currently gardeners although we recognize that everybody isn't a gardener, we garden our own gardens as well as a main crop community garden. We make and eat lots of ferments and we teach all of this to others through the Koanga Institute.

The Koanga Institute (koanga.org. nz) is at the heart of the Kotare Village, where we are currently running an urban garden research project to see how much of a family's nutrition can be provided from a 200 square meter garden. We have a How To Grow Nutrient Dense Food research project in its early stages as well. Plus we are growing and saving the New Zealand national heritage vegetable seed collection and an important heritage fruit tree collection. There is much potential for eco-village settlers in these fields and we envisage a cooperative as soon as we have enough families invested. The way we have structured our business plan means we will have money to invest in businesses that come out of our passion and the land for the good of the whole.

Kotare Village is actively looking for like-minded people who want to support a shared dream of embracing a regenerative future through independent village living, local economies and co-

evolution. There are opportunities for settlers, investors and supporters.

It is a very exciting time in the village! Through this venture we are planning to have around 30 families live in Kotare Village to ensure we have enough of a population to create a strong economic base.

We'd love to hear from you NOW if you are interested in investing in your future or becoming a settler. Email us at koangainstitute@gmail.com

> Kay Baxter Havelock North, New Zealand

TURKEY ATTACK

I can't think of anything more terrifying than chest pain that doesn't go away, followed by an ambulance trip with lights and sirens, and a frantic rush into the emergency room. The first time was justified by two 80 percent blockages in a major coronary artery. Stents were installed, and then the horrible journey through medication side effects from the one-size-fits-all treatment protocol. This treatment doesn't work very well if you're not the right size.

Three months later, still in the throes of side effects, there was another trip to the hospital. Crushing chest pain again, just like the first time,. Two nitroglycerin tablets didn't stop the pain. This time, the EKG didn't show any abnormalities. I was puzzled. The doctor was puzzled. Finally the doctor asked if I'd eaten anything unusual. "Just turkey," I said in bewilderment. I'd roasted a commercial turkey and my son and I had been eating that for three days. I went home, and the cardiologist arranged for more tests, which I came through with flying colors. My heart was doing fine. I didn't think any more about it. A month later, the same thing happened. Intransigent chest pain. Nitroglycerin. Ambulance. ER. Nothing showed up. "Did you eat anything different?" "Just turkey." I went home and wondered what was in turkey that we didn't know about. Google being my friend, I quickly discovered: ractopamine.

Ractopamine isn't exactly a household word. It's a beta-adrenergic agonist which is used as a feed additive in the commercial production of beef, pork, and turkeys. Red flags went up! Weren't beta-blockers used to treat angina? Wasn't that what I had? What's going on? The answers were: yes, yes, and who knows? Further research showed that ractopamine was used in 20 percent of commercial beef, 80 percent of commercial pork, and some unknown quantity of commercial turkeys. I raise my own organic beef and pork. Being an engineer as well as a farmer, I decided to test my hypothesis. I had canned some turkey and broth, and made some soup. Yes, the reaction was the same. I didn't call the ambulance this time, just waited out the pain.

Ractopamine use as an animal feed additive is banned in much of the

world—such as the European Union, Russia, and China. This is the reason that we cannot export meat to these countries. Residue testing in those countries has shown significant residues in US-produced meat. But in this country, we have no restrictions on its use. It can be fed up to the time of slaughter. No residue testing is employed. No withdrawal time is mandated.

This is an anecdote. The plural of anecdote is not data. But I will never again eat commercially grown turkey.

> Pegi Ficken Groton, New York

MILK PROBLEMS?

Can one have too much of a good thing? The well-read of course know the answer. Some of us know that it can be tempting to have more of something that "must be good for us." I once met a young man who had seriously compromised his health with an overconsumption of water leading to brain edema.

In New Zealand, one can, relatively easily, find a source of raw milk, and being New Zealand, it tastes wonderful and, as so many of us believe, is a very rich source of calcium. It is also balanced for carbohydrates, protein and fat.

My devotion to raw milk in recent years did not figure in my puzzlement over difficulties I was having with muscular soreness following exercise. It was severe enough to have me walking with considerable discomfort; and enough

A CALL TO HUNTERS—YOU CAN HELP WAPF!

This year the Weston A. Price Foundation will be testing various foods for levels of vitamins A, D and K.We need samples of the following fats:Beaver Tail FatSeal Fat (Seal Oil)Sea Lion FatDeer FatIf you can supply us with these fats, please send an email to info@westonaprice.org. We would need them rendered and in three glass containers, about 1 cup for each of the three samples. Thank you!The samples of the samples of the three samples. Thank you!



In Dr. Thomas E. Levy's hard-hitting book, *Death by Calcium* (MedFox Publishing 2013), he notes that calcium supplementation of more than 500 mg per day gives us a 30 percent greater chance of a heart attack, and up to a 20 percent greater chance of a stroke. His advice, following personal contact, has resulted in my abandoning my two large glasses of milk daily, and of course no more molasses.

Mortality from all causes will come sooner, rather than later, the research tells us. Very quickly, my muscle stiffness disappeared.

I can imagine a certain stiffening of backs and necks from many who may pause to consider the ramifications of these words, given the almost religious excitement which surrounds the "magic" of raw milk. But we are intelligent people—most of us—and those of us with a research background know how important it is to have an open mind, but not too open that our brains fall out, or so closed as to prevent curiosity and motivation for some detective work.

> Neil G. Hilford PhD New Zealand

There is no food that can be consumed safely by everyone. Some people get deathly ill from shellfish; others are allergic to beef. And there are individuals who for one reason or another can't tolerate milk, even raw milk, or other dairy products. But that does not mean that everyone should avoid raw milk. After all, raw milk has supported healthy populations for thousands of years and in all parts of the globe. Many have reported to us that muscle stiffness and joint pain improve when they begin drnking raw milk. And we have documented cases in which osteoporosis was reversed in individuals who began drinking several glasses of raw milk per day. Raw milk is a particularly important food for growing children.

ASTONISHING EFFECT

My health has been failing. Nothing specific, just thought I was aging at fifty-nine. I bought raw milk the other day and I'm hooked. Instantly calm. I think my body has been starving for nutrients. It has amazed me that it has had an instant effect and I feel like a flower that finally got water. Louis Pasteur has done nothing good for the milk industry. Loving the taste, and the effect on my health and well-being is astonishing.

> Jane McCallum Richland, Washington

GET REAL?

"Get Real"—the dairy industry's newest ad campaign—is their latest effort to increase milk sales, which began a downward trend in the 1970s. The dairy industry blames this decline on the growth of non-dairy alternatives such as soy and almond milk, PETA, the paleo diet and vegan groups. They also blame a recent study published in *The British Medical Journal*, which suggests that drinking lots of milk could lead to earlier deaths and higher incidents of fractures. The real problem for the industry is that this study used pasteurized milk. More than fifteen years ago, the Weston A. Price Foundation launched the "A Campaign for Real Milk" to promote full-fat, grass-fed raw milk. The "Get Real" word play is clearly an attempt by the dairy industry to piggyback on their success. Not only were people buying alternative non-dairy drinks due to trendy diets of various beliefs, thousands of people also started buying milk directly from farmers who were dedicated to producing high-quality, grass-fed, raw milk.

Humans have been drinking milk for thousands of years; maybe not quite as far back as the Stone Age, but the milk we did drink was produced by cows raised on pasture, not confinement feed lots, and it was raw or fermented, not skimmed or ultra-pasteurized. It is full-fat, raw milk that does a body good and my smart, healthy, beautiful daughters —who have been drinking raw milk for more than ten years—are a living testimony.

> Mary Wilson Falls Church, Virginia

When we founded "A Campaign for Real Milk" in 1999, we had only thirty-eight sources in the whole U.S. to list; today there are more than two thousand!

> 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

DIRECT ROLE FOR VITAMIN A

Here at WAPF, we keep our members abreast of research on vitamin A-a maligned but vital nutrient. Vitamin A is critical for fetal growth and development, for hormone creation, for neurological function, for normal reproduction, and for healthy eyes, skin and bones-to name just a few of its functions. A recently-published study suggests that vitamin A may play a more direct role than was previously known in certain physiological functions, including sperm cell formation, the development of the central nervous system and the regulation of hemoglobin production in the embryo. Vitamin A is involved in nuclear receptor signaling pathways, a process that activates genes in the human body (J Biol Chem. 2011 Jan 28;286(4):2877-85). What this means is that vitamin A plays a critical role in genetic expression, and implies that many so-called heredity conditions might be due to vitamin A deficiency. Unfortunately, there are millions of dollars out there for genetic research, but not a cent for a campaign to tell people to eat vitamin A-rich foods like liver, cod liver oil and butter and egg yolks from pastured animals.

ACUTE FLACCID MYELITIS

The term may be unfamiliar, but it describes a "polio-like" paralysis that afflicted over one hundred children in 2014. Following flu-like symptoms, children end up with one or more limbs paralyzed or even with complete paralysis from the neck down. MRI scans show distinctive damage to a specific part of the spinal cord, a classic feature of polio. Researchers are at a loss to explain the disease. If it is caused by a virus, why do most members of a family escape the disease while others contract it? "Maybe it's the host, and the virus is a trigger that sets off the paralysis. . . Maybe it's something in their genetic makeup," says Priya Duggal, a genetic epidemiologist at Johns Hopkins University ("Mystery paralysis in children is perplexing parents-and researchers," Washington Post, March 3, 2015). Others point to exposure to pesticides and neurotoxins like DDT as cause of sudden onset paralysis. And what do viruses and toxins have in common? Both deplete vitamin A or interfere with vitamin A pathways. Could vitamin A deficiency-rather than genetic makeup-be the key factor that determines whether a child becomes paralyzed after exposure to viruses or toxins? One thing's for sure, researchers will continue to roam around in the dense forest of genetic epidemiology for a long time before they admit that something as simple as cod liver oil and butter could protect our children from deadly disease.

FEEL GOOD WITH BEEF

A 2010 study looked at the extent to which the high prevalence of mental disorders is related to habitual diet in over one thousand women ages twenty to ninety-three years randomly selected from the population (Am J Psychiatry. 2010 Mar;167(3):305-11). "One of the hypotheses that I had during my PhD was that increased intake of animal foods would be toxic and would be associated with more mental disorders," said principal author Felice Jacka. "This did not turn out to be the case. In our study, out of every single dietary food grouping that I looked at, including vegetables, fruits, salads, beans, etc., the strongest correlate of mental health was red meat intake. Consistently, women who have less than the recommended intake of red meat seem to be in an increased risk for common mental disorders (like anxiety and depression) and bipolar disorder. Women only need a small amount (a palm-sized serving) three or four times a week." These are pretty profound results, especially today, with the constant barrage of propaganda urging us to eat no red meat or to eat less. Red meat provides complete amino acids, zinc, iron and omega-3 fatty acids-all important for depression and anxiety.

TOXIC OXALATE CRYSTALS

Green smoothies are all the rage these days, as a way to "cleanse the body" and "improve the diet." The problem is that the recommended ingredients for such concoctions are foods high in oxalates, such as spinach, kale, Swiss chard and arugula-often as high as 10 percent of the dry weight. Oxalic acid is an extremely acidic organic acid that traps heavy metals like mercury and lead, and deposits them in a variety of tissues throughout the body-so much for leafy greens being "alkaline" and "cleansing" to the body. William Shaw, PhD, reports consistently finding high urine oxalate levels in kidney stone patients consuming a lot of raw spinach or green smoothies. Other side effects of oxalates include reproductive problems, reduced calcium in bones and teeth, anemia, immunosuppression, stroke, atherosclerosis, endothelial cell dysfunction and fibromyalgia. Urine tests consistently show high oxalate levels in individuals with autism, kidney disease,

Caustic Commentary

fibromyalgia and vulvodynia (http://www.townsendletter. com/Jan2015/green0115.html).

END OF THE JUNK-FOOD ERA?

For years, Big Food has described the art of cooking as a necessary inconvenience, one that can be circumvented by opening a can of soup or putting a frozen dinner in the microwave. But recently consumers have returned to cooking real foods, and the industry is feeling the effects. All the major industrial food producers—ConAgra, Kraft and Kelloggs reported sluggish sales for 2014. One factor for the decline

is the strong U.S. dollar, which makes overseas sales worth less when converted to U.S. currency. But the main reason is a "mounting distrust of so-called Big Food, the large food companies and legacy brands on which millions of consumers have relied... for so long." Meanwhile, the number of farmers markets jumped 180 percent since 2006, to a total of over eight thousand. Food hubs have jumped in number by 280 percent since 2007 (http://www.motherjones.com/tom-philpott/2015/02/

has-big-food-passed-its-sell-date). And, of course, there's the "Postum effect," in which sales decline because customers die off—it was an older generation that embraced processed foods, and they are plagued with health problems. Is the junk-food era coming to an end? Stay tuned.

NO HFCS?

High fructose corn syrup (HFCS) rightly has a bad reputation—animal studies associate this engineered sugar with everything from weak ligaments to weight gain. The industry tried to get FDA approval for a name change—they wanted to call HFCS "corn sugar," but FDA did the right thing for once and said no. So the Corn Refiners Association just went ahead and changed the name anyway—to "fructose." So beware of any product containing "fructose," or "crystalline fructose," even those declaring "No high fructose corn syrup" on the label. General Mills' Vanilla, Chocolate and Cinnamon Chex boxes all claim "No high fructose corn syrup" but list "fructose" in the ingredients (www.thesleuthjournal.com/ chex-nefarious-simply-not-true/).

FIGHTING THOSE "ANTI-DAIRY" FOLKS

The dairy industry spent thirty-four million dollars on its "GOT MILK?" milk mustache campaign in California—one dollar for every person living in the state. The result: milk consumption declined. The nation's largest milk processor, Dean Foods, has closed twelve dairy processing plants since 2012, sending shock waves throughout the industry. Con-

sumption of pasteurized fluid milk continues its steady decline of one to three percent per year. But the milk industry is trying again, this time with a social media campaign by the Milk Processor Education Program, trumpeting the benefits of industrial milk. The association says it needs to act because attitudes about milk are deteriorating more rapidly "with vegan groups, non-dairy competitors and other perceived enemies getting louder online." (The "perceived enemies" of course are the advocates for raw

milk.) The campaign is intended to "drown out" milk's detractors with positive posts about milk on Facebook, Twitter and elsewhere—that means paid trolls will post pro-milk messages (finance.yahoo.com/news/milk-industry-fightsback-against-anti-dairy-folks-170243538—finance.html). Our message for the industry: it's not going to work. No amount of advertising or social media can resurrect the reputation of nature's perfect food, completely ruined by industrial processing. Industrial milk is hard to digest, highly allergenic, associated with many diseases, and it tastes bad.

ASPARTAME BAD NEWS

As little as one diet soda daily may increase the risk for leukemia in men and women, and for multiple myeloma and non-Hodgkin's lymphoma in men, according to researchers who analyzed data from the Nurses' Health Study and the Health Professionals Follow-Up Study for a twenty-two-year



Caustic Commentary

period. These findings accord with a 2006 study involving nine hundred rats, which found that aspartame significantly increased the risk for lymphomas and leukemia in both males and females (www.naturalnews.com/037772 aspartame leukemia lymphoma.html). In 2005, Dr. Stylianos Tsakiris, at the Medical School, University of Athens, showed that aspartame causes memory loss and learning impairmentwith potentially disastrous consequences for children who consume aspartame in the form of diet colas and sugar-free gum. A recent study indicates that aspartame disrupts the healthy bacteria in the gut, which can interfere with normal blood sugar and insulin production, leading to hypoglycemia and diabetes. Finally, a new study from the University of Iowa on healthy postmenopausal women showed that drinking two or more diet drinks per day may increase the risk of heart disease, including heart attack and stroke (www.janethull. com/healthynews/blog/2014/09/study-shows-aspartamecauses-memory-loss/). All in all, the evidence is clear: we should avoid products containing aspartame like the plague.

CALCIFICATION

Pineal gland calcification due to excessive fluoride exposure is a clinical risk factor in the onset of Alzheimer's disease, bipolar disease, and insomnia as well as ADHD. But fluoride is not the only factor that can cause calcification of the pineal gland. In his book *The Milk Book*, William Campbell Douglass, MD, points out that pasteurized milk can also cause calcification of the pineal gland. Vitamin K, found in aged cheeses and poultry liver, protects against soft-tissue calcification throughout the body.

SALT AND HEART ATTACKS

Current U.S. dietary recommendations advise Americans

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. ages fourteen to fifty to limit their sodium intake to 2,300 mg per day or one teaspoon of salt, and those over fifty and high-risk groups to cut back to 1500 mg daily or two-thirds of a teaspoon. But a large international study found that men and women who ate between 3,000-6,000 mg sodium (between 1.3 and 2.6 teaspoons) had a lower risk of major cardiovascular problems, such as heart attack, stroke or heart failure, and they also had a lower risk of dying over a four-year period compared with people who consumed more or less sodium (*N Engl J Med.* 2014 Aug 14;371(7):612-23). On average, American adults consume 3,400 mg sodium daily or one and one-half teaspoons of salt.

IGNORING DOCTOR PRICE

The old "soft foods" theory of malocclusion and dental crowding has raised its head again in a report published in PLOS ONE (phys.org/news/2015-02-malocclusion-dental-crowdingarose-years.html). Noting that hunter-gatherers had almost no malocclusion and dental crowding, while the condition was common amoung the world's earliest farmers, the authors state with assurance that the diet of the hunter-gatherer "was based on 'hard' foods like wild uncooked vegetables and meat, while the staple diet of the sedentary farmer is based on 'soft' foods like cereals and legumes. With soft cooked foods there is less of a requirement for chewing, which in turns lessens the size of the jaws but without a corresponding reduction in the dimensions of the teeth." Sigh. . . there is just so much wrong with these conclusions, starting with the assumption that the hunter-gatherer did not cook his food. Quite the contrary, descriptions of hunter-gatherer populations indicate that they cooked a large part of their meats and virtually all their plant foods. And what about herding populations consuming "soft" foods like milk, yogurt and cheese? These groups are characterized by splendid facial development. And how do your genes know that you will be eating soft foods and therefore give you a more narrow jaw? And what about the rest of the face and body-how do soft foods affect their disrupted development? There is no discussion of the possibility that the diets of agriculturalists might be less nutrient-dense than that of hunter-gatherers, less rich in animal foods like fish and organ meats, for example, Any mention of nutrition would force these researchers to consider the work of Weston A. Price, and that would lead them down some very uncomfortable paths.

Cleansing Myths and Dangers

by John Kozinski

The idea of cleansing the body and soul is a very old one. In both Eastern and Western traditions, cleansing the body to atone for or rid the body of one's sins was an ancient notion tied to the Western Judeo-Christian-Islamic and Eastern Buddhist-Hindu religious traditions. Methods to cleanse the body utilizing herbs and other means were practiced throughout the world. The elaborate routines of Panchakarma from India are one such example of an ancient cleansing therapy.

The idea of cleansing the body to eliminate our physical dirtiness is more alive and well today than it's ever been. While the history of detoxing the body from its ills through physical cleansing is an old notion, the modern roots of cleansing can be traced to the early natural hygienists. Dr. John Kellogg, of Kellogg's corn flakes fame, was an early American pioneer of bodily purification. Today all of the popular cleansing methods focus on stimulating the organs of elimination. For the majority of people these methods can have very detrimental effects on health. Kellogg ran the Battle Creek health sanatorium in Michigan, which was owned and operated by Seventh Day Adventists. At the sanatorium, Kellogg recommended yogurt enemas, strict vegetarianism and a bland diet because he believed that spicy, protein-rich foods increased sex drive while bland foods reduced it. He and his brother developed flaked cereals along with a number of super-bland foods for consumption at the sanatorium including, by accident in 1896, corn flakes. Corn flakes, with their high fiber content, were created to be an anti-aphrodisiac.

In the early twentieth century, John Tilden and others promoted many ideas to cleanse the body of toxins. Toxemia or blood pollution was thought to be the cause of all diseases. Cleansing through diet, fasting, juicing, herbs, colonics, exercise and other methods were taught to be the cures.

During this time, many erroneous nutritional theories were conceived to explain the cause of toxemia. These included concepts such as the putrefying effect from eating meat and dairy foods, an improper balance of acid and alkaline foods, the supremacy of vegan diets, and various food-combining theories. I'll explain why these theories hold no water later in this article. Unfortunately, these ideas are still promoted today by many contemporary proponents of cleansing protocols.

THE MODERN CLEAN-UP

For decades I was a teacher, counselor, and promoter of a primarily vegan diet for cleansing and better health. I have to admit that I taught most of the theories listed above-except for Kellogg's theories on sex. I saw first-hand that in most cases not only did the vegan approach not clear toxins from the body but in many cases did not promote healing. I had my epiphany that something was wrong when one of my teachers, Aveline Kushi, developed cancer. Over time, everyone I encountered on an unsupplemented vegan-leaning diet either developed illness or poor health. In recent years, several prominent teachers of a vegan-style macrobiotic diet died at younger ages than the average person from serious diseases such as cancer and heart disease. Sally Fallon's book, Nourishing Traditions, and the Weston A. Price Foundation were instrumental in helping me fill in the gaps of my nutritional awareness to address the growing problems associated with vegan diets. Many discussions with natural health education colleagues such as Carlo Gugliermo, Steve Gagne, and Steve Acuff were also extremely helpful as they had walked a similar road.

As I awoke from my dietary dream, I saw an explosion of methods that I had followed—lots of health gurus promoting cleansing through diet, remedies, fasting, and a host of other means. Cleansing has become big business, promoted by everyone from Dr. Oz to the Juice Man and, of course, late night infomercials. Books and websites advertising everyone's favorite cleanses as the answer to weight loss, healing all kinds of diseases, and anti-aging have taken off.

Even when I was promoting a vegan-style diet as a cleansing method, I was suspicious of cleansing protocols. My suspicions arose from the teachings of oriental medicines. In ancient oriental medicines there are two basic approaches to cleansing therapies. One can cleanse by taking substances that speed up the function of the elimination organs such as the colon, liver, and kidneys, or one can cleanse toxins by *strengthening* the function of these same organs through food, lifestyle practices, herbs and exercise. The second method was considered the most basic and safer way of getting rid of toxins. The first method was only recommended for very strong people.

Today all of the popular cleansing methods focus on stimulating, rather than strengthening, the organs of elimination. For the majority of people, these methods can have very detrimental effects on health.

TRUTH AND MYTHS ABOUT TOXINS

The truth about toxins is that we live in a very polluted world. Air and water pollutants abound. There are chemicals in our food, our homes, our household products, body care products, and in our environments. There is evidence that these toxins can accumulate in the body causing harm.

Ridding the body of toxins can be a very important part of healing diseases. The problems with the most popular detoxing approaches today arise from the methods being used. Just about all of the cleansing methods promoted today do not cleanse the body of the chemicals that we are exposed to. I will explain why most of these methods cause real harm to overall health by weakening the organs of elimination and hampering or even halting the healing process.

There is some truth to the saying that you don't see the things you aren't looking for. After my epiphany about my mostly vegan diet, I started to see more evidence that this was not a good way to eat for cleansing or for overall health.

My wife and I were amazed when watching a documentary on ocean pollution by environmentalist, explorer, and film maker, Jean Michel Cousteau. Jean Michel found large amounts of human-made environmental pollutants when testing killer whales and harbor seals. He then decided to test his staff. His vegan-style vegetarian assistant and her son had the highest level of certain environmental pollutants in their bodies, while Jean Michel's other assistant, who stated she ate everything except fish, had low levels.

This point was brought home to me when one of my clients, through testing by a holistic doctor, was found to have high levels of a contaminant from gasoline in her body. She showed me the supplement that was recommended by her doctor to remove this toxin from her body. The main active ingredients were two amino acids. I found it fascinating that these amino acids are only found in animal products.

MEAT AND THE COLON

Many dietary restrictions are being used today in the name of cleansing. Depending on the teachings of the diet gurus, the avoidance of sugar, salt, dairy, saturated fats, all fats, red meat, all meat, or other categories of foods will be recommended in order to cleanse the body.

For most people, the foods the diet gurus condemn are handled easily by the body. Various foods are claimed to clog the colon, but there is no scientific evidence that this really happens.

Vegan advocates promote the idea that meat, and by association all animal products, rot in the colon creating toxins, or toxemia, which interfere with the elimination of environmental toxins and create illness. In reality, protein-rich foods such as meats stimulate the production of stomach acid. Stomach acid is essential for the digestion of all proteins. In the presence of adequate stomach acid, the protease enzyme pepsin is produced, which initiates the digestion of protein.

When the stomach pH is low enough, that is, when it is acidic enough, enzymes are produced by the pancreas to break down fats, carbohydrates and proteins. When meats or high protein animal products enter the small intestine, pancreatic enzymes that break down fats and proteins mix with these foods. The amino acids or protein components of the meat are then absorbed by the small intestine. By the time what is left of the meat or any animal foods enters the colon (large intestine), it has been completely digested.

Some people do have trouble digesting some animal proteins, especially dairy products, but the protein that is the most difficult to digest is wheat gliadin, a vegetable protein. The food that rots in the colon is the darling of the natural foods movement: fiber.

Here is an interesting fact that contradicts what the "meat-clogs-the-colon" proponents suggest: protein-rich foods such as meat, poultry, fish, eggs and other animal-source foods cause the stomach to produce adequate amounts of stomach acid. Without adequate stomach acid, the pancreas does not produce sufficient digestive enzymes. If high-protein foods are not eaten, digestion suffers due to low stomach acid.

Vegan diets are very low in complete proteins because grains, beans, and vegetables have very small amounts of proteins. I have found that vegetarian protein sources are good complementary protein sources if adequate complete protein sources are consumed, ideally from meat, poultry, fish or other animal-source foods.

In my counseling practice I have commonly found many vegans or near vegans to have digestive disorders from a lack of stomach acid because of inadequate protein in their diets. Eating some complete protein from animal sources at every meal helps you digest all the food in the meal more completely.

FOOD COMBINING

Closely related to the "meat-and-dairy-rotsin-the-colon" theories of cleansing are the food combining and acid-alkaline theories. Food combining was first popularized by William Hay Various foods are claimed to clog the colon, but there is no scientific evidence that this really happens. The ironic fact is that many of the foods that people restrict in their diets are necessary for the proper functioning of the organs of elimination, and cutting such foods out of the diet weakens these organs. in the 1920s. Herbert Shelton wrote one of the early bibles on food combining in the thirties. The book, *Fit for Life*, by Harvey and Marilyn Diamond, brought back food combining in the eighties. Contemporary versions of food combining are promoted in the Body Ecology Diet and even by Dr. Mercola.

The basic theory behind food combining is that foods with different concentrated nutrients have different digestive demands. It is thought that if foods with concentrated protein such as meat or poultry are eaten with grains, they will rot in the stomach rather than undergo digestion.

Even years ago, before knowing as much as I do now about the science of digestion, I thought that food combining was an odd idea. I couldn't imagine our ancestors thinking much about food combinations when deciding what to eat. The evidence of what traditional peoples ate around the world shows that they didn't consider this when choosing their foods. All combinations of foods were eaten in the healthiest and longestlived cultures.

When following food combining principles, one's diet becomes extremely low in protein, carbohydrates and calories. There is no solid science behind food combining. The scientific evidence demonstrates that all foods are digested successfully together.

Early food combining theories were based on incomplete science and for some dubious reason, these outdated ideas keep returning. The key to digestion is adequate stomach acid and a healthy, active metabolism.

ACID-ALKALINE

The acid-alkaline theory also severely limits both one's diet and health. The idea behind it is that we must eat an alkaline diet to keep our blood alkaline. According to the acid-alkaline proponents, acidic blood causes all manner of diseases. They say that eating more alkaline foods, such as fruits and vegetables, is the key to good health.

The reality is that we can't regulate our acidalkaline state by diet. The kidneys regulate our acid-alkaline status. The kidneys are aided in this by lung function. One nutrient that aids the kidneys in maintaining an acid-alkaline balance is adequate complete protein from animal foods. The popular method in acid-alkaline circles of measuring urine or saliva pH does not reflect the blood pH. For more information, read Chris Kresser's excellent articles¹ that explain the science that invalidates the myths of the acid-alkaline theory.

NECESSARY NUTRIENTS

The ironic fact is that many of the foods that people restrict in their diets are necessary for the proper functioning of the organs of elimination, and cutting such foods out of the diet weakens these organs.

Protein in the concentrated forms of meats is needed for colon health. Cholesterol is needed for liver and gall bladder function. Saturated fats aid the functioning of the kidneys, colon and lungs. Sugars and starches are needed for the liver and all the organs.

For many reasons, people may feel good when they first embark on one of the restricted diets. One major reason is the rush of energy that comes from the catabolic hormones, adrenaline and cortisol. These hormones liberate energy into the body and mind. Initially, this stress reaction feels good. Reducing chemicals, pesticides, and high amounts of refined sugars is another reason for people's positive experience. Eating more vegetables as the acid-alkaline and vegan proponents suggest is a healthy practice.

Eventually, though, most people fail with all dietary restrictions whether it is carbs, sugars, or meats. The body needs an array of nutrients to function well. My experience from carrying out thousands of personal health consultations is that the body needs all the macronutrients carbohydrates, fats, and proteins—in substantial amounts, with smaller amounts of vitamins, minerals and other nutrients.

Appetite, taste and an understanding of the overall effects of foods are the best indicators as to what we should eat. It is important that no major category of food be left out. Even people who are eating traditional nutrient-dense foods should vary the frequency and quanity in the diet of the important and necessary concentrated foods such as liver, butter, meat and other similar foods to ensure long-term health. One size never fits all. A nutritionally complete diet with variability over time is important for everyone. The worst of the extreme diets that are promoted for cleansing and health are zero-carb and all raw. In zero-carb diets, the body is starved of a major energy source, carbohydrates, while on all raw diets, complete proteins, calories, and many nutrients are missing. Depending on one's health condition, different types of carbohydrates and some raw foods are helpful.

Some foods cause real health problems for people, such as artificial sweeteners and the industrially produced polyunsaturated vegetables oils—corn, soy, and others. Certain natural foods such as unfermented soy show evidence of harm if eaten regularly or in large amounts.

Some people are allergic or highly sensitive to foods such as gluten, dairy products and even the nightshade family (tomatoes, potatoes, etc.). In my own consultation practice I suggest that people avoid foods that they are sensitive to with one exception. Often a person who has not eaten a food for months or longer, will react negatively to it. This happens to many people after a long period of avoiding gluten, sugar, carbs, meat, dairy or other natural foods. After reintroducing the restricted foods over an appropriate amount of time for each individual, most do fine eating them again.

THE MYTH OF CALORIE RESTRICTION

Many cleansing approaches recommend intended or unintended calorie restriction by juicing or other methods of fasting, green smoothie meal replacements and drinking excessive amounts of water. The major problem with these approaches is that by reducing calories the metabolism drops. When the metabolism drops by undereating, all bodily functions decrease. As the metabolism drops, elimination slows down. The major myth about fasting is that it causes your body to dump toxins. The only truth to this is that when you put your body in a stress mode by calorie or nutrient restriction, or other methods such as extreme exercise, there is a temporary increase in stress hormones. The stress hormones speed up all functions of the body including elimination. This stress "honeymoon" doesn't last. With the repeated stressors of calorie or nutrient restriction, bodily functions slow down.

The kicker is that if a person has been under

repeated stress from nutrient-deficient diets, poor lifestyle habits, or habitual negative thinking, there is no stress honeymoon. Any added stress such as calorie restriction drops the function of the body even further. Elimination and all body activities slow down in these cases. Many modern people and health food followers have already pushed the stress envelope. In these cases, their health will only continue to worsen.

There are additional concerns for health regarding the abovementioned methods beyond those of calories. Green smoothies contain goitrogens (from cruciferous plants such as kale) in concentrated doses. Goitrogens suppress the function of the thyroid, which lowers the metabolism and weakens the elimination of toxins in addition to all other body functions.

Juicing, smoothie meal replacements, and excessive water consumption add large volumes of liquids to the body. The excess liquid dilutes sodium and causes swelling in the cells, leading to a condition known as hyponatremia. This also causes the metabolism to drop, slowing down elimination and all bodily functions.

DEEPER CLEANSING

As you can see, the most popular cleansing methods are worthless at best and dangerous at worst. Real cleansing is effected by a balanced, nourishing diet, a healthy lifestyle, a positive mental attitude, and doing what you really love in life.

In my health counseling practice, I employ a form of East-West visual, touch and symptom diagnosis to understand the detox or cleansing needs of my clients. In Eastern diagnostic systems, there is a holistic idea that a person's overall health condition affects that person's wellbeing.

There are certain states of health that benefit from strongly stimulating the organs of elimination to function more robustly. Certain herbs, foods and supplements can accomplish this.

Other types of health conditions benefit from a fundamental strengthening or toning of the organ functions. Certain foods, herbs, and supplements can foster the strength of the eliminative organs: kidneys, colon, liver, and lungs.

Stimulating the eliminative organs to become active can weaken people who have an overall nutritional or energy deficiency. For the majority of people, a better cleansing method is to eat and live in a way that best supports the healthy functioning of the body.

A diet that supports proper elimination needs ample calories to fuel the metabolism, adequate protein from natural animal foods to support organ functions and structures, saturated fats, adequate carbohydrates from grains, sweet vegetables, tubers, and fruit with moderate amounts of fiber, cooked and raw vegetables, and natural sugars. A diet that is primarily natural, organic and wholesome is best. Natural seasonings, healthy beverages, optional moderate alcohol intake and other wholesome foods round out this healthy regimen. An occasional intake of not-so-healthy foods will not harm healthy persons or hamper their elimination if their routine, daily diet and lifestyle are sound. Diets that are missing any of the macronutrients of carbohydrates, proteins or fats are the worst for our body's natural detoxification systems.

FURTHER CLEANSING METHODS

Other cleansing methods that are popular today range from worthless to harmful for health. These methods include vigorous exercise and sweating, colon cleansing, coffee enemas, eating more fiber, laxatives, and the liver-gall bladder cleanse.

SWEATING OUT TOXINS:

Moderate to high intensity exercise done over a sustained period of time is recommended to induce sweating to get rid of toxins. Advocates think that toxins will be released in the sweat. The truth is that toxins are not released in sweat. Sweat is composed of water and small amounts of salts, proteins, carbohydrates and urea. The main purpose of sweating is to lower the core body temperature. Exercise done in this way can lower the ability of the kidneys to excrete urine thus reducing the amount of toxins excreted. In addition, sustained exercise if overdone lowers the metabolism, thus lowering the body's ability to excrete toxins.

Exercise that raises the metabolism would increase detoxification. Such exercise includes weight training and high intensity interval training. Two to three times per week is enough to obtain benefits.

STARBUCKS ENEMAS:

Flushing water through the colon is promoted as a cure for all kinds of ills. As with most things in health and life, the proof is in the pudding. If someone finds coffee enemas helpful, I think it is best to employ this on a limited basis for a short time. In ancient Ayurveda, enemas were given very cautiously. Weak people were not given enemas as it was thought to drain too much energy or life force from the body. From my clinical experience with thousands of clients, I feel there is wisdom to this idea.

HIGH FIBER CLEANSE:

Eating more fiber is thought to help stimulate the bowels to increase function. Fiber, especially in the form of whole grains, creates tears in the bowel that stimulate it to move. Over time, these tears can create high inflammation and lower the function of the bowels.

The original fiber theories are flawed. I suggest Anthony Colpo's excellent e-book, *Whole Grains, Empty Promises* to learn more about fiber's sordid history. Whole grain brown rice was never eaten in Asia. Traditional methods to hull rice in Asia removed much of the fiber from brown rice and other whole grains.

Fiber advocates state that plaque and other material build up in the colon and that fiber removes it. Serious researchers and autopsists have investigated this matter and have not found evidence of mucoid plaque or any other sort of residue or buildup in the intestines. Consuming fiber in large amounts fills you up before you have eaten enough calories to fuel the body. This is not good as it lowers all body functions. I mentioned a low metabolism as a consequence of many of the cleansing methods. This is a real issue because many degenerative diseases including cancer and heart disease have been linked to a low metabolic state. Lastly, fiber can irritate the colon when taken in excessive amounts.

LIVER-GALL BLADDER CLEANSE:

Lastly, is the liver-gall bladder cleanse. It is still circulating among health seekers despite the fact that it is physiologically impossible, unpleasant to do, and the results don't hold up to the promises.

This cleanse has many variations. The central feature is drinking large amounts of lemon juice and olive oil. People swear that the little green balls that are discharged in the stool are gall stones. They are, in fact, saponified, or soapy, olive oil balls.

The gall bladder is a very small organ. At maximum capacity, it is three inches by 1.5 inches. The amount of green blobs expelled during this cleanse is more than the gall bladder can hold. Olive oil, not gallstones, as advocates of the cleanse think, is being discharged. Another claim for this cleanse is that more bile with toxins from the liver is being produced. The liver cannot produce more bile in response to large amounts of olive oil ingested. Fewer globs are expelled if the cleanse is repeated. Proponents think that this means you have no more stones. What it really means is that your body has adapted to you consuming large amounts of olive oil.

The major danger of the liver-gall bladder cleanse is irritation to the colon. Large amounts of olive oil taken at once, sometimes with a large amount of apple juice, create inflammation in the colon.

When the body is in a stress mode, all systems of the body lose their proper functioning. Natural lifestyle practices along with diet aid in countering stress. The right amount of moderate exercise, being outside especially in the sun, stress-reducing practices such as yoga, meditation and quigong, good sleep, engaging in activities, including work, that you love, and a good mental approach help us to thrive and quickly restore balance in times of stress. These activities keep the metabolism high to fuel proper detoxification.

Some people need extra nutrients and herbs to aid in detoxification and natural cleansing. Cleansing nutrients and herbs include vitamin C, alpha lipoic acid, B-complex vitamins, milk thistle, dandelion root, and triphala (an Ayurvedic herbal combination).

The elements of health listed above support the body's natural cleansing ability. Unlike the dangerous cleansing methods that are popular and outlined in this article, the marvelous side effect of eating and living in a healthy way that supports detoxification is vibrant health.

John Kozinski has been a pioneer natural health teacher, author, and researcher since 1976. Education and diagnostic techniques are rooted in his clinical experience with 40,000+ students and clients. John resigned in 2013 from the Kushi Institute faculty after 27 years. To address catastrophic illness that developed in those following restrictive natural diets John reveals in a new training program his clinical experience and research into what was really working and why for people following popular diets. This education gives teachers, health practitioners, and students new skills to help evaluate and treat a wide variety of health conditions both naturally and complementary to medical treatments. www.macrobiotic. com (413) 623-5925.

RESOURCES

- 1. Chris Kresser: http://chriskresser.com/the-ph-myth-part-1 http://chriskresser.com/the-acid-alkaline-myth-part-2
- 2. Anthony Colpo "Whole Grains, Empty Promises" eBook
- 3. Hyponatremia http://en.wikipedia.org/wiki/Hyponatremia
- Jean Michel-Cousteau:Call of the Killer Whale (1:18:18 Pilot Study Results)http://video. pbs.org/video/1099394282/
- 5. http://www.ncbi.nlm.nih.gov/pubmed/18156662

TWO PROGRAMS OF DETOXIFICATION

ELIMINATING EXCESS

In my clinical experience, the visual signs that indicate a condition that needs more eliminative herbs, supplements or foods are the following: a consistent overly loud voice, a red face, hard and rigid pressure points used in acupressure or oriental medicine, strong body odors, a strong pulse, and a thick yellow coating on the tongue. In oriental medicines, these are signs of heat from excess energy. In diet, this excess condition arises from over consumption of poor quality foods such as meats, vegetable oils, commercial cheeses, and a lack of vegetables and fruits over many years.

A person with this type of condition can benefit from taking in foods, herbs and supplements that stimulate the liver, large intestine, and kidneys to function more strongly. Lighter forms of animal foods such as poultry and fish, raw vegetables and fruits, beets, fermented drinks that are stimulating such as kombucha and beet kvass will cool the body through the stimulation of these elimination organs. Higher doses of vitamin C and bitter herbs such as dandelion and Oregon grape root will also stimulate these organs to eliminate the excess energy. How long a person emphasizes these foods, herbs and supplements depends on the degree of excess in the body.

STRENGTHENING DEFICIENCY

Signs of deficiency include a weak voice, pale skin, a slumping posture, weak pulse, pale tongue, lack of vitality, clear urine, thin cheeks, and dark circles or bags under the eyes. These signs indicate the person has either been running on empty (not eating enough), using stimulants such as coffee, drugs, and sugars to function, or has not been eating nourishing foods.

Habits that create this condition include eating a nutrient-deficient and/or calorie-deficient diet or a diet that is lacking the maxi nutrients such as proteins, fats, and carbohydrates. People who have been on vegan or raw foods diets for many years or those who have the habit of under-eating, dieting, not eating adequate animal products, not getting enough sleep, over-exercising or working long hours will create a condition of energy drain or deficiency.

This type of person needs to eat a nourishing diet of properly prepared whole grains, cooked vegetables, natural animal foods and dairy at every meal including naturally-raised beef and lamb more often, saturated fats, less sweet foods and no raw foods until the strength of the body and mind returns. Rest and sleep are essential.

Digestive aids in the form of pancreatic enzymes, Chinese formulas containing ginseng or ginseng-like roots such as Ten Tastes Tea, cod liver oil, liver pills and B_{12} are helpful to restore this kind of deficient state.

Toxicity and Chronic Illness

by Mark Schauss, MBA, DB

Rates of asthma, childhood cancers, birth defects and developmental disorders have exponentially increased, and it can't be explained by changes in the human genome. So what has changed? All the chemicals we're being exposed to."¹

The issue of toxicity and our children was most disturbingly reported by the Environmental Working Group's release of an investigation called Body Burden in July 2005.² The report revealed that they detected two hundred eighty-seven chemicals in the cord blood of newborn babies, one hundred eighty of which are known carcinogens, two hundred seventeen of which are known neurotoxins, and two hundred eight of which have been shown to cause birth defects or abnormal development in animals. This insult to newborns is unprecedented in human history and lays the groundwork for a dramatic upswing in chronic illnesses as these children mature into adulthood.

The cost of managing chronic illness in the U.S. alone is staggering. Estimates from the Centers for Disease Control put the number at nine hundred eight billion dollars a year.³ Three out of every four dollars spent in today's healthcare system is on chronic illness.⁴ Obesity has become epidemic, which is a grave concern to health experts as it dramatically increases the risk of developing coronary heart disease and diabetes. The most disturbing part of this situation is how it is affecting the young. Over the past twenty years, the rate of obesity amongst two- to elevenyears-olds has almost tripled while in twelve- to nineteen-year-olds it has tripled.5 One in three children born today is likely to develop type 2 diabetes in his or her lifetime.6

If we do not face the reality of the cost—both in dollars and in suffering—of chronic illness, our society faces a crisis far greater than the threat of terrorism. In 2004, I gave a speech in Bellevue, Washington where I proposed that the healthcare system in the U.S. would financially collapse within twenty years if this emergency of chronic illness was not addressed and dealt with. No amount of healthcare reform would resolve this catastrophe.

Much can and needs to be done in order to deal with the issue of chronic illness, and the first step is to acknowledge the problem with environmental toxicity. Rachel Carson warned us in 1962 in her landmark book, *Silent Spring*.⁷ It would eventually lead to the formation of the Environmental Protection Agency a decade later, but now we are faced with a government more interested in corporate profits than in the health of its citizens as legislation is being drawn up to strip the EPA of much of its power.

The only way for people to have their voices heard is through education, personal responsibility, and the power of the purse. If we educate ourselves as to which toxins we are exposed to and how to avoid them through our choices as consumers, we can make the necessary changes. In this article I hope to inform readers on how to protect themselves and their families as well as society as a whole.

Before we delve more deeply into the subject of toxicity and chronic illness we need to define the term toxicity and the study of it, toxicology. Here I would like to quote the authors of *Prin*- *ciples of Toxicology*, Drs. Karen E. Stine and Thomas M. Brown, "Toxicology is the science of poisons and has as its focus the study of the adverse effects of chemicals on living organisms. Although any substance in sufficient quantities (even water) can be a poison, toxicology focuses primarily on substances that can cause these adverse effects when administered in relatively small quantities."⁸

While the topic of toxicity and how it affects human health is a complex and difficult one, I believe that if you know your enemy (toxins) you are better able to defeat them or avoid them.

HISTORICAL PERSPECTIVE

When we look at the historical records we find that humans were aware of substances that adversely affected our health for millennia. The ancient Romans were well aware that the smokestacks that belched toxic fumes from metal smelting caused birth defects. The writer Strabo commented that they needed to build taller and taller chimneys to force the fumes further from the cities.⁹ By looking at the ice caps in Greenland we have noted that lead levels in the atmosphere during the time of Roman prominence were much higher than the times immediately before and after.¹⁰

It has also been postulated that the fall of the Roman Empire was in part due to their exposure to lead.¹¹ Much of this came from lead-based goblets and water pipes, especially those used by the wealthier citizens. We now know that lead, even in the smallest doses, can lower IQ, especially in children.¹² In a paper published in *The New England Journal of Medicine*, the authors saw that drops in IQ were higher even in the lowest exposure levels. Their conclusion was that no level of lead is acceptable in children.

Other civilizations have grappled with toxicity problems but none in quite the same quantity as in today's world. If even small amounts of toxins can cause neurological problems, why are we not surprised by the explosive increase in disorders like autism and ADHD in children and Alzheimer's and Parkinson's in adults?¹³

While heavy metals have a long history with human populations, petrochemicals do not. Although the use of petroleum goes back thousands of years, its uses were limited. It wasn't until If we educate ourselves as to which toxins we are exposed to and how to avoid them through our choices as consumers, we can make the necessary changes. What we are beginning to understand is how our actions today will affect the lives and health of children who will be born twenty to fifty years from now. 1847 when Scottish chemist James Young was able to distill petrochemical byproducts that its use vastly increased.¹⁴ From the 1850s through the early 1900s, production began to ramp up dramatically worldwide. What few knew was how toxic these chemicals are.

In the twentieth century society began to regulate the uncontrolled release of toxins into the environment, but that was for gross amounts. What we face today is a world where we come into contact with more than eighty thousand chemicals, many of which have not been tested for safety.

THE MOST VULNERABLE

All of us are vulnerable to the effects of environmental toxicity, but those most susceptible are the unborn and the very young. Before a child is even conceived, the effect of toxins can influence their propensity for developing any number of chronic illnesses, especially neurologic ones. The concept, known as transgenerational epigenetics, and which has been proven in numerous studies, says that an exposure to a toxin can cause an illness to future generations even if the individual is never exposed to the toxin again.²⁰ There are studies showing this effect on obesity. Women exposed to certain toxins increase the risk of obesity to their offspring as well as to numerous generations in the future.²¹One study suggested it could carry out to twelve generations.²² Exposure to DES (the synthetic estrogen diethylstilbestrol) can epigenetically cause a greatly increased risk of developing reproductive tumors in future generations.

how our actions today affect the lives and health of children who will be born twenty to fifty years from now. They are susceptible to any number of chronic disorders before their existence is even imagined.

The next most vulnerable groups are those who are about to be born, neonates, and infants. Studies on one family of toxins called phthalates, which I will revisit later, indicate they can affect gonadal development, impair socialization, and cause endocrine disruption.²³⁻²⁶ We are still in the early stages of our understanding about how a child's risks of developing chronic illnesses during adulthood are affected by environmental toxins.

It is well known that there is an epidemic of childhood obesity, unprecedented in human history. According to one study, in 2003–2006, 31.9 percent of two- to nineteen-year-olds had a BMI (body mass index) greater than or equal to the 85th percentile for age and sex.²⁷ Children who are already obese are at increased risk for developing type 2 diabetes, cardiovascular disease, stroke, and potentially cancer.²⁸⁻³⁰

So what is causing this epidemic in children? First off, we know that their diets need a lot of work. They consume far too much sugar and other unhealthy foods along with not getting enough exercise.³¹⁻³³ But there is another factor that is causing our children to become overweight, and that is the environment. The number of studies that have linked obesity to environmental toxicity is staggering. A paper I urge everyone to read is entitled, "Environment and Obesity in the National Children's Study" by Dr. Leo Trasande, et al. It is from the pres-

What we are now beginning to understand is

A PLETHORA OF TOXIC EXPOSURES

It would be hard to cover all of the major environmental toxins in one paper, or for that matter in one book. This paper will focus on the major culprits that affect chronic illness. Some of them are released into the atmosphere in enormous quantities. Here are some prime examples:

- An average of 2.3 billion gallons of benzene, a known carcinogen, are produced each year in the U.S. alone.¹⁵
- Fifty-six billion pounds of styrene, another petrochemical, which is used to make Styrofoam and is a known neurotoxin, are released into the environment each year in the U.S..¹⁶
- Over 1.3 billion pounds of one of the most toxic phthalates (a plasticizer) are released into the environment.¹⁷
- An estimated twelve million pounds of arsenic and arsenic-related compounds (a toxic heavy metal) were released into the environment in 1999.¹⁸
- Dentists use approximately forty metric tons of mercury a year. They are the largest source of mercury in our wastewater treatment plants.¹⁹

tigious journal *Environmental Health Perspectives* and can be found online at ehp.niehs.nih. gov/11839/#b78-ehp-117-159.

This matter is such a sober concern that a twenty-one-year prospective study was proposed to examine one hundred thousand children. The National Children's Study unfortunately was halted in 2014 due to funding troubles as well as the difficulties of determining what the researchers were seeing. No doubt, industry pressure was involved as well.

The elderly is another group exceedingly vulnerable to the effects of toxicity. This part of the population is increasing rapidly and for the first time in human history soon there will be more people over the age of sixty-five than are under the age of five.³⁴ Because they have been around a long time, they have been expoxed to toxins for a long time. Toxins are known to increase oxidative stress which increases the risk of cancer and cardiovascular disease.³⁵

We have only recently been faced with the problems of toxicity and aging as many people in earlier times succumbed to infection, injury or illness before they reached an advanced age.³⁶ Now with expanded life expectancy and the dramatic increase in environmental toxic exposures, we must meet new challenges. We are still working under an old and outdated medical model. Few healthcare providers look at toxicity as a cause of many chronic health disorders and instead look to managing illnesses, such as type 2 diabetes. Focusing on the root cause of disease, especially when environmental in nature, may result in a longer and healthier life.

Another great concern when talking about our aging society is of course cognitive function as it relates to toxic exposures. An example: as with children and lead we are becoming increasingly aware that the elderly lose cognitive function when exposed to this heavy metal.³⁷ Alzheimer's disease is rapidly becoming an epidemic. In 2014, over five million Americans were diagnosed with the disease. In 2050, the number is expected to rise to over fifteen million.³⁸ A number of studies link different environmental toxins to this rise. One such study links the exposure of a fetus to lead to a far greater propensity to develop β -amyloid plaque when they get older.³⁹ This plaque has been implicated in the development of Alzheimer's.

As you can see, children and the elderly present unique challenges regarding the effect of environmental toxicity. In the article, "Aging Society and Environmental Health Challenges," author Yun-Chul eloquently states that "Children are not just smaller adults, nor are the elderly just older adults; they are individuals with unique challenges and medical needs different from those of younger adults." ^{40,41}

THE TOXIC OVERLOAD

We've established that environmental toxins are all around us, but which ones should we be most cautious about and what are their sources? Can we reduce our load and exposure to prevent chronic illness or at least avoid as many of these toxins as possible?

PHTHALATES

Phthalates are a group of chemicals used to soften and increase the flexibility of plastics. They are also heavily used in personal care products, especially those that are scented. You will also find them in air fresheners that use heat to release the aroma. Even if you avoid all of these sources, you will be exposed because phthalates do not bind very tightly to the plastics and therefore are released into the atmosphere quite easily. This means that the main sources of exposure are inhalation, dermal absorption and ingestion.⁴²

Several recent studies have revealed that many of the metabolites of phthalates (DEP, DnBP, BBzP, and DEHP) are found extensively in the general population.^{43,44} There is evidence that the exposures also have socioeconomic and sociodemographic divides, which place a greater burden on children of the poor.^{45,46}

One of the mechanisms behind phthalate toxicity is its depression of testosterone. Growing evidence shows that phthalate exposure may express its effect on reproductive health, especially in developing males.^{48,49} It has also been implicated in miscarriages and birth defects.

Arguments against phthalate's toxicity include its relatively short half-life, which is less than twenty-four hours.⁵⁰ This assertion does not hold true, as we are constantly exposed to the chemical; thus, its effects are persistent, with a percentage of the population having unacceptFew healthcare providers look at toxicity as a cause of many chronic health disorders and instead look to managing illnesses, such as type 2 diabetes. BPA is a very big business and there is strong resistance to its being banned; however, pressure is mounting because of the growing number of studies demonstrating its toxicity. ably high levels of phthalates.51

The question is how to avoid exposure. To begin with, it is important to make sure that the personal care products you use do not contain them. A resource to find out which toxins are in your products is available through the non-profit Environmental Working Group at www.ewg.org. The site offers a database called "Skin Deep" which rates various products, lists their toxins, and suggests safer alternatives. Another quick tip to detect phthalates is whether the product emits an aroma; if it does, it likely contains this toxin.

A few years ago, I received a call from a physician at a midwestern university who was concerned that she was finding more and more males between the ages of eighteen and twentyfive with testosterone levels you would normally find in fifty- to sixty-year-olds. When we began testing we found that almost all of the young men with high phthalates had low testosterone. To me this was not a surprising finding given the popularity of body sprays.

The third major source I would caution you on is soft plastics like those used in water bottles. Phthalates are very heat sensitive, and if you ever suspect that a bottle has gotten hot, such as being left in your car during the day, discard it. When Whole Foods opened in Reno a number of years ago, they had a display of bottled water outside the store when the temperature was over 90 degrees F. I called the assistant manager and informed him that this was a good way of increasing the toxic load of his customers and that it might be a good idea to change the display.

BENZENE

The "-enes" are a family of petrochemical refining byproducts (benzene, xylene, toluene, and styrene). They are also found throughout the environment. Benzene is the most carcinogenic and one of the reasons why smoking is so dangerous.⁵² An estimated fifty percent of the public's exposure to benzene is due to cigarettes.⁵³ The other exposures come from automobile exhaust, predominantly from diesel-powered vehicles.

In a report written a number of years ago, researchers found trace amounts of benzene in sodas that were formulated with vitamin C and sodium benzoate, a common preservative.⁵⁴ When confronted with the problem, many of the

manufacturers reformulated their products, not by eliminating the obvious source of benzene, sodium benzoate, but by removing vitamin C, which had caused a chemical reaction converting some of the benzoate into benzene. Mind you, vitamin C is also a preservative, but blame for the chemical conversion was laid to the vitamin.

Benzene itself is the most toxic of this group having been linked to an increased risk of leukemia.⁵⁵ A byproduct of diesel fuel combustion, it has also been implicated in neural tube defects, decreases in birth weight and head circumference during pregnancy and at birth, and impaired mental development in fetuses.⁵⁶ Fortunately, it seems that some of these toxic effects can be mitigated with a diet high in antioxidants.⁵⁷

XYLENE

Xylene is a very common petrochemical available at any home improvement store as a paint thinner and remover. It is also found in certain nail polishes, rust preventives, shellacs, air fresheners, degreasing cleaners, as well as cigarette smoke and carpet adhesives.⁵⁸

Pesticide manufacturers add xylene to their products and claim that xylene is an "inert" chemical. You can go to your local hardware or home improvement store and see for yourself. Now to be fair, xylene is far less toxic than the actual pesticide. The main reason for xylene's use as a carrier is its ability to penetrate wood, brick, and the soil to carry the poison to the pests. Of course, this ability to penetrate hard materials also makes it much more likely to be absorbed through your skin.

Xylene is a known carcinogen and neurotoxin that increases the risk of miscarriages and birth defects.⁵⁹ The recreational use of alcohol should be avoided at all costs for anyone with xylene toxicity as it impairs the body's ability to detoxify.⁶⁰

TOLUENE

Toluene is the "anti-knock" agent that replaced lead in gasoline back in the 1970s.⁶¹ While significantly less toxic than lead, it is still a suspected carcinogen, endocrine disruptor, and interfering factor in fetal and childhood development.⁶² The U.S. produces about three million tons of toluene annually, which amounts to one-third to one-quarter of the world's total production.⁶³

The best way to find out what products contain toluene is to go to the National Library of Medicines' Household Products database at householdproducts.nlm.nih.gov/. Avoidance is important in lowering your exposure.

STYRENE

Styrene is one of the most prevalent of all of the "-enes." It is found in Styrofoam, which is ubiquitous in our everyday lives. While the least toxic of all, when added to the overall chemical onslaught we are exposed to, it compounds the demands made on our detoxification systems. Styrene was detected in the blood of Americans as a chance discovery in the 1970s. The first test to look specifically for styrene in the blood was done in 1982 and has continued to show the same ubiquitous results to this day.⁶⁴

With this class of toxins, the best way to help detoxify the is using the simplest amino acid, glycine. During Phase I detoxification, the chemicals are transformed into a benzoate compound. In the case of xylene and toluene they become 2- or 3-methylbenzoate, a chemical more toxic than the original one.⁶⁵ Luckily for us, glycine has a strong affinity for benzoates and conjugates (binds) with them to create a hippurate molecule like 2- or 3- methylhippurate, which is easily excreted in the urine.

The conjugation of glycine to benzoate to create hippurate is the oldest known biosynthesis, first reported in 1842. Students in the early days of toxicology would ingest sodium benzoate and glycine and then measure the levels of hippurate.⁶⁶

If you think you've heard about glycine from the Weston A. Price Foundation, you're right. The main and best source of glycine is in the collagen-rich unctuous food known as bone broth. Collagen is about fifty percent glycine, so every time you drink a cup of broth you're helping your body detoxify itself. If you need to supplement glycine, it should be taken at a dose of about three to five grams per day for an adult and one to three grams daily for a child under age twelve.

BISPHENOL A (BPA)

Another toxin that we come in contact with on a daily basis is bisphenol A (BPA). It is used to stiffen plastics so you find it in harder plastic bottles. You will also find it in the lining of canned food as well as on store receipts. Absorption through the skin and ingestion are the two main ways it enters the body, but inhalation is also a possibility because of the sheer volume produced, about 1.6 billion pounds annually.⁶⁷

This estrogen mimicker was first discovered in 1891 as a major building block in what is now known as polycarbonate plastic, but it was first found to be estrogenic in 1936.⁶⁸

One of the main problems with bisphenol A is that it is a reproductive toxin. Not only does it affect the female ability to reproduce because of its estrogenicity, but it has been shown to affect men as well.⁶⁹ The industry argues that the amounts of bisphenol A humans are exposed to and assimilate are minute and therefore not a significant threat to health. They cite a single study.⁷⁰ Other researchers are bewildered by this assertion as the number of studies showing quite the opposite effect is numerous.⁷¹⁻⁷³

BPA is a very big business, and there is strong resistance to its being banned; however, pressure is mounting because of the growing number of studies demonstrating its toxicity. In what I would call a classic "bait and switch" tactic, many manufacturers are removing BPA but replacing it with bisphenol S and F, which have had extremely limited testing and which, in the end, may not be deemed less toxic.

The best way to deal with this ubiquitous toxin is avoidance. First, avoid using canned goods. Can linings contain BPA and it has been shown to leach into the food.⁷⁴ The second source and more difficult to avoid is from store receipts. When asked if you want the receipt in the bag, say yes. When asked if he wants his receipt at the grocery store, one of my friends, who is a world renowned trainer, typically says, "No, I'm trying to give them up."

When it comes to reusable water bottles, because of the switch from BPA to BPS or BPF, many sellers of these products proudly put "BPA Free" on the label, but does that make them non-toxic? Maybe or maybe not. My recommendation is to use glass bottles whenever possible, or stainless steel as long as they are not lined.

HEAVY METALS

I could devote an entire article to the subject of heavy metals. Our knowledge of the dangers of heavy metals like mercury, lead, arsenic and cadmium is extremely thorough. Because of the constraints on the length of this article I will only briefly cover two of them, lead and mercury.

LEAD

Lead toxicity has brought down a mighty civilization (the Romans) and has damaged the brains of countless millions of people. According to the CDC, there is no level of lead that is acceptable in children.⁷⁵ Yet we have tens of thousands of tons of lead in our soil and atmosphere as well as in ground waters because of our indiscriminate use over the past few thousand years.

The major sources of lead contamination before 1970 in the United

Given the fact that we all have toxins in our systems, the testing method I recommend is looking at what we are excreting. States were paint and gasoline fumes.⁷⁶ While banned at that time, it persists in our environment to this day. Anytime an old house, office, or apartment is renovated the dust that is released contains lead, due to its use in white paint. The research focus on lead should be shifted from what the effects are into detoxification strategies including, among others, chelation therapy.

MERCURY

Mercury is one of the most toxic of all heavy metals; mercury exposure and its effect on chronic illness is an ongoing issue. We have extreme exposures such as those at Minimata Bay in Japan between 1953 and 1960, where a large number of deaths and congenital birth defects were documented.77 This is an example of a high-level exposure, but there have been numerous other studies showing that low levels of this toxic metal, especially methyl mercury, have wide ranging effects on fetal development, cardiovascular disease, cognitive function and other chronic illnesses.78 The authors of this study, led by Karagas, warned that while there is some evidence on low-level effects, more research is needed. In my personal opinion, much like with lead toxicity, the evidence should point us primarily towards the treatment of mercury toxicity and further research into its effects on chronic illness.

HOW TO DETERMINE YOUR TOXIC LOAD

Since 1996, I have been looking at different testing protocols to determine toxic loads in people. For many years, fat biopsy and blood tests were the gold standard, and to many, they still are. I feel that this approach is no longer necessary as it is expensive and painful. Why, you might ask? It is because we all have a large number of toxins in our bodies as we have seen in this article.

Unfortunately, in today's medical environment, little thought is given to finding the causes of chronic illness. Instead, the main focus is on management of the disease once it has appeared in an individual. This ill-advised strategy is one of the main reasons why our healthcare system is overwhelmed and expensive.⁷⁹ Seven out of ten deaths are due to chronic illness, often due to lifestyle choices, but in many cases are owing exposure to environmental toxins.80

Since we all have toxins in our systems, the testing method I recommend is looking at what we are excreting. The body has three main excretion avenues to rid itself of its burden. First is through the skin, second through feces, and third through urine. Urine analysis generally provides the most helpful results, although in the case of screening for heavy metals, fecal testing is also very useful.

Urine testing is beneficial in determining the level of exposure to petrochemicals and their by-products, and in many cases, the source. There are two commercial laboratories in the U.S. that do an excellent job of testing urine for toxins: U.S. Biotek (usbiotek.com) and Genova Diagnostics (gdx.net).

Over the years I have used the U.S. Biotek test extensively because of its ease of use. Using your first morning urine, you dip a dry strip into the collection, allow it to air dry for a few minutes then put the dry strip into a bag of desiccant and into an envelope for mailing. Within a few weeks you get the results for the markers for styrene, benzene, toluene, trimethylbenzene, parabens, phthalates and monoethyl phthalates. A comprehensive interpretation is also available which will provide you with safe and scientifically validated detoxification protocols along with listings of potential sources of exposure.

There is one more test that is quite important. It is the LEAP-MRT from Oxford Biomedical (nowleap.com). Xenobiotics (toxins) are a leading cause of inflammation which in turn triggers many chronic illnesses. They are also the main reason why people react badly to foods and food additives. If we take the path of detoxification, we also need to address any underlying inflammatory reactions until we are clear of the toxins.

LEAP-MRT is a blood test that looks at inflammatory reactions to food and food additives. When my daughter took the test at age nine and followed the recommended diet, her seizure activity dropped by eighty percent within five days. Since then, I have seen countless people show dramatic improvement in their health after detoxifying themselves and removing inflammatory foods from their diets.

CONCLUSION

Chronic illness in the Western world and in particular the U.S. is reaching epidemic proportions. Exposure to environmental toxins is one of the leading causes of this crisis in health. It is imperative that each and everyone be aware of the toxins they are exposed to, how to avoid them, and how to detoxify themselves. Choosing less toxic products will send the strongest signal possible to manufacturers of consumer products that the status quo is simply not acceptable.

Organizations like the Weston A. Price Foundation and the Environmental Working Group are at the forefront of education and activism in dealing with this plague of toxicity. All of us must be proactive in this venture. If we aren't, the health and very future of our species are in peril.

Mark Schauss, MBA, DB is an internationally acclaimed lecturer on the effects of environmental toxicity on human health, cognitive issues, the use of laboratory testing and how to interpret the results in a clinically relevant manner. Through his research he has gained a comprehensive insight into a range of neurological disorders and other health problems. Currently the president of Lab Interpretation LLC, in Reno, Nevada, Dr. Schauss has lectured on the subject of laboratory testing, brain function and environmental health issues throughout the world.

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Reviving Health through Gentle Detoxification

by Kim Schuette, CN

ften when one thinks about detoxification, images of a rigid three-day juice fast or grueling days of drinking nasty pre-packaged concoctions come to mind. Detoxification is the physiological removal of metabolic waste and exogenous toxins from the body. It is in fact a process, and not an event.

Detoxification is an ongoing function carried out by the numerous emunctories of our very complex body. *Emunctories* are organs of elimination; the word has its origin in the Latin *emungere* which means "to cleanse" and refers to tissues and organs that excrete toxins from the body. These organs include the liver and gallbladder (bile excretion), the kidneys (urination), the lungs (carbon dioxide), the colon (defecation), and the skin (perspiration).¹ Our sovereign organ for detoxification is the liver.

The liver is the chief organ responsible for breaking down both endogenous and exogenous toxins every second of our lives. It works in concert with the kidneys and colon as well as the lungs and skin to ensure that toxins leave the body as quickly and efficiently as possible. The liver filters blood, removing chemicals, excess hormones, viruses and bacteria. Additionally the liver is called upon to metabolize drugs and chemicals and to break down alcohol. It also plays a key role in the digestion of fats, proteins, and carbohydrates, and acts as a storehouse for vitamins, minerals and sugars. There is no better way to ensure optimal detoxification than to nourish the body properly. In this article we will take a three-pronged approach to aiding gentle detoxification. The three principles we will focus on are nourishing the body, protecting the body and supporting the body. In each of these categories we will touch on simple steps in everyday life to enhance the body's ongoing vital task of detoxification. These steps involve both the inclusion of those things that encourage ongoing detoxification and the removal of those obstacles to proper elimination and cleansing of the body. Before we step into the three principles, let's look at the challenges we face in this modern world.

While civilization has brought many gifts to mankind, it has also increased our challenges in the area of disease due to toxicity. Industrialized countries continue to lead the world in attention deficit disorder, allergies, anxiety, autoimmunity, arthritis, bowel disorders, cancer, heart disease, and neurological illnesses. Heart disease and cancer now rank as the two leading causes of death in America. Heart disease claims about 787,000 deaths annually.² The condition is primarily the result of calcification of the arteries, which leads to plaque buildup (the body's attempt to patch arterial lesions). As Tom Cowan, MD, explains, "... we have an epidemic of congestive heart failure in the recent era of lowfat diets." Dr. Cowan goes on to suggest that we return to a diet high in superior animal fats and that we walk regularly.3

It is understood that the root causes of 90 to 95 percent of all cancers are linked to diet, tobacco, stress, radiation and infection.⁴ These are all factors that can be altered by our daily choices through proper nourishment, avoidance of toxic exposures, and gentle supportive therapies.

NOURISH

There is no better way to ensure optimal detoxification than to nourish the body properly. In order for the liver to function at optimum levels, a diet rich in nutrient-dense, unadulterated, non-genetically modified real food must be consumed. This diet should be high in fat-soluble vitamins A, D, E, and K_2 from pastured animals, highlighted by mineral-rich full fat, raw dairy products, homemade bone broths replete in minerals and amino acids, and an abundance of organically grown vegetables, some fruits, and properly prepared soaked or fermented grains. The diet taught by the Weston A. Price Foundation is the ideal diet for optimal detoxification and revival of health.

Over the past fifteen years I have found the short-term therapeutic use of the Gut and Psychology Syndrome DietTM (GAPS DietTM) developed by Natasha Campbell-McBride, MD, to be the best diet for those desiring gentle detoxification of the gut, liver, and brain. The principles of the GAPS Diet are perfectly in line with those of the Weston A. Price Foundation. While the GAPS Diet eliminates the use of properly prepared grains, it allows most people to benefit from their inclusion upon completing the GAPS Diet. The GAPS Introduction Diet, with its emphasis on meat stock, offers a balanced, food-based approach to gently cleanse the body for those serious about using food as their medicine. Upon progressing to the GAPS

WEANING YOURSELF FROM COFFEE

Another important aspect of nourishing the body and removing obstacles to optimal detoxification is eliminating coffee from the diet. Before I lose you, consider the facts: coffee has been demonstrated to dehydrate the body as well as deplete the adrenal glands (and the epinephrine and norepinephrine neurotransmitters).⁵ A well-hydrated body is essential for proper kidney function. Additionally, coffee increases the heart rate and blood pressure.

To avoid uncomfortable side effects of stopping coffee cold turkey, wean off your coffee habit gradually over a four-week period. Reduce coffee intake by 25 percent every seven days. If, for instance, you are used to drinking eight ounces of coffee each morning, reduce this to six ounces each morning for the first week; 4.5 ounces the second week; 3.4 ounces the third week; 2.5 ounces the fourth week, and then you should easily be able to drop coffee altogether after the fourth week.

Increase water intake to 50 percent of your body weight converted in ounces of purified water, lacto-fermented beverage, or broth daily. A pinch of Celtic sea salt may be added to your water to increase its ability to hydrate your cells. Herbal teas to consider as coffee substitutes include rooibos, chicory root, dandelion, and herbal combinations such as Dandy Blend and Teccino.

Full Diet, bone broth is introduced and used to continue the gut-healing process.

All processed, refined, and denatured foods and beverages must be eliminated from the diet. This includes pasteurized lowfat dairy products, refined grains and flour products (not properly soaked or fermented), most vegetable oils, and commercial meats from animals raised in confinement and fed an unnatural diet. I suggest you use *Nourishing Traditions* by Sally Fallon Morell as your guide to transitioning your diet. Reading the first five chapters will give you a plethora of information to establish a diet that will be optimal for a lifetime of gentle detoxification.

Once the GAPS Diet has been completed, a lifetime commitment to the WAPF diet will ensure provision of the nutrients so essential for healthy liver function and overall optimal detoxification. Dr. Price spoke extensively of the disease-free elders of the primitive communities he studied where the diets were very high in animal fats and void of refined sugars and denatured oils. These wise people enjoyed life to the fullest without the suffering so prominent in the aging populations of industrialized countries.

PROTECT

Prudent avoidance of unnecessary pharmaceuticals, vaccines, toxic dental materials, chemicals, known or suspected toxic personal care products, household cleaning products, clothing, and furnishings is another key aspect of supporting your body's ability to carry out its most important task of daily cleansing.

Synthetic hormones in the form of the birth control pill, patches and hormone replacement therapy, including testosterone, deplete the liver of vital nutrients while adding to its toxic load and upsetting the delicate balance of the body's natural steroidal hormones. Other pharmaceutical drugs, including synthetic hormones, disrupt the vital gut flora leading to digestive insufficiency and a poorly guarded mucosal barrier of both the digestive and respiratory tracts.

Perhaps there is no more common source of toxicity than personal care products. These include make-up, skin care, sunscreen, and hair products. Keep in mind that whatever goes on the skin or scalp ends up in the bloodstream and passes into the liver for elimination. The Food and Drug Administration requires no testing of ingredients used in personal care products. Most ingredients used in skin care contain estrogenlike compounds and other hormone disruptors. Many of the chemicals allowed in personal care products are known carcinogens and mutagens.

Our world is inundated with literally thousands of environmental toxins that affect our food, water, air, personal care products, cleaning products, clothing, and furnishings. It is important that we learn to identify major sources of carcinogenic chemicals and eliminate or minimize our daily exposures. There are numerous organizations and sources such as the Weston A. Price Foundation's "Shopping Guide for Finding the Healthiest Foods in Supermarkets, Health Food Stores and by Mail Order" (available through westonaprice.org), the "Find Real Food: the WAPF Shopping Guide for the Highest Quality Foods Available" app, which can be found on iTunes App Store, and the Environmental Working Group (ewg.org) for chemicals in skin care products. You may also go to my website, biodynamicwellness.com and receive "Our Favorite Non-Toxic Products List" at no charge.

SUPPORT

In a study spearheaded by the Environmental Working Group (EWG) in collaboration with Commonweal, researchers at two major laboratories found an average of two hundred industrial chemicals and pollutants in umbilical cord blood from ten babies born in August and September of 2004 in U.S. hospitals. Tests revealed a total of two hundred eighty-seven chemicals in the group. The umbilical cord blood of these ten children, collected by Red Cross after the cord was cut, harbored pesticides, consumer product ingredients, and wastes from burning coal, gasoline and garbage.6 Clearly we have unavoidable exposures due to air pollution and products used throughout our communities. Let's now take a look at practical ways we can support the body's natural detoxification mechanism.

MOVEMENT

Movement is perhaps the most simple and easily available therapy for encouraging gentle detoxification. Movement need not be exhausting. In fact, if your exercise routine leaves you Perhaps there is no more common source of toxicity than personal care products. If your exercise routine leaves you wiped out, you are working too hard and taxing your adrenal glands. wiped out, you are working too hard and taxing your adrenal glands. Exercise should be exhilarating. Gentle stretching, brisk walks, deep breathing, jumping rope and rebounding are all forms of movement that stimulate the lymphatic system, which is part of the circulatory and immune systems. It is an open system, acting like a pump to move toxins to the liver for processing and elimination as well as distributing lymphocytes and other white blood cells for immune support. A stagnant lymphatic system is a sure way to slow down the body's ability to properly and efficiently detoxify.

CASTOR OIL PACKS

Another traditional remedy for supporting the lymphatic system is the castor oil pack. The first recorded use of castor oil packs (expressed from the castor bean, *Oleum ricini*) was among the ancient Egyptians, and was commonly used in Europe during the early Middle Ages as well. Due to its powerful healing properties, the early Romans called the plant the Palm of Christ.

The constituents of castor oil that are responsible for its therapeutic effect are ricinoleic acid, comprising 89.5 percent of the oil, and oleic acid, making up three percent. These substances have been studied for their antimicrobial properties and are very effective against several species of bacteria, yeasts, and molds.⁷ As a pack placed over the abdomen, usually with heat applied, the oil is absorbed into the gut-associated lymphatic tissue and circulates, providing a soothing, cleansing, antimicrobial, and nutritive treatment.

DRY BRUSHING

Dry skin brushing is a gentle therapy which stimulates the skin and, to a certain degree, the underlying lymphatic system. Aside from being one of your organs of detoxification, your skin

HOW TO UTILIZE CASTOR OIL PACKS

The castor oil pack is specific for non-cancerous thyroid nodules, uterine fibroids and ovarian cysts. Other conditions that appear to benefit from castor oil packs include constipation, liver congestion and cirrhosis, cholestatis (sluggish bile flow), gallstones, migraines, intestinal disorders, urinary tract disorders, arthritis and joint inflammation, as well as global detoxification.

A word of caution: Women who are pregnant or breastfeeding or experiencing heavy menstrual bleeding should not use castor oil. Those persons with intestinal blockage, internal bleeding, acute inflammatory intestinal disease, appendicitis or abdominal pain should be under the guidance of a trained health care practitioner before implementing castor oil packs.

Materials needed:

- organic castor oil
- piece of cotton flannel, preferably organic
- hot water bottle, preferred, or heating pad
- hand towel
- small sheet of plastic
- pillows
- baking soda
- 1. Fold flannel into three layers to fit over entire abdomen. May also cover breasts/chest and thyroid gland.
- 2. Soak flannel with castor oil. Fold flannel in half and squeeze excess from pack. Unfold.
- 3. Lie on your back with feet elevated; a pillow under your knees may be used. Place oil-soaked flannel over abdomen, cover with a small sheet of plastic and then an old hand towel. Place a hot water bottle or heating pad on top.
- 4. Leave pack on for 45-60 minutes. Practice relaxation breathing by placing one hand on your diaphragm and the other on your lower abdomen. As you breathe in, allow your lower abdomen to swell like a balloon. With each breath out, relax your jaw and shoulders. Allow all muscles in your body to relax. You may even fall asleep and wear the pack all night.
- 5. To remove the oil, wash with a solution of 2 tablespoons of baking soda or 1/2 teaspoon Branch Basics[™] to one quart water.
- 6. Store flannel in a large zip-lock bag. Add more oil only as needed to keep the pack saturated. Replace the pack after it begins to change color.
- 7. For maximum effectiveness, apply the pack as often as possible—at least four consecutive days per week for at least 4-6 weeks. Daily use provides the most beneficial effects.

has the second largest surface area in your body. It often appears to be the first to show degeneration or imbalances and the last to heal. It weighs almost twice as much as the brain and receives one third of the body's circulation of the blood.⁹

The skin assists the body in eliminating toxic waste from the body by allowing it to pass through the pores via perspiration. Conversely the skin absorbs toxins from the outside world via these same pores. Eventually these toxic substances, such as chemicals from skin and hair care products (including sunscreen), work their way into the bloodstream or lymphatic system and must be neutralized by the liver and kidneys and then eliminated via the urinary tract or colon. When the liver and kidneys are overburdened, skin eruptions may ensue as toxins overwhelm the skin.

Chronic exposure to chemicals through toxic skin and hair care products, make-up, and work place chemicals, to name a few, will create a constant burden to your body's emunctories and the entire detoxification process.

Here are instructions for dry brushing:

- Use a natural bristle brush or natural loofah sponge. The brush or sponge should be washed every couple of days using plain soap or Branch Basics and warm water.
- Using a circular motion, gently brush the entire surface of your body, excluding your face. Start with the soles of your feet, always moving towards the liver, and end with the palms of your hands. Pay special attention to your inner thighs, neck, and armpits. The head may be brushed but not the face.
- Brush for approximately sixty seconds, ideally before bed.

LIVER TONIC

My favorite liver tonic is beet kvass, a traditional tonic that was very popular in Russian and Ukrainian cultures dating back to the Middle Ages. It was known to offer protection against infection and to help one deal with hangovers. Beet kvass is also a probiotic and a digestive aid. Containing many liver-supporting properties, it is a perfect addition to any detoxification program.

Beet kvass can be safely used prior to

conception by women for cleansing and toning the liver. This may help minimize future morning sickness, which is so common in the first trimester of pregnancy, as the liver is working overtime to clear excess hormones. Beet kvass can be safely consumed throughout pregnancy. Beet kvass assists in cleansing the blood and is also an excellent support for kidney stones and gallstones. Many report that its regular consumption eventually eliminates liver spots that have formed on the skin.

Beet kvass provides valuable enzymes and lactic acid, which is a natural means of preserving food and making food less likely to harbor pathogenic bacteria. Lactic acid bacteria are the chief beneficial bacteria found in Bulgarian yogurt.

The following recipe for beet kvass is from *Nourishing Traditions*, by Sally Fallon Morell, and makes two quarts.

3 medium beets, peeled and coarsely chopped 1/4 cup homemade whey (optional) 1 tablespoon Celtic sea salt (double if no whey is available) purified non-chlorinated water

Place beets, whey, and salt in a two-quart sterilized glass jar. Add purified water to fill the jar. Stir well and cover tightly. Place in pantry or cupboard at room temperature for two days or longer. Colder, drier climates will require longer for fermentation; in hot and humid climates the beet kvass will be ready in two days. Refrigerate after fermentation period and enjoy a glass each day!

COFFEE ENEMA

Enemas are one of the most ancient medical treatments known to man. The oldest known medical text, the Egyptian Ebers Papyrus (1500 BCE), records the use of enemas. Enemas were in use throughout the ancient world in Samaria, Babylonia, India, Greece, Africa and China. Greek literature is filled with references to the therapeutic use of enemas.

American Indians, as well as pre-Columbian South Americans, crafted enema bags from animal bladders, latex and bones.¹⁰

The use of coffee enemas began in Germany

The skin often appears to be the first organ to show degeneration or imbalances and the last to heal. Coffee enemas appeared in the medical literature as early as 1917 and remained in the Merck Manual until 1972. during World War I. The following story is an excerpt from the *Townsend Newsletter* told by Dr. Jerry Walters:

During World War I, Germany was surrounded by the allies' military forces, and many imported materials were short or missing for the German citizens. Among other things, morphine was running very low in supply. Also there was hardly any coffee available to drink. Moreover, painkillers, anesthetics, and other drugs were lacking too. When soldiers were sent back from the front lines, severely wounded, and in need of surgery, there usually was just a bit of anesthesia available—perhaps only enough to get them through the surgical operation.

Upon the anesthesia wearing off, obviously the pain set in for the wounded soldier. In many cases, after the doctors finished operating, they ordered plain water enemas for the patients. But the nurses were desperately looking for something more to help the soldiers deal with their pain. It happened that there was always coffee brewing, available only for the surgeons to drink. They often had to work around the clock, and needed to keep awake by caffeine in the beverage. Sometimes, a little of their black coffee was left over. Apparently, some nurse had the idea that, since the coffee was doing the surgeons good, perhaps it would also help the soldiers. So, the nurses poured a quantity of the leftover coffee into the soldier's enema buckets. The soldiers receiving coffee enemas reported that such ablutions were doing them some good, and that their pain was much relieved.11

Upon hearing of the nurses' observations, two researchers at the German University of Göttingen College of Medicine, O.A. Meyer, MD, and Martin Heubner, MD, decided to study the effects of caffeine administered rectally to rats. They published their findings in the German medical literature, explaining that the coffee enemas actually opened the bile ducts of the rats. This enhances liver function.

The purpose of the coffee enema is to support the liver in eliminating toxins and to cleanse the blood. In 1984 Dr. Peter Lechner from Graz, Austria stated, "Coffee enemas have a definite effect on the colon which can be observed with an endoscope."¹² "Dr. Lee Wattenberg and coworkers were able to provide [evidence] in 1981 that the palmitic acid found in coffee promotes the activity of glutathione S-transferase and other ligands by manifold times above the norm. It is this enzyme group which is responsible primarily for the conjugation of free electrophile radicals which the gall bladder will then release."^{13,14}

Coffee enemas appeared in the medical literature at least as early as 1917 and remained in the Merck Manual until 1972. German scientists discovered that coffee was able to open the bile ducts and increase the production of bile by the liver. Max Gerson, MD, began using coffee enemas with his patients suffering from tuberculosis and then later, with his cancer patients.

Dr. Gerson found that the physical root cause of cancer among his patients was toxicity and nutritional deficiency. He used raw fresh juices and raw liver to address nutritional deficiencies as well as assist in cleansing the kidneys. As toxins were forced out of the tissues, it became necessary to support the liver in its ability to eliminate toxins adequately. Dr. Gerson understood that the liver becomes overburdened by the continuous onslaught of toxins, as well as the release of toxic metabolites as the liver breaks down toxins, and that it was necessary to find proper support for detoxification. He found that detoxification could best be facilitated through the caffeine in coffee enemas, absorbed from the descending colon via the hemorrhoidal vein, which carries the caffeine to the portal vein and the liver. The caffeine stimulates the liver and biliary ducts to open for release of waste products and toxins into the intestinal tract for excretion.15

Later, Dr. William Kelley, learning from Dr. Gerson, implemented the use of coffee enemas first with himself during his two-year battle with pancreatic cancer starting in 1967, and then with his cancer patients until his death in 2005. Both doctors noted remarkable healing in those patients using coffee enemas. Keep in mind that coffee enemas are given for the purpose of detoxification of the liver and blood, not for emptying the bowels. The substances found in coffee, kahweol and cafestol palmitate, promote the activity of a key enzyme system, glutathione S-transferase, above the norm. This system detoxifies a vast array of electrophiles from the bloodstream and, according to Gar Hildenbrand of the Gerson Institute, "must be regarded as an important mechanism for carcinogen detoxification." This enzyme group is responsible for neutralizing free radicals. It is believed that kahweol and cafestol palmitate increase the liver's production of glutathione by as much as seven times.

As previously mentioned, the coffee enema works by dilating the bile ducts. As hemorrhoidal veins and bile ducts are dilated, they neutralize and excrete toxins, toxic metals, excess hormones, gallstones, parasites and carcinogens from the liver and gallbladder. The coffee travels through the left hemorrhoidal vein to the portal vein, which delivers the coffee to the liver. As stated by the editors of *Physiological Chemistry and Physics*, "Caffeine enemas cause dilation of bile ducts, which facilitates excretion of toxic cancer breakdown products by the liver and dialysis of toxic products from blood across the colonic wall."¹⁶

"In addition, theophylline and theobromine, two other chemicals in coffee, dilate blood vessels and counter inflammation of the gut; the palmitates enhance the enzyme system responsible for the removal of toxic free radicals from the serum; and the fluid of the enema then stimulates the visceral nervous system to promote peristalsis and the transit of diluted toxic bile from the duodenum and out the rectum."¹⁷

The coffee enema is typically retained for fifteen minutes and then repeated again for fifteen more minutes. Each molecule of blood in the body passes through the liver every three minutes. During a coffee enema session all the blood cells of the body experience detoxification.¹⁸ Coffee enemas have been used for over one hundred years as a generalized detoxification procedure and are perfectly safe when taken as directed. They stimulate the liver and gallbladder to release stored toxins, increase the liver's production of the powerful antioxidant, glutathione, and enhance liver function. As an added bonus, many report noticeable improvement in skin, clearing of liver spots on the hands and face, and a brightening of the eyes. To receive complete instructions on how to administer a coffee enema at home, visit my website, biodynamicwellness. com.

DRY SAUNA THERAPY

Lastly, but certainly at the top of my list of personal favorites, is the dry sauna. The use of the sauna therapy dates back to ancient Rome. Of the Roman saunas, Sidney Licht writes, "Although the baths were used largely for cleansing and pleasure, physicians did prescribe the various forms of available heat for hygiene and Rather than enjoying long periods of rest dominated by the parasympathetic branch of the nervous system, modern man lives in constant "fight or flight" mode.

BACK TO SCHOOL FOR DOCTORS

Chapter leaders Maria Atwood and Monica Corrado hold WAPF literature at the Back to School for Doctors conference, September 27, 2014. Maria hosted a WAPF booth and signed up lots of new members.



Wise Traditions

All internal organs detoxify during a sauna while the body is in a relaxed state.

in illness."¹⁹ The Finns understood the healing power of saunas as early as 1112. There is an old Finnish proverb that says "the sauna is Finland's medication . . . and a poor person's apothecary." Native American Indians have also been using saunas, aka sweat lodges, for thousands of years.

When the body is in a state of chronic sympathetic dominance (stress), our detoxification processes slow down or in some cases come to a halt. When in sympathetic dominance, our organs receive a signal that we are in a state of flight or fight. This is no time to eliminate toxins. All hands are on deck for survival mode. Unfortunately, many of us living in modern, industrialized cultures live in a frenzied state of constant sympathetic dominance. Rather than enjoying long periods of rest dominated by the parasympathetic branch of the autonomic nervous system, people today live in constant "fight or flight" mode.

One of the benefits of sauna therapy is that you are able to easily shift into parasympathetic dominance, unless of course you sit in the sauna with a cell phone engaged in an intense conversation or play loud music. In that case all bets of benefit are off. The autonomic nervous system stays in sympathetic dominance, limiting the ability of the body to detoxify.

While the skin holds the second largest surface area of all the body's organs (with the small intestinal tract having the largest surface area), it is not the only organ that benefits from dry sauna therapy. All internal organs detoxify during a sauna while the body is in a rested, parasympathetic state. In actuality we eliminate more toxins while relaxing and sweating in a sauna than we do working out on a treadmill or (foolishly) running up a steep grade in the middle of a hot summer day. Sympathetic nervous activity, as in stress, inhibits toxin elimination, according to Larry Wilson, MD, who specializes in detoxification.²⁰

Sweating in a rested state encourages the body to eliminate chemicals from body care products; toxic metals (copper,²¹ mercury,²² and other metals²³) accumulated from exposure to certain medications, vaccines, dental materials, polluted air, and commercial fertilizers; residues from pharmaceutical drugs; DDT, PCBs, DDE, dioxin (found in Agent Orange), and other pesticides.²⁴ Additionally, heat therapy increases circulation drawing the blood toward the skin.²⁵ As the body sweats toxins are eliminated. Drugs such as methadone,²⁶ amphetamines,²⁷ methamphetamines, and morphine²⁸ have been measured in human sweat.

D.C. Roehm reported in 1983 the results of a Vietnam veteran who had been exposed to dioxin and DDE, a persistent metabolite of the pesticide DDT, and who underwent a managed detox program, which incorporated sauna therapy. After two hundred fifty days, the DDE was measured to be 97 percent reduced.²⁹

The humanist scientist René Dubos stated twenty-five years ago that "The greatest danger of pollution may well be that we shall tolerate levels of it so low as to have no acute nuisance value, but sufficiently high to cause delayed pathological effects and despoil the quality of life." Four million distinct chemical compounds have been identified since 1965. As many as seventy thousand of these compounds are in current commercial production, with more than three thousand chemicals added to food and seven

KIDS 'N CAVIAR

Randy Hartnell of Vital Choice Seafood teaches WAPF children to eat salmon jerky and salmon caviar at Wise Traditions 2014. Vital Choice has been an extremely generous supporter of our conferences over the years.

Wise Traditions

hundred chemicals found in drinking water. A huge concern is the fact that a good percentage of these toxic chemicals are fat-soluble, ending up stored in the body's fat tissues. More than four hundred chemicals have been identified in human tissue, with forty-eight in adipose tissue, at least forty in breast milk, seventy-three in the liver, and over two hundred fifty in blood plasma.

David Root, MD, MPH, and his colleagues have found that the most effective way to lower the body's burden of lipophilic (fat-loving) chemicals is through exercise (movement), sauna therapy, and the use of niacin. They have seen that these combined factors mobilize fat-soluble chemicals and a notable portion of the toxic chemicals will be excreted via the sweat.³⁰

An interesting study in Germany compared twenty-two kindergarteners, all of whom were taking a weekly sauna, with a control group of children who took no saunas. The study lasted eighteen weeks, and researchers carefully recorded incidences of ear infections, colds and upper respiratory conditions. As it turned out, the children who took no saunas experienced twice as many sick days as those kindergarteners taking a weekly sauna. The researchers concluded that regular sauna therapy improves resistance to infection.³¹

Saunas provide the benefit of assisting in the breakdown of toxins stored in the fat. According to Dr. Michael Schmidt, co-author of Beyond Antibiotics, "Sweating it out reduces chemical stress on the body and generally leads to improved health."32 It is important to sweat at a temperature low enough that an inordinate amount of electrolytes are not lost. It is advisable to follow a sauna session with a glass of purified water and a pinch of Celtic sea salt or Quinton Original Isotonic or QuintEssential minerals. Always rinse in clean water immediately after a sauna to prevent the skin from reabsorbing what has been drawn out in the sweat. Remember, the sweat contains toxic residues from past exposures to a wide variety of toxins. I have had clients report to me after a couple of months of sauna therapy that they are smelling chemicals coming out through their pores and in their sweat. Everything from the smell of marijuana, which was reported to have not been used for twenty years, to nail polish and acrylic nail chemicals

to metallic scents.

Sauna therapy should begin slowly. There is no need to rush. Allow your body to get used to the heat gradually. Start with twenty-minute saunas, gradually working up to thirty to forty minutes over several weeks. Stay hydrated by drinking electrolyte-rich water or bone broth after your sauna. Always shower off after the sauna. It is important that you are showering in filtered water so as not to absorb chloramine or chlorine after your pores have opened up from the sauna. You may call my office to discuss the water filters we carry or you can visit radiantlifecatalog.com. If you take a sauna in the evening, follow with a shower and then a quick dry brush session. Many people find that a sauna before bedtime assures them a nice, restful sleep.

When it comes to choosing a sauna, there are endless options in today's market. I highly recommend the near-infrared lamp saunas. These saunas use incandescent red heat lamps for heating. Most far-infrared saunas use metallic, ceramic, or black carbon elements for heating that mainly emit in the far-infrared range. The electric heating elements are spread around the sauna space. Unfortunately, these far-infrared saunas give off stray electromagnetic fields that may be extremely harmful. Please avoid these types of far-infrared saunas for this reason. To learn more about nearinfrared lamp saunas and how to make your own, go to drlwilson.com. Cedarbrook Saunas (cedarsauna.com) in Woodinville, Washington makes near-infrared lamp saunas in a cedar frame as well as a more economical tent sauna. The tent sauna is low profile and a wonderful option. Also SaunaSpace in Columbia, Missouri offers a nice range of options. Check them out at saunaspace.com. Another great source is Country Ray Saunas in Pennsylvania owned by Ben Lap, an Amish furniture maker. Ben can be reached at (814) 349-5212.

It is very important to understand that if you are challenged by low blood pressure or hypoadrenia/adrenal fatigue, you must be advised by a qualified health care practitioner, prior to beginning sauna therapy. The rewards of sauna and other detoxification therapies are abundant but wisdom should be used before implementing any detoxification therapies if you have any health concerns.

Now that you have a few options for gentle detox therapies that can be done in the comfort of your own home, start with nourishing yourself with a proper Weston A. Price diet and pick one simple therapy to begin incorporating into your lifestyle. Keep in mind that detoxification is a process, not an event. Small, consistent steps will keep you on the path to reviving your health and achieving optimal wellness.

GRATITUDE

The Weston A. Price Foundation is grateful for a generous donation from the John William Winans Charitable Remainder Trust. These funds will be used for our research program to test foods grown in various ways for the fat-soluble vitamins A, D and K. We can't think of a better legacy to John and his work than finding out how best to produce foods to maximize the fat-soluble activators! His generosity will benefit many generations to come. Kim Schuette is a certified nutritionist and a certified GAPS practitioner. She has worked in the field of nutrition since 1999 and introduced the GAPS Diet to clients in 2006. She specializes in real food, nutritional therapy, and biotherapeutic drainage therapies. She serves on the board of directors of the Weston A. Price Foundation and is co-chapter leader for the San Diego/ Encinitas chapter. For more information, go to biodynamicwellness.com or gapsinfo.com. Her office number is (858) 259-6000.

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WAPF LADIES ORGANIZE LUNCHEON FOR SMALL FARMERS

Kentucky raw milk farmer Linda Stone organized a luncheon to introduce health-conscious consumers to local small farmers.



More than sixty-five women showed up and met farmers selling produce, raw milk and farm-raised animal products. Chapter leader Sally O'Boyle has taken the lead to organize the KY Ag Women for Wellness movement throughout the state.

LEFT: Courtney Byron, Bath County, Kentucky co-chapter leader, and Valerie Samutin of Freedom Run Farm.

RIGHT: Idea-woman Linda Stone of Brook-Lin Jerseys.



Wise Traditions

Great Pioneers in Nutrition of the Twentieth Century

by Sylvia Onusic, PhD, CNS, LDN

hile recruiting for the Boer War in the years 1899 to 1902, the British Army Medical Service reported that fully 40 percent of volunteers were rejected for medical reasons such as deformities, rotten teeth and weak hearts, a situation which only became worse during the ensuing years of the First World War. Scientists found that British children of the day were sustained mainly on bread made from white flour as milk was in short supply.¹ Many children suffered from rickets and tuberculosis, as portrayed by the beloved Charles Dickens' character, Tiny Tim, from *The Christmas Carol.*²

On the other side of the great pond, medical examinations of the 1910s in the U.S. also revealed an unhealthy citizenry. Of 3.76 million men examined for service in World War I, over half a million were rejected as unfit; and of the 2.7 million called into service, about 47 percent suffered physical impairments.³ Most Americans of that time suffered some kind of health problem. In the same time period, among five thousand citizens of Framingham, Massachusetts, examined as part of a Metropolitan Life Insurance demonstration project to control tuberculosis, 77 percent were recorded as ill with some disease.⁴

Despite the predominant "science of the day," scientists slowly picked apart the puzzles of deficiency diseases such as rickets, pellagra, beriberi, and scurvy, which were major killers of that era.

Theories and treatments of the day designed to address this worsening crisis were abject failures. Many experts sided with the theory of eugenics, believing that some people were simply doomed as "human wastage," their ill health a result of weak or defective genes.⁵ But babies of the rich and well-off were also suffering and dying.¹ Great minds of the day turned to food and the diet.

GOLDEN AGE OF VITAMIN HUNTERS

Nutrition study at the beginning of the 1900s was a fledgling science, and researchers came from many fields: agriculture, biochemistry and chemistry, dentistry, anatomy, medicine, physiology, hygiene, home economics, health education, anthropology and others. The twentieth century was a golden age filled with important discoveries of essential nutrients, their roles in the prevention of disease, and the implementation of these findings into public health nutrition policy. Many Nobel Prizes were awarded to scientists in the field of nutrition science. Nutrition science today is the heart and major driving force welding together diet, genetics, disease, disability, and other related fields.

At the beginning of the twentieth century, the germ theory of Robert Koch and the work of Louis Pasteur guided scientific thinking. The principles of Justus von Liebig (1803-1873), who contended that food contained only three elements (protein, fat, and carbohydrate) and refused to acknowledge that any other substances could play a role in health, also dominated scientific thought and held sway over health policy for many years.1 Liebig even promoted baby formulas based on his own principles which were devoid of essential vitamins and minerals. Babies fed on these formulas developed infantile scurvy in large numbers. While the babies of the well-to-do suffered because families could afford to buy these formulas, infants of the poor suffered even more because of hunger, famine and poverty.1

In this era researchers who opposed these views were criticized, taunted and discouraged. But despite the predominant "science of the day," scientists slowly and successfully picked apart the puzzles of the deficiency diseases such as rickets, pellagra, beriberi and scurvy, which were the major killers of that era, and the "accessory factors," namely vitamins, became the major focus of nutrition research for the next half of the century. Indeed, that era was a golden age for nutrition research, and many important discoveries were made.¹

WESTON A. PRICE

Probably the greatest nutrition researcher of the twentieth century was Dr. Weston A. Price (1870-1948), a dentist who was raised on a farm in Canada.⁶ With his wife, Florence, he traveled the world studying diets of indigenous peoples and recorded the effect of their diets on their dental, physical and mental health. He also documented the effects of "foods of commerce," such as white rice, canned milk, and white flour on the facial structure, rates of dental caries and the overall physical health of these groups. His work applies not only to dentistry but also to related fields, such as anthropology, genetics, health education, chemistry, physiology and medicine.

At his Cleveland dental clinic, Dr. Price also worked extensively with children, adults and families, applying the nutrition principles he developed during his career and using the knowledge established by early scientists who had identified vitamins A, B, C, D, E and others. In his most famous work, *Nutrition and Physical Degeneration*, he cites many of these early pioneers who built the foundations of nutrition science up to his time.⁷

Price also was working at the height of the eugenics movement, which he addressed in *Nu*trition and Physical Degeneration. Price showed that humans suffered disease and disability, mentally as well as physically, not because of "bad genes," but because elements of the modern diet caused degeneration in the expression of the human genome, which continued to appear in successive generations.⁷ Through his work he established the basis for the work we now call epigenetics.

In addition to his *magnum opus*, Dr. Price wrote books related to dental practice, along with many articles published in medical journals. Dr. Price's papers (and those of other researchers) are archived at the Price-Pottenger Nutrition Foundation, founded in 1952 and presently headquartered in Lemon Grove, California, which traces its history back to 1952. PPNF publishes *Nutrition and Physical Degeneration* and will issue the 23rd edition of the book in summer 2015. Together with the Weston A. Price Foundation, founded in 1999 by Sally Fallon and Mary Enig, PhD, these two organizations keep the work of Dr. Price alive and relevant today.

FRANCIS M. POTTENGER, JR.

In conjunction with the work of Dr. Price, Dr. Francis M. Pottenger, Jr. (1901-1967), a California native and the son of a physician, was best known for his epigenetic work with generations of cats and diet, which is documented in his book *Pottenger's Cats.*⁸ From 1932 to 1942 he conducted controlled experiments with over nine hundred cats, involving three generations. Dr. Pottenger proved that cats eating fresh meat, raw milk, and cod liver oil remained healthy, whereas a group of cats eating heated milk and cooked meat began to develop health problems and degenerative diseases within the first generation.

Cats in the second and third generations developed degenerative diseases earlier: they became blind, weak, infertile, with hypothyroidism and soft bones, culminating in a short life span. Allergies increased up to 90 percent in the cats fed processed foods versus only 5 percent in the cats fed raw foods. Kittens of the third generation of cats fed cooked foods suffered adverse personality changes, with males exhibiting docility and females aggressiveness. By the fourth generation the cats were sterile and could not reproduce.

Dr. Pottenger also conducted a milk study with the cats, using pasteurized, evaporated, sweetened, condensed, and raw milk. Cats on raw milk thrived while cats on the other regimens sickened. The changes that Dr. Pottenger saw in the cats were similar to those observed by Dr. Price in his world travels when groups abandoned their native diets and adopted diets of processed foods. Some experts claim that today we are seeing the results of Pottenger's fourth generation of cats in our younger generations of humans.

In 1940 Dr. Pottenger founded a hospital for treating lung diseases, specifically asthma, where he promoted the use of diet principles determined by Dr. Price. Butter, cream, raw milk, liver, cod liver oil, and eggs were the foundation of the patients' diets. The records and artifacts from his research are also archived at the Price-Pottenger Nutrition Foundation.

EARLY PIONEERS

The course of nutrition science was driven by history, politics and economics. During World War I, just as later in World War II, women took the reins in business and industry, as well as in nutrition science. Dr. Dame Harriette Chick (1875-1977), in charge of the Lister Institute (Institute of Public Health) in London since the beginning of World War I, was concerned with the nutritional deficiency diseases of scurvy, beriberi and rickets, which often befell soldiers during military service and affected the course not only of battles, but of history. (These diseases had affected soldiers in the Civil War in America as well.¹)

Along with her colleague, Dr. Elsie Dalyell (1881-1948), Dr. Chick arrived in Vienna, Austria in 1919 to minister to Vienna's children. Vienna had been a glorious city and one of the world's major medical centers, but with the end of World War I came the fall of the Hapsburg dynasty (a fixture since the 1200s) and war's destructive aftermath of famine, disease, crime and insanity.¹

Dr. Chick's experiments with lab animals showed that rickets was caused by nutritional deficiency. She and her colleagues went to Vienna in 1919 to assist with the many post-war cases of childhood rickets. The head of the Kinder Institute in Vienna, Professor Clemens von Pirquet, of Vienna University, as well as many other practitioners of the time and before him, believed rickets to be an infectious disease and so consequently no progress had been made in curing the condition in two centuries. Many infants and children were dying from the illness. In 1909, among infants aged eighteen months or less who died, 96 percent were afflicted with rickets.9 However, Dr. Chick, working with malnourished children in Viennese clinics, showed that rickets could be cured by the administration of whole milk and cod liver oil.10,11

Rickets, the "English disease," was common among impoverished urban children at that time not only in postwar Europe but also in America. The condition included soft bones, bandy and bowed legs, deformed spines, dental caries, In 1940 Dr. Pottenger founded a hospital for treating lung diseases where he promoted the use of the diet principles determined by Dr. Price. During the rationing and food shortages of World War I, Hopkins studied margarine and and found it inferior to butter because it lacked vitamins A and D.

swollen joints, large heads and mental health problems.¹

In a 1917 paper, two pediatricians from New York found that 90 percent of African-American children had rickets. A group of these babies were fed cod liver oil and matured normally. At the end of the nineteenth and beginning of the twentieth century, numerous researchers worked on the rickets dilemma. Through experiments with animals, cod liver oil and sunshine were shown to be keys to solving the puzzle.⁹ The development of the X-ray by Marie and Pierre Curie led to more understanding of the disease. Marie was a Polish physicist who was the first woman to win a Nobel Prize, and the only woman to win two of them. During WWI she set up the first military field radiology centers.¹²

Casimir Funk (1884-1967) was the first of the vitamin hunters to coin the term "vitamines" —vital amines—in 1912 for the unidentified substances present in food which could prevent the diseases scurvy, beriberi and pellagra. Dr. Funk was a Polish scientist who worked in Paris and also at the Lister Institute during the early twentieth century.¹³

Frederick Gowland Hopkins (1861-1947), a British biochemist, was an amazingly influential researcher in whose lab many young European scientists trained. Biochemistry was not yet recognized as a discipline in the early days of his career. His best known work, published in 1912, debunked Justus von Liebig's and others' longstanding belief that pure proteins, carbohydrates, fats, and minerals were all that were needed for growth.14 He named those yet unidentified mysterious substances, vital in small quantities for animal growth and survival, "accessory food factors," later renamed vitamins. It was this work that led to his receiving (together with Christiaan Eijkman) the 1929 Nobel Prize in Physiology or Medicine.15 He also discovered the amino acid tryptophan in 1901.

During the rationing and food shortages of World War I, Hopkins studied margarine and found it inferior to butter because it lacked vitamins A and D. In relation to this work, British government policy supported vitamin-enriched margarine in 1926.¹⁶ Hopkins was President of the Royal Society from 1930 to 1935.¹⁷

EDWARD AND MAY MELLANBY

Sir Edward Mellanby (1864-1955) was a highly respected British physician and professor of pharmacology at the University of Sheffield in England and a true nutrition pioneer who followed the experimental method to investigate diseases using puppies and dogs. In 1918 he found that feeding dogs oatmeal caused rickets because the phytic acid content in the oatmeal reduced the availability of calcium. He discovered that the condition could be cured with cod liver oil. Dr. Mellanby concluded that rickets was caused by a dietary factor. He diagnosed rickets by X-ray examination, bone-calcium assay, and histology of bone, and noted that the gross appearance of the dogs' bones was quite similar to that of rachitic children.^{26,27} The missing element was a fat-soluble essential dietary factor. He wrote: "Rickets is a deficiency disease which develops in consequence of the absence of some accessory food factor or factors. It therefore seems probable that the cause of rickets is a diminished intake of an anti-rachitic factor, which is either [Mc-Collum's] fat-soluble factor A, or has a similar distribution to it."26,27

Together with his wife, May (1882-1978), the Mellanbys devoted their careers to studying nutritional deficiency diseases, such as rickets and pellagra. During World War II, Dr. Mellanby acted as a scientific advisor to the British War Cabinet and exerted a strong influence on government food policy.²⁸

Lady May Tweedy was a lecturer at Bedford College in London when she met Edward Mellanby. She was born into a rich merchant family and studied at Cambridge University. After their marriage the focus of her work turned more towards nutritionally related topics. In 1917 she noticed that the structure of teeth in dogs with rickets was altered by a change in the diet. In 1918 she began dental research for the Medical Research Council and during the 1920s and 1930s she conducted dietary trials with children in institutions. She published many papers in the British Medical Journal and British Dental Journal. Mrs. Mellanby and associate showed that even badly formed teeth attacked by caries could increase their resistance to caries so that the decay process was slowed and even stopped by the vitamin D in cod liver oil.28,29

Dr. Mellanby's major work, *Nutrition and Disease*, published in 1934, devoted a chapter to Mrs. Mellanby's research on diet and dental decay.³⁰ The Mellanby papers are housed at the Wellcome Library in London.

HERBERT McLEAN EVANS

Herbert McLean Evans, MD (1882-1971), a California native, was an anatomist and embryologist who obtained his medical degree from Johns Hopkins University and was an associate professor there. Later he was professor at the University of California at Berkeley.

In his research, Evans studied human nutrition and other sciences. In 1922, with his associate, Katharine Scott Bishop (1889-1976), he discovered vitamin E, which was called the "fertility factor." Vitamin E deficiency is associated with increased infection, anemia, stunted growth, poor outcomes in pregnancy, and reproductive failure. Rat pups deprived of vitamin E in Evans' and Bishop's experiments became partially paralyzed. Adult rats survived without vitamin E but were sterile and pregnancies were resorbed. In 1937, Dr. Evans isolated vitamin E from wheat germ. Vitamin E destroyed "free radicals" and was itself destroyed in the process. The author of more than seven books and numerous articles, Dr. Evans was selected as a Fellow of the Royal Society.

HENRIK DAM AND VITAMIN K

Henrik Dam (1895-1976) was a Danish biochemist and physiologist who was awarded the Nobel Prize in medicine in 1943 for the discovery of vitamin K with Edward Doisy. For his work he used chickens as experimental animals. Dr. Dam called the new vitamin "koagulation," (German for coagulation), thus vitamin K.

ALBERT SZENT-GYÖRGYI: VITAMIN C

The Hungarian scientist Albert Szent-Györgyi, MD (1893-1986), won the Nobel Prize in physiology in 1937 for his discovery of vitamin C.³⁶ He had a very colorful history as a freedom fighter and covert diplomat while serving in both World Wars. Adolf Hitler personally issued a warrant for his arrest because of his resistance activities. After the Communists took over Hungary he immigrated to the U.S.³⁵ He was a Rockefeller Fellow at Cambridge, visiting professor at Harvard, and held a research position at the National Institutes of Health. In 1948, he was selected as a member of the National Academy of Science.³⁵

In the 1930s, Szent-Györgyi discovered vitamin C, "the anti-scorbutic factor," as well as components and reactions of the citric acid cycle. In some experiments he used paprika, a famous national food product, as a source of the vitamin and as the Hungarian cure for scurvy. He also discovered actin and myelin in muscle tissue. His later work was concerned with cancer, and he founded the National Foundation for Cancer Research in 1973.³⁵

ALFRED FABIAN HESS AND ADOLF WINDAUS: VITAMIN D

Dr. Alfred Fabian Hess (1875-1933), a graduate of Harvard, earned his MD from Columbia University and studied medicine in Berlin, Prague and Vienna. He spent time at the Rockefeller Institute as well. In 1921 he observed that ultraviolet (UV) light cured rickets. Dr. Hess worked with Harriette Chick and her team to cure rickets among children in Vienna. He founded the Tuberculosis Preventorium for children in New Jersey, and was professor of pediatrics at New York University. In 1925 he isolated sitosterol. When irradiated by UV light, both sitosterol and cholesterol from the rat brain were active against rickets.³⁷

Hess and his team proposed the hypothesis that "it would seem quite possible that the cholesterol (which we now know as 7-dehydrocholesterol) in the skin is normally activated by UV-irradiation and rendered anti-rachitic—that the solar rays and artificial radiations can bring about this conversion. This point of view regards the superficial skin as an organ, which reacts to particular light waves rather than as a mere protective covering."³⁸

From 1919-1922 Hess was concerned mainly with the study of rickets, heliotherapy (curing with sunlight), infant feeding, irradiated ergosterol and cod liver oil, particularly with its potency in connection with rickets, as well as irradiation of milk, dental caries and minerals in human milk and cow milk.³⁷

Hess asked the German steroid chemist

May Mellanby and associate showed that even badly formed teeth attacked by cavities could increase their resistance to caries so that the decay process was slowed and even stopped by vitamin D supplied in cod liver oil.

It wasnt until 1980 that the sequence of steps leading to the production of cholcalciferol in the skin was described by Michael Holick, PhD, one of the current vitamin D experts. Adolf Windaus (1876-1959) to work on the substance of cholesterol and the anti-rachitic factor. Windaus and Hess worked together to test over thirty different plant substances before they finally isolated ergosterol, a fungal steroid from ergot which when irradiated was effective in curing rickets. They named this substance vitamin D₂.³⁷ It was purified in 1931 by Windaus and his team who also established its structure in 1936. For this work he was awarded the Nobel Prize in chemistry. In 1937 Windaus and Beck isolated 7-dehydrocholesterol (7 DHC), which when irradiated became vitamin D₃, present in animals, human skin, and animal-source foods, and synthesized it in 1935. Windaus went on to establish the formula for cholesterol, its relationship to bile acids, and other functions.^{39,41}

It wasn't until 1980 that the sequence of steps leading to the production of cholecalciferol in the skin was described by Michael F. Holick, PhD, one of the current vitamin D experts.⁴²

HARRY STEENBOCK AND VITAMIN D

Harry Steenbock (1886-1967) was one of the first students of E.V. McCollum (see page 51) at the University of Wisconsin; he later became professor of biochemistry at the same university. He demonstrated in 1924 that irradiation by ultraviolet light increased the vitamin D content of food, especially milk, and that it cured rickets in rats. Quaker Oats offered him one million dollars for his patent on his technique but Steenbock gave the rights to the Wisconsin Alumni Research Foundation (WARF), which he founded with other alumni. WARF then sold the patent to Quaker Oats and also licensed the technology for pharmaceutical companies for the patented medical application called "Viosterol," which eventually almost completely replaced cod liver oil as a treatment for rickets.43

According to the Vitamin D Council, "in 1943 the U.S. Federal Circuit Court of Appeals stripped Steenbock of his patent, labeling Professor Steenbock's work a 'discovery' and not an invention. By that time, Steenbock's patent had already delivered 7.5 million dollars to the Wisconsin Alumni Research Foundation. That is equal to about one hundred million dollars in 2012."⁴⁴ bock Units or Oslo Rat Units defined as "the total amount of vitamin D which will produce a narrow line of calcium deposits in the rachitic metaphysis of the distal ends of the radii and ulnae of standard rachitic rats in a period of ten days." Steenbock Units were declared to equal 3.2 IUs (international units). To add to the confusion, also in existence were U.S.P. (United States Pharmacopeia) units, ADMA units (American Drug Manufacturers Association), and others.⁴⁵

After their discovery, vitamins D₂ and D₃ were considered equivalent in vitamin potency, a confusion that continues today and is propagated by Dr. Holick.⁴⁶ Many recent papers discuss the biochemical difference.⁴⁷ But already early papers discussed the fact that more and more viosterol (ergosterol) was needed to cure rickets, and that high amounts cause vitamin D hyper-vitaminosis.⁴⁸ Dr. Weston Price, throughout his book, *Nutrition and Physical Degeneration*, criticized the overuse of viosterol and considered it dangerous as it led to calcification of the soft tissues.⁴⁹

JOSEPH GOLDBERGER: VITAMIN $\rm B_3$ AND THE PUZZLE OF PELLAGRA

Pellagra, from the Italian word meaning "rough skin," a deficiency disease of vitamin B_3 (niacin), was widespread during the American Civil War and in the southern states of the U.S. in the nineteenth century. It was very common among inmates of lunatic asylums and prisons.¹

In 1912 around thirty thousand cases were reported in South Carolina with a 40 percent mortality rate. Pellagra commissions were set up by Congress and private individuals, but these authorities denied that pellagra could be caused by malnutrition. The official cause was deemed either syphilis, sun exposure, corn toxin, or a disease imported by immigrants. In 1914 the Surgeon General appointed Dr. Goldberger (1874-1929), an officer in the Public Health Service and a "seasoned epidemiologist," himself an immigrant son from the East Coast, to investigate pellagra and determine its cause.

Dr. Goldberger immediately noted that staffs in institutions where pellagra was rampant were not affected by the disease. The inmates and the poor ate diets largely restricted to fatback, cornmeal, sweet potatoes and molasses. But other

Early on, vitamin D was measured in Steen-

ELMER V. McCOLLUM, AKA "DR. VITAMIN," LAFAYETTE MENDEL, AND THOMAS OSBORNE

In a commentary on his life, *Time* magazine stated in 1951 that, "Dr. Vitamin has done more than any other man to put vitamins back in the nation's bread and milk, to put fruit on American breakfast tables, fresh vegetables and salad greens in the daily diet."¹⁸ Elmer McCollum believed that milk was the greatest of "protective foods" for health. A farm boy from Kansas, McCollum became a giant in the field of nutritional biochemistry.

McCollum earned his doctorate from Yale University in 1906 and started work with farm animals at the University of Wisconsin. When he began his career, few physicians or public health officials in America took the relationship between diet and disease seriously, and few saw the connection between animal experiments and human health. The principles of Justus von Liebig, which stated that food provided only three components—fat, protein, carbohydrate—and perhaps small amounts of a few minerals, was still the mainstream thought on nutrition. When McCollum accepted his position at the University of Wisconsin, his colleagues at Yale asked him why he wanted to "work in a field which had already been figured out."¹⁹

McCollum and his colleagues conducted experiments to determine which food rations would best promote the growth of cattle and other economically important farm animals. McCollum also pioneered the use of small animals on purified diets for experimental studies in nutrition, insisting on their unequaled value as test animals. Despite the indignant reaction of the School of Hygiene and Public Health at the U of W to the presence of lab "vermin," he established the nation's first colony of white rats for nutritional research, which led to the isolation of the first known fat-soluble vitamins between 1912 and 1915, later called vitamins A and D, and water-soluble vitamin B. McCollum confided to a colleague that his rat colony was the key to all his successes in nutritional science, which were many.²⁰

Scientists made note of deficiency-disease symptoms in humans. Using lab rats and purified diets they induced these diseases in small animals and birds, and then figured out how to cure them with dietary substances. But rats were and remained the major "workhorses" in nutrition science. After this initial work was completed and verified by various laboratories, the next step was to isolate the substance that was vital to prevent a particular disease.

At Yale University in 1913, also using rats for experimental research, Layfayette Mendel (1872-1935) and Thomas B. Osborne (1859-1929) co-discovered vitamin A in butter independently of E.V. McCollum. They also found that lack of vitamin A led to the development of xerophthalmia, an eye condition that caused blindness. They also established the essential amino acids and in 1910 discovered vitamin B.²¹ Dr. McCollum had worked with Drs. Osborne and Mendel while studying at Yale. It was Mendel who helped him obtain his first position at the University of Wisconsin.

McCollum and his lab assistant Marguerite Davis shortened the name "vitamines" to "vitamins" and in 1916 proposed an alphabetical designation preceded by a notation of the solubility of the factor, thus fat-soluble A and water-soluble B. This was the beginning of the common nomenclature for vitamins.²²

In 1917 Johns Hopkins University recruited Dr. McCollum as the first chair and professor in its newly established department of chemical hygiene where he remained until retirement. While at Johns Hopkins he studied the nutritional status of children in orphanages and schools and gave many public lectures on nutrition. In addition to Marguerite Davis, his research colleagues included Nina Simmonds and J. Ernestine Becker.²²

Some of his most important research explored the relationship of diet, sunshine and rickets by experiments with rats. This research demonstrated the role of "a vitamin whose specific property is to regulate the metabolism of bones" (later called vitamin D) in preventing childhood rickets and led to the widespread supplementation of diets with vitamin D-rich cod liver oil.²³

In 1920 McCollum's team found that the fat-soluble factor A in butterfat could be destroyed by heating and aeration. Butterfat so treated no longer had growth-promoting activity; rats fed the treated butterfat developed xerophthalmia and died within 50 days. But the key experiment was performed by McCollum and his co-workers in 1922, when they observed that heated and oxidized cod-liver oil could not prevent xerophthalmia but could cure rickets in rats. "This shows that oxidation destroys fat-soluble A without destroying another substance which plays an important role in bone growth."²⁴

McCollum's belief that many other diseases of unknown origin, including mental illnesses, could be traced to nutritional deficiencies motivated his research into the effects of other inorganic elements including aluminum, boron, calcium, cobalt, potassium, phosphorus, fluorine, magnesium, manganese, iron, zinc and sodium. He published one hundred papers at Johns Hopkins, reporting his research on tooth decay, vitamins D and E, and the role of minerals. He wrote many books including his classic textbook, *The Newer Knowledge of Nutrition*, which passed through multiple editions.²⁴

Dr. McCollum died on November 15, 1967, at the age of eighty-eight. Shortly before his death, he remarked: "I have had an exceptionally pleasant life and am thankful." His papers are housed at Johns Hopkins University.¹⁸

The vitamin deficiency diseases are again appearing among children, immigrants, and the poor, and also subclinical deficiencies are seen in the general population. public health officials and administrators called his conclusions regarding diet "absurd," relying on the current eugenics theories that only inferior "human wastage" ended up impoverished or in institutions and that susceptibility to disease was racially determined. Even though Dr. Goldberger proved through his dietary experiments with convicts that pellagra was a condition of malnutrition, he was still accused of fudging his results, and criticized even by E.V. McCollum. Totally frustrated, he and six volunteers injected themselves with the blood of pellagra patients, as well as rubbed nose secretions into their mouths, and ingested urine, feces, and skin scabs mixed in a flour paste from patients. The fact that they did not contract pellagra still did not convince the medical profession that pellagra was caused by a vitamin deficiency. But at universities and in Europe, his work was praised and he was nominated twice for a Nobel Prize. Goldberger, again back in the South, was asked to intervene when an epidemic of pellagra struck after widespread flooding in 1927. He recommended brewer's yeast, which was a huge success and saved many lives.1

Dr. Goldberger died prematurely in 1929 of a rare cancer and never succeeded in isolating the substance lacking in the diet of those with pellagra. Conrad Elevihem (1901-1962) did so when he experimentally fed a similar diet to dogs. They developed "black tongue" and could be cured by feeding them nicotinic acid (niacin) contained in fresh meat or brewer's yeast. With the Great Depression, the 1930s saw a resurgence in the incidence of pellagra, also called the disease of four Ds: diarrhea, dermatitis, dementia and death. After the discovery of vitamin B, as a preventive, pellagra rates fell rapidly. These nutrition advances led to the enrichment of all flour with niacin, along with iron, thiamin and riboflavin. After World War II pellagra was considered a disease of the past.1

The remainder of the vitamins we know today were also discovered in the first half of the twentieth century. These include all members of the B-vitamin family, including B_{12} and folic acid, as well as vitamin K_2 and others.¹

A NEW FOCUS

Research during the second half of the

twentieth century turned from curing nutritional deficiencies and infectious diseases to exploring the role of nutrition in chronic disease, such as heart disease, cancer, diabetes and obesity. The new direction began in the 1950s with the start of the Framingham Heart Study and the research of "Dr. Cholesterol," Ancel Keys. Fat, particularly saturated fat, and cholesterol were identified as the culprits in the development of heart disease, and dietitians were taught to recommend severe restrictions of these "villains."^{50,51} Sadly, the Standard American Diet (SAD), largely a result of the now-failed nutrition policy from the 1950s onward, resulted in a staggering upward trend in the incidence of all these diseases.⁵²

The vitamin deficiency diseases are again appearing among children, immigrants, and the poor, while subclinical deficiencies are also seen in the general population.⁵³ From 2014 on, scientists cannot help but admit that this paradigm of condemning traditional saturated fats is not only just plain wrong but dangerous. Butter is once again becoming popular,⁵⁴ replacing rancid vegetable oils that were pushed so heavily for decades.⁵⁵ As in the days of Weston Price, the nutritional value of the commercial food supply continues to decline as processed, artificial and genetically modified foods become the mainstay along with increasingly poor physical and mental health of the American population.⁵⁶

Yet burgeoning public awareness and grassroots initiatives spurred on by organizations like the Weston A. Price Foundation continue to inspire everyday citizens to take a stand and fight for their food rights by supporting small farmers and farmers markets, tending organic gardens, and cooking wholesome, delicious meals at home where future generations will be nurtured.

Sylvia P. Onusic, PhD, CNS, LDN, a boardcertified and licensed nutritionist, writer and researcher, is a frequent contributor to the journal. Her background is in foods, nutrition, and public health. As "Your Public Health Advocate," she keeps you current on controversial topics in health and nutrition, analyzes studies in the field, and provides nutrition counseling services through her website at drsylviaonusic. com.

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SHOPPING GUIDE CORRECTION

New phone number for Reallygoods: (262) 423-8000.

The MyPlate Dietary Guidelines: Obsession with Calories and Fat

by Kimberly Hartke

s the U.S. government putting our entire nation on a calorie-restricted diet, whether we need it or not? It would seem so, as ChooseMyPlate.gov is one of the most calorie-conscious websites in cyberspace.

Take the downloadable consumer brochure on ChooseMyPlate.gov: the message is introduced via the subtitle, "Build a Healthy Plate," claiming that "low-fat dairy products and lean protein foods contain the nutrients you need without too many calories." It goes on to promote the calorie-vigilant mindset with a segment called "Cut Back on Foods High in Solid Fats" (because they contain extra calories, it explains) followed by "Eat the Right Amount of Calories" (did you know we all have a "personal calorie limit"?), and finally wraps up with a section encouraging physical activity presumably for the express purpose burning calories.

Just an aside, if the USDA's office of Nutrition Policy and Promotion is tasked with giving dietary advice, fine; but what is the meaning of including exercise in the brochure? Running, jogging, walking and other athletic endeavors do require fuel from our nutrition, but such counsel is clearly beyond the USDA mission. The Diet Dictocrats aim to manage not only our calories in, but our calories out as well.

The meta-message for the colorful, downloadable MyPlate brochure is that good health equals weight loss. Readers are finger-wagged: "Think before you eat; is it worth the calories?" They are forewarned about restaurant pleasures: "When eating out choose the lower calorie option." They even receive advise to keep a food di-

Fruits

egetable

Grains

Protein

Choose MyPlate.gov

ary: "Write down what you eat to keep track of how much."

SEARCHING OUT THE FATS

Let's take a look at the fats on My Plate if you can find them. Fats are scrubbed from the dairy section; the only foods allowed in the "Dairy Group" are those that "retain their calcium," which ex-

cludes cream cheese, butter and cream. Can you imagine being kicked out of your rightful food group after thousands of years of serving humanity? And consider the insult of replacement by an outright imposter: soy milk with added calcium is deemed a full-fledged dairy food on My Plate!

We looked for fats in the "Protein" section of My Plate. "Go lean with protein" is the main consumer takeaway message on this page. Skinless chicken breasts and 95 percent lean ground beef are at the top of the hit parade, along with two servings of seafood a week. Fortunately, they haven't yet invented a process to manufacture lowfat seafood.

What about the "Vegetables" on My Plate? Dr. Weston Price taught that fat is necessary for assimilating and metabolizing vitamins and minerals in the diet, which is why the Weston A. Price Foundation recommends always serving vegetables with a dollop of butter or cream. Yet the first benefit cited on My Plate for eating vegetables is that they are lowfat, low-calorie, and contain no cholesterol. Anticipating our human frailty, the Dictocrats admonish us that "sauces may add fat, calories or cholesterol." Nevermind that sauces also make vegetables more flavorful and satisfying, not to mention more nutritious. And isn't it much easier to persuade a child to eat those virtuous vegetables with a pat of butter melting over them?

After the low-in-fat praise for vegetables, their nutrient and health benefits follow in secondary importance, illustrating the official hierarchy of values: condemn fat first and then concede the nutrition content facts. Funny, the fi-

Dairy

nal reason presented on this page is, once again, that they are lower in calories per volume than other foods.

We found the same approach used on the "Fruits" page of My Plate and for the same low-calorie-content standards. Under a section on how to make fruit more appealing (as if fruits aren't totally appealing already), lowThe thought of eating plain popcorn and all those dry grains makes you want to apply extra butter and a sprinkling of fleur de sel seasalt on your next slice of sourdough!

fat or fat-free yogurt was suggested for dips and smoothies. Guess strawberries and cream are out of the question.

You've probably heard about the "sandwich" method of delivering bad news: you give good news first, then the bad stuff, and end with more good news. It seems that those dishing out My Plate information consider the best news about fruits and vegetables is that they contain very little fat. Does that make their vitamin and mineral content the bad news?

Sleuthing out the fats in the "Grains" segment on My Plate also proved difficult. Lots of grain-based foods are recommended, grains that are only palatable topped with butter: whole wheat bread, whole grain rice, whole grain pancakes, whole oats. The only mention of fats was in the negative. We learn that popcorn is a healthy snack, but only if served "with little or no salt and butter." The thought of eating plain popcorn and all those dry grains makes you want to use extra butter and a sprinkling of *fleur de sel* sea salt on your next slice of sourdough! It gives you the sense that Fagin fed Oliver Twist and his orphan boys better than federal nutrition policy-makers want us to feed our children.

USDA advises against both butter and lard as being unwanted and nutritionally void (sic) "solid fats." We read nothing about the vital nutrition provided by these solid fats (A, D, E, K and the Wulzen factor), only warnings about them possibly increasing LDL-cholesterol levels, which "they" claim will lead to heart disease. Traditional, nature-made fats that have been with us for millennia are lumped in with modern manufactured *trans* fats as though they were equally

dangerous.

Since there are nearly no fats allowed on My Plate, it may surprise you that vegetable oils merit their own webpage. These oils are lauded as containing vital nutrition from essential fatty acids. But oils rich in saturated fats like palm oil and coconut oil slide right off the page into the solid-fats waste bin.

FORBIDDEN SATURATED FATS

The lowfat message peppers every good group on MyPlate, while the food governors gush about liquid oils. We therefore decided to compare the "approved oils" versus the "forbidden fats," contrasting their calorie count and saturated fat content.

First we looked at the recommended daily intake of oils on My Plate. Women ages thirty-one to fifty are recommended five teaspoons of liquid fats (plant oils) per day—men, you are allowed one more teaspoon. We are told these vegetable oils, like sunflower, soy, corn, canola, and safflower, "contain essential fatty acids and are the main source of vitamin E in the American diet."

For comparison we used the Super Tracker Food Tracker App on the website which accesses a dazzling database of foods and food ingredients—except if you try to search for bacon grease, beef tallow, chicken fat or schmaltz you'll come up with a goose egg; i.e., nothing.

A daily allotment of five teaspoons of canola oil registered 200 calories on the tracker. Canola oil contains two grams of saturated fat, and received a "zero empty calories rating." The same amount of soy oil contains 199 calories, with four grams of saturated fat. Are you beginning to see why soy was eclipsed by canola as the healthy oil of choice? Soy has double the saturated fat of canola oil. Still, the tracker reported that soy oil also contains "zero empty calories."

When we entered WAPF-preferred fats into the Super Tracker, it ap-



Charlotte, 9 years old, came up with the concept for this cartoon. Charlotte is very proud to make her cookies with coconut oil and butter.

pears some "empty calories" count more than others. Lard (five teaspoons) is lower in calories than soy and canola oils, coming in at 193 calories and eight grams of saturated fat. The tracker declared that 173 of these calories are "empty calories."

When we drill down by clicking on the Super Tracker's "Nutrient Info" tab we learn something surprising about lard. Sixty percent of the fatty acids in lard are government-approved fats! Five teaspoons of lard contains ten grams

> of monounsaturated fat and two grams of polyunsaturated fat. So are the calories from these twelve grams of USDA-favored lipids guilty by association with the eight grams of saturated fat? According to USDA they become empty calories by residing in the same foodstuff.

> Last, we entered five teaspoons of butter in the Super Tracker and found, surprise, it has the smallest calorie count of all: 179 calories and the highest saturated fat count of thirteen grams. The tracker posted 164 "empty calories" for this nutrient-dense food, even though, once again, butter contains both mono- and polyunsaturated fats. This time, we notice there is no government-prescribed target or limit for these favored fats.

These results didn't exactly jibe with the "Solid Fats" page on ChooseMyPlate. gov, which says, "Solid fats and oils provide the same number of calories per gram." And it isn't clear why, by this inane bureaucratic logic, butter, with more grams of saturated fat, has fewer "empty calories" than lard which contains less saturated fat.

As a WAPF-educated consumer, what can you take away from all this? Butter, which is highest in saturated fat, is the lowest in calories. So why all the calorie consciousness if the "approved" canola oil is actually higher in calories than butter or lard?

TOTAL BLACKOUT

My Plate might as well be a covered dish, for there is a total blackout on the bounty of valuable nutrition available to us from animal fats and tropical oils.

We will need to go offline and consult a WAPF source for that information. According to Mary Enig, in her book, *Know Your Fats*, pork fat (lard) is about forty percent saturated, fifty percent monounsaturated, and contains ten percent polyunsaturated fatty acids. What a coincidence: My Plate highly recommends fats that contain sixty percent monounsaturated and polyunsaturated fatty acids. Plus, lard is also one of our richest dietary sources of vitamin D.

Mary Enig also had this to say about butter: "It is definitely a fat with health potentiating properties. . . it is a source of antimicrobial fats, short chain fatty acids that inhibit growth of pathogenic fungi, and medium chain fatty acids that disable many pathogenic viruses and other organisms... glycolipids that have anti-infective properties, and conjugated linoleic acid (CLA) that has anti-carcinogenic properties." Enig also reports grass-fed ruminant butter to have high levels of vitamin A, and that butter and real cream have healthful components not found in any other food.

Enig was a proponent of tropical oils such as palm and coconut. "Palm oil is one of the most important edible oils in the world," she noted, and "coconut oil is an important source of nutrients. . . a source of lauric acid, which is important for infant formulas. . . where it plays a critical role."

We must question the integrity of the USDA dietary guidelines. ChooseMyPlate.gov totally disregards numerous fats that are vital to human health. \bigcirc

Kimberly Hartke is the publicist for the Weston A. Price Foundation.

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Technology as Servant HERBICIDES FROM HELL: THE NEXT GENERATION By John Moody

While I have generally focused on the positive contributions technology makes to our lives, and the opportunities it creates to benefit both people and planet, this column will sadly have to take a different tack. Technology can bless us, but it can also burden and even bury us. The story of herbicides is a somber case of the latter.

WEEDS, WEEDS, EVERYWHERE

For home gardeners and food growers, weeds can be a perennial problem. The more the ground is disturbed, the more the weeds appear and advance. As agriculture became more and more dependent upon tillage and soil disturbance, weeds became more and more problematic, especially for larger-scale growers. Intensive monoculture agriculture from the Roman Empire on has always faced this issue. The ancient solution was slave or similar cheap manual labor to carry out the back-breaking work of crop cultivation.

As with the rise of antibiotic resistance and new, deadlier strains of bacterial diseases, weeds and insects have also adapted to this ill-informed approach to agriculture. For modern agriculture, the solution has not been to move toward more environmentally sensible, ecologically smart farming systems, but to a dependence upon chemicals, especially the leftovers from chemical arms developments in times of war. While many people claim that the U.S. has never experienced a war with invaders on its own shores, our native soil, plants and animals would likely differ.

Defoliants and other warfare chemicals related to nerve gases were found to be effective not only against enemy troops but to annihilate at-home pests, of both the plant and insect varieties. A new paradigm of agriculture was born, built not on partnership with nature, but on the violent terms of war, plunder and domination.

GLYPHOSATE GANGBUSTERS

Now a household name, and in some circles a four-letter word, Roundup (brand name of the

active ingredient glyphosate) became the herbicide par excellence among farmers and suburban home owners alike. Indeed, Roundup is used not solely for weed control, but also as a desiccant to hurry harvest of such crops as wheat. The problem? It also killed many crop plants along with those pesky weeds. The solution? Genetic modification (GM) technology, to create plants that would withstand dousing with this potent poison. Roundup's use is so widespread that in 2007 it was estimated that just under two hundred *million* pounds of it was used in the U.S. alone.¹

Yet people tend not to learn the lesson that nature cannot be scorned. Nor can she be so easily beaten. Over the past four decades of herbicide and pesticide dependence, like a drug addict needing ever greater highs, industrial ag finally hit a snag. The law of diminishing returns set in. Nature adopted and adapted. She fought back. As with the rise of antibiotic resistance and new, deadlier strains of bacterial diseases, weeds and insects have also adapted to this ill-informed approach to agriculture.

Now we find ourselves surrounded by quickly spreading super weeds and super bugs, resistant to glyphosate and Bt (found in crops containing a gene from the insect-toxic bacterium *Bacillus thuringiensis*). Roundup-resistant weeds now occupy well over sixty million acres of real estate in the U.S., are found on fifty percent of surveyed farms, and include over two dozen types of plants.² The spread was sudden, expansive and certain.

Undaunted, Big Ag came up with a solution. Supported by nearly all departments of the federal government and subsidized heavily by the same, their plan is perfectly positioned to ensure the continued dominance of industrial agriculture at the high cost of citizens' dollars and health, while assuring the continued spread of new generations of resistant species, both plant and insect, with potentially more detriment to the rest of nature.

NEXT GENERATION HERBICIDES

When the inevitable end of the "miracle" of glyphosate and Bt-genetically engineered traits and chemicals arrived, agro-death dealers immediately began working on the next generation of herbicides and herbicide-resistant GM strains of common commodity crops. Government agency lapdogs EPA and FDA will waste tens of thousands of dollars assailing small, honest, and integrity-driven businesses like Wilderness Family Naturals and essential oil companies, while speedily rubber-stamping Big Ag science and chemical concoctions safety reports.

One of the new herbicides is aminopyralid, first registered for use in 2005 in the U.S. under the brand name Milestone, among many others. From Dow Agro-Sciences's own product report: "Aminopyralid is a recently introduced herbicide developed by Dow AgroSciences to help control noxious, poisonous and invasive broadleaf weeds. . . [and] was accepted for review by the U.S. Environmental Protection Agency (EPA) under its Reduced Risk Pesticide Initiative and met all guidelines for the registration of an herbicide in the U.S.."

There is a lot that could be said about this slick piece of PR. It is instructive to note, first of all, that most broadleaf plants are neither weeds nor noxious. This castigation befell many of them because their presence disturbed the homogenous tableaux of turf grasses in suburban lawns even while many of them benefitted lawns, gardens, and pastures, such as the clover family, which fixes nitrogen, attracts pollinators, and supports the soil food web. Many of them are also beneficial to us, nutritionally speaking. Some so-called weeds contain ten to one hundred times the nutrition of modern lettuces and green vegetables.

By re-christening these plants as "weeds," lawn care and chemical companies got a two-for-the-price-of-one deal. First, they charge customers to kill off said "weeds" and then again to apply chemical concoctions to replace what the weeds naturally provided to the soil food web and ecosystem. A sinister arrangement based on ignorance and greed.

Further, aminopyralid is of concern to vegetable growers, as it can enter the food chain via manure, which contains long-lasting residues of the herbicide. Its sale has been suspended in various parts of the world, but that has not stopped instances of contamination from continuing to crop up in those countries. Such suspensions have generally been short-lived, as regulatory bodies merely impose a "strict program of stewardship," which theoretically protects the public from these poisons.

DEADLY DUO

One of the main ingredients of Agent Orange, the defoliant used by the U.S. during the Vietnam War, was 2,4-Dichlorophenoxyacetic acid, more commonly known as 2,4-D. This herbicide, associated with many health problems, is now making a reprise in concert with glyphosate in a very recent product debut, again by Dow AgroSciences. Using a trade name with decidedly military flavor, Enlist, this latest cocktail of poisons was registered by the EPA in October 2014 for restricted use in Illinois, Indiana, Iowa, Ohio, South Dakota and Wisconsin. In 2013, the product was approved by Canada for the same uses, namely as a replacement for the original Roundup-Ready system that is now losing ground to the rise of "super weeds."

Already environmental groups predict a new wave of resistant weeds

SURELY ORGANIC GROWERS ARE FREE FROM THIS PLAGUE?

The main focus of this article is the new wave of herbicides spilling over into sustainable growers' gardens and growing systems, with sometimes catastrophic results. Imagine an herbicide that has a half-life of three to five years, damages and destroys plants at one part per billion, breaks down only very slowly in compost systems and healthy soils, and passes through ruminant animals' digestive tracts and into their manures unmolested. Say hello to aminopyralid, a grower's worst nightmare.

With four different ways it can end up in gardens—manure, compost (municipal or farm-made), straw and hay aminopyralid and several others are some of the worst of a host of the next-generation herbicides. But aminopyralid so far leaves them all in the dust in terms of danger and damage, though all must be avoided.

If aminopyralid makes it into a grower's soil, for the next three to five years the only crop they can hope to grow is ... corn. Yes, there is some real irony that one of the two main crops responsible for the development of this herbicide is the only thing you can grow if it gets into your ground. If a grower is certified organic, his certification is immediately lost for three or more years. If you have limited space, your only option is to pay to have all your dirt removed, regardless of how thick, healthy and happy your humus is. That dirt is now death, and there is nothing you can do to resurrect it quickly.

In the northeast U.S., thousands of backyard and organic growers, thinking they were doing the "green thing," picked up municipal compost or composted animal manures for use in fertility building, only to find out later that their choice was fatal. In England, legions of gardens now lie fallow following exposure. Yet use is continuing to increase and spread for this herbicide from hell and others like it. Fastidious practices are needed to protect food plants from soil contamination by herbicides. will develop in response to deployment of the Enlist system, which is designed to be applied to corn and soybean crops (and soon cotton) genetically modified to resist both herbicides. The chemical arms race, like any arms race, has no endpoint other than mutually assured destruction (MAD).

PROTECT YOUR POTATOES!

With aminopyralid in particular, there is no current test to detect its presence in soils. So for growers, fastidious practices are needed to protect food plants. First, any compost should be bio-assayed before purchase (see sidebar below) until testing for aminopyralid contamination becomes affordable and available. Second, for those needing hay, visually inspect the fields before and during harvest. If the field lacks clovers and similar broadleaf plants, there is reason for concern. Milestone is a broad leaf herbicide. so any field that lacks typical broadleaf pasture plants is a prime suspect for having had it, or a similar product applied at some point. Good hay should contain a perennial polyculture of various grasses mixed with other species.

Also, note the risk of fence lines and other boundary areas. Many farmers won't spray their main fields, but may use these chemicals for fence lines, around outbuildings, and other similar maintenance applications. This means that the hay, straw or animal manures from grazing along these areas may be contaminated. Some bales of hay or straw may thus be clean, while others may be heavily contaminated.

The best defense is a good relationship with the people who supply your growing inputs and

clear communication about your concerns. Getting a written agreement that inputs are raised without herbicides is an important precaution and alerts your grower to the high level of vigilance you require.

Understand that destroying a farm's or homestead's economic future for many years is as simple as having "bought hay at auction, fed it to my horses, and put the manure in my hoop houses." Realize that the people who produce this poison have one thing to say to you when your farm and financial future are destroyed by their deeds: "What I was told by Dow is that they are not legally responsible for it."³

You must be absolutely sure of what you are obtaining as a grower of any scale and kind. The chemical companies deny any and all responsibility for damage caused by contamination from their killer moneymakers. Their bureaucratic buddies and political pals ensure these protections are in place.

Only you can protect your growing spaces. Also, in cases of damage caused by overspray and drift, the Farm-to-Consumer Legal Defense Fund may be able to help if you document the incident properly and promptly.

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BIO-ASSAY FOR COMPOST SAFETY

Until reliable tests for herbicide contamination are available, growers must rely on less precise methods. Bio-assays require advance planning, since you will need at least four to six weeks to complete the test, and will want a time cushion in case something goes wrong with the trial and you must retest. You don't want to be a few weeks out from planting only to realize that you lack certainty regarding the safety of your soil.

The bio-assay is a typical high school science experiment, involving two sets of plants, one using known clean planting soil, one using soil containing compost or other inputs that may be herbicide contaminated. A full explanation of this method, along with helpful pictures, is available for free from Washington State University, puyallup.wsu.edu/soilmgmt/ Pubs/CloBioassay.pdf

Homeopathy Journal PERSONAL POLLUTION: THE NASTIEST KIND By Joette Calabrese, HMC, CCH, RSHom (NA)

Pollution is a problem. Foods contain pesticides. GMOs are everywhere. Formaldehyde is coated on our clothing and flame retardants infuse our mattresses. And then there's radiation reaching us from the other side of the globe. We're doomed, right?

Yet consider a different take on pollution, one that may be much more important than the randomly emitted sort. It actually might be the most vicious, as its overuse has become the number one killer in the U.S. today. Remarkably, we willingly accept this kind of pollution. In fact, the public has been convinced to respect it enough to pay for it! And it's brazenly sitting right there in your medicine cabinet.

What is it? By now you must have guessed: I am speaking of prescription medicines and overthe-counter drugs. Pharmaceuticals. These drugs are euphemistically called medicine instead of what they often are: pollution of a most personal nature.

Allow me to demonstrate the devastation that occurs in the wake of having taken, in many cases, only a round or two of one of these pollutants.

Meet Dolly. She is a plucky ingénue attending an Ivy League university where she pursues her major in piano performance. She has lived her sparkling nineteen years with nary a thought towards health. She eats organic fare at the school's upscale cafeteria, enjoys full-fat, organic vogurt, and wouldn't dream of consuming a Big Mac, yet her skin has become an issue of late. Each month she is visited by blemishes. And since she performs regularly on stage, she wishes to have flawless skin. So she takes a trip to the infirmary on campus to get an expert's opinion. We already know what the doctor will say, but because of her age, Dolly is unsuspecting. She leaves the clinic with two predictable prescriptions: one for an antibiotic and the other for birth control pills. Her "acne," that was in reality little more than a monthly show of pimples on her cheeks,

disappears within days after commencing the drugs. All is well, right? But then, wham!

Perhaps a month or two later, Dolly begins to feel not so well. Her belly aches after eating, constipation sets in, and she begins to notice a creeping sadness that soon settles into depression. Small matters that never troubled her before become dismal and heavy. She also finds that certain foods cause embarrassing gas, one of which is her beloved yogurt. Dolly has developed chronic illness. And these sufferings may not dwindle over time, regardless of how soon she stops taking the drugs. If their effects are not fully addressed, they will be commensurate with the amount of time she ends up taking them. Dolly has traded a minor skin condition that could have been treated with a homeopathic protocol for a new life of lasting gastrointestinal discomforts and frank depression.

Like an innocent, well-trained poodle, Dolly drags herself (did I mention that she now suffers fatigue too?) back to the prestigious clinic in her prestigious university where, never fear, more up-to-the minute drugs are prescribed. This time she is given a psychotropic drug for her depression and a pain reliever for the gastrointestinal pain. There is simply no responsible argument for the use of psychotropic drugs in the case of a young woman whose equilibrium has been upset by birth control pills and antibiotics.

This, my friends, is a case of neglect and pollution of the most sobering sort, and, moreover, one that is entirely avoidable. It only takes a visit to drugs.com to accumulate enough vital facts regarding side effects of each of Dolly's drugs. To find what I call the "unofficial" short- and longterm effects takes only a few key strokes to reveal the forums of people suffering from drug effects as they share their misery. Had Dolly thought to do this, or if the clinic doc had conscientiously warned her, she would have found that the side effects of her prescribed drugs sounded not unlike nuclear winter warnings. Remarkably, we willingly accept this kind of pollution. In fact, the public has been convinced to respect it enough to pay for it!

Wise Traditions

We have not yet observed the full effects of the birth control hormones that Dolly is ingesting daily but we can only imagine what may superimpose on Dolly's life in the next decade.

NUX VOMICA: POISON NEUTRALIZER

According to Dr. William Boericke in *Homeopathic Materia Medica*, "*Nux vomica* is the greatest of polychrests [medicine that cures many diseases], because the bulk of its symptoms correspond in similarity with those of the commonest and most frequent of diseases. It is frequently the first remedy, indicated after much dosing [of pharmaceuticals], establishing a sort of equilibrium of forces and counteracting chronic effects. *Nux vomica* is pre-eminently the remedy for many of the conditions incident to modern life."

Dr. Roger Morrison in *The Desktop Guide* to Keynotes and Confirmatory Symptoms lists Nux vomica for breakdown from substance abuse and notes its significance in antidoting a simple hangover. Dr. Douglas M. Gibson tells us that "The treatment of a much-medicated patient, so frequent a type nowadays, may well be started with Nux vomica in high potency."

In worldwide practices, it is the premiere remedy not only to antidote the ill effects of drugs but the effects of other substances such as alcohol and street drugs. Dr. Gallavardin, in his book, *Homeopathic Treatment of Alcoholism*, published in 1890, devotes nearly the entirety of his treatise on the importance of *Nux vomica* for substance abuse.

Unlike herbs, enemas, supplements, and so on, homeopathic remedies must be chosen with a less sweeping brush. *Nux vomica* is not to be administered willy-nilly, but must be chosen based on the substances abused as well as on the way the person responds to the drugs.

STOP, DOLLY, STOP!

So what is the solution? Dolly must stay clear of drugs that pollute the body and may project compounded symptoms into her future. The way to do this is to consider food changes, add patience and sufficient time to heal, perhaps a homeopathic remedy, and drop the idea that drugs are harmless when taken in moderation.

It is telling that Dolly's mom took her to the

doctor for nearly every sniffle and sneeze during her tender years. This is where it all begins: at the pediatrician's. Parents and children are trained to depend on "the professional" to make important health decisions and accept taking drugs as normal behavior. This is where mothers are convinced that their instincts are not scientific, that fever should be quashed with Tylenol, allergies ought to be tamped down with steroids, that young girls are birth-control-pill deficient, and, up until only a few decades ago, that breastfeeding is unnecessary and even barbaric.

STEPS DOLLY CAN TAKE

The first step is for Dolly to get off the drugs. This can be done by offering homeopathics first, so that the need for the drugs becomes obsolete. This would include employing a protocol for her gut dysbiosis as well as one for depression and then aiming backwards towards her original complaint of blemishes. Each of these conditions will be thoroughly resolved via homeopathy and Dolly will be back on solid ground. This is not to say that all drugs can or ought to be stopped abruptly by everyone in all circumstances. Such a sweeping generalization carries potentially dangerous consequences. But in Dolly's situation, antibiotics, birth control pills and psychotropic drugs are, at best, superfluous.

Next is to offer a dose of *Nux vomica* 200 that can be taken once daily for three days. This will help settle the chaos. It's likely that her stomach pains, gas, and even depression will relent enough, once off the drugs, to allow her to move to a more intelligent way to treat each of her other conditions.

Dolly will need to tighten up the purity and choices of her food for some time while taking up a homeopathic protocol to right the wrongs the antibiotics caused her gut health. Her symptoms will dictate the remedy choice. If she suffers chronic constipation, in which she cannot complete a bowel motion, the protocol that will likely antidote this will be *Chelidonium* 30 mixed with *Nux vomica* 200, taken twice daily for approximately six weeks.

Next, it's time to review what Dolly could have done to take care of her minor problem with homeopathy. Acne is often best met with *Hepar sulph* 200 mixed with *Arsenicum album* 200 taken every other day for about six weeks. Often that's enough time to eliminate the problem permanently. I learned this little trick in Calcutta at the side of the great Drs. Banerji where they assured me of the efficacy of this medicine for acne. They were right. I witness the success of this protocol time and time again. In fact, for nearly any medical condition that Dolly might encounter, with a little effort she might easily have rooted it out safely with homeopathy.

Join Joette for inspiration and free homeo-information with the research section of her blog JoetteCalabrese.com/blog. Visit courses. joettecalabrese.com/homeopathy-courses to find courses such as "Good Gut Bad Gut," for using homeopathy for GI disorders, and "Skin: The Ugly Truth," Joette's course on skin conditions and homeopathic protocols. Go to the front page of www.JoetteCalabrese.com or call (716) 941.1045 to schedule a free 15-minute conversation with Joette to see if homeopathy is a fit for you and your family.

Healing Lyme Disease Coinfections: Complementary and Holistic Treatments for Bartonella and Mycoplasma by Stephen Harrod Buhner Healing Arts Press

If you tell the average person you have a book that contains all known information about Bartonella and mycoplasma, the first question will probably be, "What is Bartonella?" If you make it through the answer to that question without triggering more questions, the next question will be "What is mycoplasma?" Chances are that even your average doctor doesn't know much about them and couldn't answer these questions.

The items in question are two very opportunistic, highly adaptable, intracellular parasites that often show up in people with Lyme disease. They can commandeer your immune system for their own nefarious purposes. They complicate both symptoms and treatment. They can have a big party all over your body and while they are having fun, you're not.

While you may not have heard much about these things, they are quite common and have been around for a long time. Right on the first page of his book's introduction Buhner points out that the numbers from the CDC are, as usual, very different from reality. Imagine that. The CDC is at war with bacteria but doesn't collect very accurate information on it. Referring to the war on bacteria, David Livermore (bacterial resistance researcher and physician) has said, "It is naïve to think we can win."

Buhner brings up another good point from Buckminster Fuller, which is that American students are taught information that is fifty to one hundred years out of date. These observations may explain the general state of research in America today.

Buhner goes into detailed explanations of mycoplasma first. It is tiny. Four thousand can fit into one red blood cell. There are many different strains and they cause even more symptoms. If the immune system is weak, no treatment or drug will make any difference. Mycoplasmas can survive pasteurization. There are very long, detailed explanations about how they evade immune system attacks, spread from one body to another, and drain nutrients from those infected bodies. They scavenge essential vitamins, including vitamin A, amino acids lipids, and minerals. They are pleomorphic—they can take on different forms when it suits them. They are capable of rapid genetic variation and have been implicated in the development of cancer. These little bugs are stubborn, devious and difficult.

That's the bad news. So what's the good news? There is a treatment protocol. One key is that mycoplasma is due first and foremost to a nutrient deficiency. Nutrition is an important part of the recovery protocol. Scavenged nutrients must be replaced. In addition to nutrition there are numerous herbs that can disrupt mycoplasma infections. Buhner does not seem to think it is a coincidence that some of those herbs that can help with these widespread health problems are thriving, invasive species. He tells us that if we hear of a plant that is going to destroy the country, ask yourself, "What medicinal qualities does it have?"

Buhner does talk about treatment with antibiotics. If you must use that option, it is important that the doctor know what he is dealing with and how to deal with it. The wrong antibiotics will do nothing. The right antibiotics will also do nothing in the long run if you don't understand how these bacteria can hide in bones or other places until the antibiotics are gone—and then they pick up where they left off.

This book is good but it is not an easy read. It is long and goes into extensive detail. You know you're in trouble when you start seeing Greek letters—a lot of them. The author does have a sense of humor but you won't find a big laugh on every page unless you are easily amused by the Greek alphabet. The $\tau\eta\nu\mu\beta$ is UP.

Review by Tim Boyd



If we hear of a plant that is going to destroy the country, ask yourself, "What medicinal qualities does it have?"



Grain of Truth: *The Real Case for and against Wheat and Gluten* by Stephen Yafa Hudson Street Press, 2015

Proponents of countless health-aspiring camps have joined the cacophony of condemnation of grains, and especially wheat, for nearly a decade now and the furor seems unlikely to diminish anytime soon. In the tsunami of near universal rejection of the once-venerated "staff of life," yet one more voice seeking audience on the subject might easily be ignored. After all, many are convinced that wheat and gluten are irrevocably proven the scourge of humankind. Wheat and gluten sensitivities afflict many of one's friends, family and co-workers. Restaurants, food retailers, and any social event that includes edibles these days all offer gluten-free or grain-free options. Those mortals with as yet no overt symptoms of wheat sensitivity nervously

fear the stealthy onset of some associated illness and reject the verboten foods as a means of prevention and, they believe, just good common sense.

There is no question that wheat and gluten sensitivities are very real and that a growing number of Americans suffer their effects, not only in the gastrointestinal system, but in many other unpleasant manifestations, including the function of the brain, the nervous system and the immune system. Books such as *Wheat Belly* and *Grain Brain* claim that wheat is poison and the instigator of numerous ailments and degenerative conditions—including the obesity epidemic—that plague so many of us. The zeal of this evangelism threatens to squelch any unorthodox viewpoint, yet Stephen Yafa manages to present some calm and refreshing insights amid the firestorm.

Yafa, novelist, screenplay writer, and California wine grower, is also the author of *Cotton*, his first non-fiction investigative work,

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 review?

- 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/or 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, 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 that is 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 are peddling misinformation, and for these we will give a negative review. We also will give a negative review to a book that misrepresents the findings of Weston A. Price.
- Please do not send us a book as an email attachment. Have the courtesy to send us a hard copy book or a print-out of your ebook or manuscript in a coil binding.

and writes about wine for the San Francisco Chronicle. His interest in the story of wheat was partially fueled by his wife's experience at an Ayurvedic retreat when her masseurs refused to continue body work until she gave up gluten. "I have gluten neck," she reported ruefully to her husband. Yafa companionably joined her in a gluten-free month-long experiment and while they both noted her improvement in some physical disorders, Yafa watched his pleasure fade from mealtimes. Unapologetic in his devotion to Wheaties and Triscuits, Yafa found that while he had no cravings for these rebuffed favorites on their wheat fast, the exclusion of all wheat and bread products nevertheless blunted his otherwise happy anticipation of dining. For more than the next year he embarked on a journey of discovery that included speaking with wheat growers, millers, plant geneticists, artisan bakers and others involved one way or another in the troubled history of this maligned food.

Yafa soon discovered that one may find "a grain of truth" in nearly every thesis presented by all the writers who profess to have found the "smoking gun" in the guise of wheat gluten responsible for the sorry state of health in the United States today. Readers will find his historical perspective on humans and grain consumption revealing, as well as the path that plant breeders have taken in selecting modern strains of wheat to fulfill strict industry requirements of yield, accommodation to harvesting machinery, milling and manufacturing technology. Gluten, most plant experts agree, has in fact not increased in modern wheat, yet something called "vital gluten"-a powdered, high-potency concentrated gluten supplement-is routinely added to commercial bread recipes in order for the dough to perform in high-speed mass-production lines. Most of the bread products made commercially (hamburger buns, etc.) are transformed from dry ingredients to packaged product (with super doses of undigested gluten) in a mere four hours. The products' health qualities are not remotely

considered—most of the big players in the industry know that neither insects nor rodents are stupid enough to eat the denatured flour they are made from—yet they are consumed daily by most Americans. Their role as "carriers" for sandwich fillings makes them, at best, "edible gloves," as Yafa says.

Those with an interest in history, plant biochemistry, microbiology, horticulture and the culinary arts will all find subjects and personalities of great interest and illumination in *Grain of Truth*. Yafa comes to believe that it is the unsavory mix of modern technology and mass food production that has besmirched the reputation of wheat. The miserable offerings of the public food trough—commercial, mass-produced, crud-laden, food-like artifacts—are largely responsible for the tangled web of health disorders we can't seem to escape. Conditions like wheat and/or gluten sensitivities may also be symptoms of sugar overload, imbalanced and damaged gut flora, glyphosate and other pesticide and chemical exposure, as well as other exogenous assaults too numerous to list.

Dairy products have suffered a similar struggle to maintain integrity in the past half century in this country. "Nature's perfect food" has been targeted as a poison and killer along parallel tactics of mistaken identity. I shouldn't have to point out to readers of this journal the obvious fact that industry-produced dairy products not only bear no resemblance to the genuine article, but are indeed dangerous to health.

Yafa's many months of research bear fruit in a most rewarding and delightful way when he decides to roll up his sleeves and become an artisan sourdough baker. My heart leapt in comradely spirit to read of his excitement when meeting other bakers with intimate knowledge of heritage wheat breeds, their individual nutrient and flavor profiles, and the magic of sourdough alchemy that creates satisfying tastes and aromas as well as producing digestible (to healthy individuals) results. Yafa's wife was able to return to eating bread when made by her husband with his newfound skill in the gentle art of fermentation. In fact, she even lost a last bit of stubborn weight effortlessly when fully satisfied with her meals that included sourdough bread. His chapter entitled "The Sourdough Solution" provides an elegant introduction and explanation of the magical transformations that microbes and an acidic environment wield on organic, whole meal flour.

Grain of Truth includes an appendix with detailed instructions for Yafa's multi-day sourdough bread recipe as well as one for local organic grain and flour sources, and another for heritage grain and flour sources. Yafa's pleasure in exploring the flavor palettes and nutritional benefits of properly grown and cultured heritage grains is inspiring and may be the best part of this story. Review by Katherine Czapp



Freedom from Fibromyalgia: 7 Steps to Recovery Leah E. McCullough

Fibromyalgia is a serious condition that leaves sufferers incapacitated by pain and exhaustion. Medical doctors are not much help because there are no drugs that cure it or effectively suppress the symptoms. For those who limit themselves to that option there is little hope.

Leah McCullough wisely found another way to overcome fibromyalgia with a multi-faceted approach. One facet which is often overlooked is the importance of a positive mindset. Just say no to negativity. If you think your situation is hopeless, or you have bad genes and are doomed to a life of suffering, then you're probably right.

McCullough spends several pages on gentle detoxification protocols and gives specific recommendations for the products that worked for her. Since toxins are often at least partly responsible if not the root cause of illness, it stands to reason that they should be avoided. A good rule of thumb pointed out by McCullough is not to put anything on your skin that you wouldn't eat. That includes cosmetics, deodorants, shampoo, soap, tattoos, chemicals in hot tubs, sunscreens, and anything you can't pronounce.

For nutritional supplementation she recommends fermented cod liver oil and high-vitamin butter oil. Her ground rules for nutrition and eating in general are fully Weston A. Pricecompliant.

Leah McCullough suffered severe fibromyalgia (diagnosed by a medical doctor) and by using her protocols is now free of all symptoms. Most people, including me, find it hard to argue with success. She was extremely overweight and has lost all excess weight and looks very healthy. She went from feeling like she was going to die to good health and having a healthy baby. There is a current picture of her on the cover of the book. I have met the author so I know that picture is accurate and wasn't brought to us by the magic of Photoshop. Her recommendations are based on her experience and what worked for her. That doesn't guarantee it will work for everybody yet may work for many. The thumb is UP.

Review by Tim Boyd

FOOD: THE LIGHT MEAT, DARK MEAT AND THE WISHBONE By Bill Hyde, PhD, Farmer

Many of you may remember Bill Hyde's wonderful article on the true cost of food in our Summer 2014 issue (westonaprice.org/health-topics/the-real-cost-of-real-food/). In it, he computed the real cost of a pastured egg, including a small profit for the farmer, at twelve dollars a dozen. He also pointed out that food costs in the U.S. have gone from 17 percent of the family budget to 8 percent; during the same time medical bills have gone from 7 percent of the family budget to 18 percent. So, in a truly viable, sustainable system, we either pony up to those dollar-a-piece eggs or face multi-thousand dollar medical bills later (and sometimes earlier) in life, not to mention the devastation wrought by the kind of industrial farming that brings us cheap eggs.

Hyde is an economist, and therefore looks at the economies (or lack thereof) of small-scale farming in this delightful book of essays. He also explores life's persistent questions such as: Is it crazy to be a small farmer? Should we eat red meat? Are goats easier to raise than cows (he didn't ask me, an owner of cows, before he bought his goats, which are the Houdinis of ruminants)? What to do about the horrors of GMOs? How do we put real food instead of food-like substances into our mouths? How do we distinguish between positive and negative externalities (between agriculture that builds soil and improves the environment versus agriculture that extracts and pollutes)? How do we navigate the maze of doublespeak that characterizes food labeling in America?

All this in a small package of very readable essays that are bound to elicit plenty of chuckles—except for the chapter on GMOs. The thumb is UP. Review by Sally Fallon Morell

Tim's DVD Reviews

Origins Written by Pedram Shojai Directed by Mark Van Wijk

Cancer, heart disease, infertility, mental disorders, and other degenerative diseases are widespread today. They have not always been so. A variety of experts in this film agree that the diet and lifestyle that sustained traditional cultures for thousands of years are not the source of the problem. People around the world have been eating highly valued saturated fat and cholesterol for a long time. Fat, cholesterol, and traditional foods are not the problem To find the solution to a recent problem, one must look at recent changes.

A lot has changed in the last hundred years. We are now exposed to thousands of untested chemicals. We have isolated ourselves from nature. Our food is no longer food. In my most recent trip to the Outer Banks of North Carolina I noticed a sign very prominently displayed on the doors of a local Dairy Queen. It said, "Treat Center Only. No food available at this location." The message is a little disturbing but at the same time has an element of almost refreshing honesty. It pretty much says it all. The processed sugar we consume as the primary offering at "treat centers" is eight times more addictive than cocaine. GMO Frankenfoods introduce genetic variations never before seen in nature.

Do you suppose all these changes to the basic ways we sustain ourselves could be at the root of our modern health issues? The experts in this video think so. They further point out that the health of plants, animals, and humans is all connected. When we chemically force crops to grow in depleted soil, the unhealthy results ripple up the food chain. We can't expect to remain healthy eating animals that have been subjected to concentration camps and torture chambers. One suggested solution to these problems is to disrupt the industrial food system and buy local. I agree. We all need to be more disruptive. The thumb is UP.

Unacceptable Levels Ed Brown Macroscopic Media

Ed Brown talks about the proliferation of chemicals in just about everything since World War II. Many of the chemicals have not been tested for safety at all. When they are tested, they are tested one at a time. No testing has been done of chemical combinations but we are assured by all the industry's experts that they are safe and to suggest otherwise is to be scientifically irresponsible.

These chemicals are very likely a factor in the explosion of chronic disease. Genetics is almost certainly not a factor. The large spike in chronic disease has happened too fast to be genetic in origin.

One of the best examples of systemic insanity today is fluoridation of water. Former EPA scientist Robert Carton, PhD, has called it the "greatest case of scientific fraud of this century, if not all time." Scientific fraud is a highly competitive field and everybody has his opinions, but fluoridation is a strong candidate. Fluoride is a phosphate industry waste product that is considered a pollutant in air, ground, bodies of water—everywhere but in our drinking water. Another example would be the practice of renaming human sewage "sludge" and selling it to farmers as fertilizer.

Even toys for small children are not safe. The ageless rubber ducky contains toxic vinyl. Sunscreen typically has more than one toxic ingredient. The cosmetics industry pretends to regulate itself but you can guess how effective that is. An entertaining example shows Homer Simpson at the "Screaming Monkey Medical Research Center" where he is a test subject for some new chemical. Brief exposure causes him obvious pain and burning but in the next scene the experts are immediately recommending it for general use. Those experts do not get a thumbs up but the video does rate thumbs UP.

When we chemically force crops to grow in depleted soil, the unhealthy results ripple up the food chain.

Tim's DVD Reviews

Cowspiracy: The Sustainability Secret AUM Films, First Spark Media

Our story opens with Bruce Hamilton of the Sierra Club expounding on rising carbon dioxide levels, rising sea levels, drought, famine, extinction, cats fornicating with dogs, etc. Well, he might not have mentioned that last one, but in a nutshell, according to Hamilton, we're all shortly going to die horrible deaths. And then the movie gets really depressing.

Kip Andersen interviews a variety of environmental and health experts. Mr. Andersen came across an alarming piece of news from the UN that cows are responsible for emitting more greenhouse gases than the entire transportation sector combined. When he talked to various environmental groups about this looming bovine ecological apocalypse he was disappointed at their responses. Greenpeace didn't even want to talk to him. California government representatives talked to him but had no comment on how too many cows are going to do us all in. The Sierra Club spoke with him at length but didn't see any reason to panic about this cow-tastrophy. One person somewhat bluntly disagreed with him, which he found bizarre. It's not clear whether it was bizarre that someone would disagree with him or that the very idea that he might be wrong was bizarre.

Andersen eventually finds Will Anderson who is a former director of Greenpeace and will talk to him. Will Anderson starts out by saying that environmental organizations are not telling the truth about what the world needs from us as a species. Up to that point I agreed with him but he quickly lost me after that.

Kip Andersen has amassed a blizzard of factoids from his interviews, UN reports, Internet blurbs and Chicken Little. Highlights include these familiar items: Cows produce methane. It takes twenty-five hundred gallons of water to produce one pound of beef. Rain forests are being torn down to graze cattle. Cattle overgraze the land, and cows produce enough manure to bury several large cities and a few small countries. He lists those cities and countries. He does not include Washington, DC, presumably because it is already covered. He admits that the amount of water associated with cattle raising is probably grossly overstated and assumes that water disappears from the planet forever once used. He looks at grass-based farming but concludes it is even less sustainable than the conventional model.

While he was looking at the over-grazing issue, he came across the name of Allan Savory, and for a brief moment I thought he might come to an intelligent conclusion about grazing. Silly me. Allan Savory made mistakes in his earlier years, some very unfortunate, but learned from those mistakes and went on to do some great work. Andersen fixated on the mistakes and decided he would not listen to anything said by someone who would make mistakes. If that is his standard, I'm not sure how he's finding anyone to listen to. He went on to interview a sock puppet for the GMO industry but had the wisdom not to listen to the puppet.

There are more episodes of throwing dubious numbers around. For example, Andersen claims we can get fifteen times more protein from plants than animals. There is no thought given to what happens when that partial plant protein turns out not to be enough. Also no thought about all the nutrients you can't get from plants. At one point he bemoans the killing of all those cows. At another point he recommends using all crops for humans and not feeding it to cows. I'm not sure what he thinks is going to happen when you stop feeding cows.

From a nutritional point of view this film is a disaster, but it goes well beyond that. It seems many people, in particular some environmentalists and those who bloviate about sustainability, are operating under false assumptions based on what the early white settlers (*Europeanus ignoramus*) found when they got here and their

The West was not an untouched wilderness sparsely populated by a bunch of vegans.

Tim's DVD Reviews

impressions of its provenance. They found a rich, fertile land unlike anything they had seen in Europe. Because their diseases wiped out much of the native population, the land superficially appeared to be untouched by human hands. This has led to the conclusion that good environmental stewardship means letting nature run its course with no human interference. I highly recommend reading the book *1491* to understand what really happened.

Before Columbus, the Western Hemisphere was about as well populated as the Eastern Hemisphere and those inhabitants were brilliant at managing land and resources. In the East, European colonists found savannahs and woods clear enough to ride a horse through. Woods untouched by human hands are choked with underbrush, fallen trees and debris. You can't walk, let alone ride, through such woods. How did the ancient forests end up so clean? They were regularly groomed with fire by the residents of that time. According to some accounts those fires were really big. Healthy trees survived. Sick and dead trees and brush didn't.

Further west the Europeans found the Great

Plains with incredibly deep, fertile topsoil. It did not get that way by random forces of nature but by Plains Indians partnering with animals, namely bison. They had a lot of the big bovine, more than we have today. The West was not an untouched wilderness sparsely populated by a bunch of vegans.

All that fire and the resulting smoke, all those cattle, and all those people did not cause global warming, did not destroy the land, did not drive species to extinction and did not wreak general havoc on the environment. There was no Smokey the Bear to whine about fire. There was no dead zone in the Gulf of Mexico. The sky did not fall. It was sustainable and was sustained for centuries if not thousands of years. This movie repeatedly claims that we cannot support as many cattle as we have now. These claims were disproven five hundred years ago. I guess some people are a little slow to get it. Some vegans have been farming their own way for a few decades at most and claim that it is sustainable. Decades don't mean diddly. Come back in a couple of centuries and show me. Then maybe I'll be impressed.

The producer may have been well-intentioned. I don't know. I try to be sensitive to people's feelings and be nice and I'm trying now. This film is impressive—impressively dreadful, intellectually lightweight, and fear-mongering. It is a pile of steaming hot, USDA grade A, grain-fed, cow-phobic drivel. That is about as nice as I can be. Before he finished the film Andersen discovered he was in danger of losing all his funding. Apparently this movie was too pessimistic even for Chicken Little. Have you guessed yet that my thumb is DOWN for this thing?



HEALTHY 4 LIFE: WAPF DIETARY GUIDELINES AND RECIPE BOOK Our colorful 84-page guidelines booklet with recipes provides sensible, sciencebased guidelines. Instead of complicated formulas involving calories and grams, which most people don't understand, we simply recommend including highquality foods from four food groups in the diet every day. The good groups are:

- Animal foods, including meat, dairy, seafood, and bone broths;
- Grains, legumes and nuts—properly prepared;
- Vegetables and fruits, including lacto-fermented products;
- Healthy fats and oils, including butter, lard, coconut oil and cod liver oil.

The reaction to this publication has been very positive. It is suitable for use in schools and other programs. To order online, go to westonaprice.org. Booklets are \$10 each or \$6 each for orders of ten or more. Now available in Spanish!

Food Feature

COOKING WITH BLOOD By Sally Fallon Morell

Many cultures use blood as an ingredient in cooking—not just the Maasai, who extract blood from their living cattle, but European cultures from Hungary to the British Isles. The American Indians filled the stomach of the animals they killed with finely cut-up organ meats, shredded fat and blood. And blood from chickens and pigs is used throughout the Caribbean.

We know that blood is a rich source of vitamin D, and we can guess that it is a powerhouse of vitamin B_{12} , iron and many other vitamins and minerals.

Where to obtain this unique ingredient? Certainly not from a grocery store! You will need to know a farmer who will save you the blood from butchering chickens. Or perhaps our Amish farmers will begin supplying us with frozen blood. In a pinch, you can order it from the internet at philamfood.com/martin-purefoodsfrozen-beef-blood-10oz.html. Unfortunately this product contains sodium citrate and probably does not come from pasture-raised animals.

SPICY BLOOD MEATLOAF Serves 8

2 pounds ground beef 1 cup blood 1 medium onion, peeled and finely chopped 1 carrot, peeled and finely chopped 1 stick celery, finely chopped 4 tablespoons butter 1/4 teaspoon dried chili flakes 1 teaspoon dried thyme 1 teaspoon cracked pepper 1 teaspoon sea salt 1 1/2 cups sourdough breadcrumbs 1 cup cream 1 egg 1 tablespoon fish sauce

1 small jar tomato paste

Sauté onions, carrots and celery in butter until soft. Add the chili flakes, thyme, pepper and salt and blend well. Meanwhile soak the bread crumbs in cream.

Using your hands, mix the meat, sautéed vegetables, soaked bread, blood, egg and fish sauce. If the mixture is too runny, add more bread crumbs. Form into a loaf and place in an oblong pyrex pan. Ice with the tomato paste. Add about 1 cup water to the pan. Bake at 350 degrees for about 1 1/2 hours.

FRENCH STYLE BLACK PUDDING (Boudin Noir) Recipe from Angie Minno Serves 6

3 eggs, beaten 2 cups sourdough bread crumbs 1 pound ground beef or pork 1 apple, minced 1 onion, minced 1/2 cup diced pork fat 1/2 cup cream 2 cups beef blood 1 teaspoon salt freshly ground black pepper 2 teaspoons quatres épices 1 tablespoon brandy

Render the pork fat in a frying pan, and sauté the apple and onion in it until soft. Set aside as you mix the bread crumbs with the eggs, cream, blood, brandy, salt, pepper, and quatres épices. Add the sautéed apple and onion and all of the fat and mix well.

Put the ground meat in another bowl and gradually mix in the bread crumb mixture (it
mixes in more evenly this way). Pour into a buttered dish set in a *bain marie* (that is, set in a pan of simmering water). Cover the top with foil, making sure the foil does not come in contact with the food, and bake at 350°F for 34-45 minutes, or until completely set.

Note: you can make your own quatre épices by mixing white pepper, allspice, ginger and cloves.

CAJUN-STYLE BLACK PUDDING Recipe from Angie Minno Serves 6

2 cups bread crumbs
1/2 cup diced pork fat
3 sticks celery, minced
1 onion, minced
3 eggs, beaten
1/2 cup cream
2 cups blood
1 pound ground meat
1 teaspoon salt
1/2 teaspoon ground black pepper
1/2 teaspoon ground white pepper
1 tablespoon oregano
2 teaspoons ground celery seeds
2-3 cloves of garlic, minced

Render the pork fat in a frying pan, and sauté the celery and onion in the fat until soft. Set aside as you mix the bread crumbs with the eggs, cream, blood, salt and seasonings. Add the sautéed vegetables and all of the fat and mix well. Put the ground meat in another bowl and gradually mix in the bread crumb mixture (it mixes in more evenly this way). Pour into a buttered dish set in a *bain marie*. Cover the top with foil, and bake at 350°F for 34-45 minutes, or until completely set.

BRITISH BLACK PUDDING Makes 3 pounds

4 cups fresh pig's blood
2 1/2 teaspoons salt
1 1/2 cups steel-cut (pinhead) oatmeal
juice of 1 lemon
2 cups finely diced pork fat (or beef suet), finely chopped
1 large yellow onion, finely chopped
1 cup milk
1 1/2 teaspoons freshly ground black pepper
1 teaspoon ground allspice

> Soak the oatmeal overnight in warm water and lemon juice. Stir 1 teaspoon of salt into the blood.

Bring 2 cups water to a boil and stir in the oats. Simmer, stirring occasionally, for 15 minutes, until just tender, not mushy.

Pour the blood through a fine sieve into a large bowl to remove any lumps. Stir in the fat, onion, milk, pepper, allspice and the remaining 1 1/2 teaspoons salt. Add the oatmeal and mix to combine. Divide the mixture between two greased glass loaf pans, cover with foil, and bake for 1 hour at 325 degrees until firm. Cool completely. Seal in plastic wrap and either freeze for extended use or store in the refrigerator for up to a week.

To serve, cut a slice about 1/2-inch thick off the loaf. Fry in lard until the edges are slightly crisped and browned.



MEMBERSHIP POSTER

Membership is the main source of financial support for the many projects of the Weston A. Price Foundation. We appreciate your help to increase membership. We are happy to send a free copy of our membership poster to those who will display it.

The poster is $8.5'' \times 11''$ with a cardboard flap that allows it to stand. It goes well with our Dietary Guidelines booklet. It can be displayed at an exhibit, a doctor's office, a library, a farmers market, etc.

If you will display it, please write for a free copy: info@westonaprice.org.

Farm and Ranch

FARMERS' UPRISING IN POLAND By Christina Sarich

MARCH 2, 2015: Poland's largest farmer uprising ever has occurred as convoys of tractors took to the roads recently in protest of GMO infiltration and land grabs by biotech and Big Ag corporations.

Thousands of farmers blocked roadways and held numerous demonstrations in order to bring attention to the important issue of food sovereignty in Poland. Their focus is a ban on GMOs and a restoration of small farmers' rights after decades of oppressive health and safety regulations, which take rights away from small farms and give them to mono-cropping, poisoning Big Ag mega-companies.

The farmers have been stalwart—refusing to call off their demonstrations until their demands are met. Rallies and demonstrations have taken place around the country—in over fifty locations. Hundreds are picketing government offices in addition to the road blockades.

In the largest organized farmers' protest the country has likely ever seen, the farmers are demanding that legislators protect the small farmer from exploitation by monopolizing companies and refuse to sell-off their country's land to these behemoths. As the farmers point out, once the land is sold, the Big Ag model can't be stopped, and the land is forever lost.

Until government officials agree to talk with the farming unions, they have vowed to keep up their efforts. Edward Kosmal, chairman of the farmers' protest committee for the West Pomeranian Region said:

"We are ready for dialogue. We look forward to meeting with you, Prime Minister, and beginning a comprehensive government commitment to solving the problems of Polish agriculture. If you do not enter into a dialogue with the Union, we will be forced to step up our protests."

FOUR DEMANDS

The famers have four simple key demands:

- Regulation of land grabs by primarily Western companies (translation—biotech and Big Ag) to prevent small farmers from losing their livelihoods.
- The legalization of direct sale of produce and other foods from farms to the people. This cuts out the middle man and allows the higher quality produce of many farms to reach their customers directly. Poland currently has some of the most extreme policies of all of Europe in this regard, making it nearly impossible for small farmers to compete with big food companies who are notorious for selling fake and highly processed foods.
- Change inheritance laws so that families can rightly leave land under lease to their heirs.
- Ban the cultivation of genetically modified organisms.

One farmer stated: "We demand the introduction of legislation that will protect Polish land from exploitation by foreign capital! Agricultural land cannot be sold to commercial companies. It's part of Polish territory. Once sold it will be lost."

AN INTENSE ESCALATION OF EVENTS

The farmers' protests represent a dramatic increase in activist fervor that has been boiling to the surface for over a year, with marked unrest in the northern provinces.

These provinces are especially upset about not being able to sell their produce, which is mostly organic though uncertified. It is usually of higher quality than the food grown on modern industrial farms. Poland is one of the last places in Europe where peasant farmers still use

These provinces are especially upset about not being able to sell their produce, which is mostly organic though uncertified.

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traditional agricultural methods, with very low mechanization, and without the use of chemicals, so the soil is healthier, and so are the plants grown there. The majority of small farms are no larger than five hectares.

Industrial-bent foreign corporations are keen to expand their operations in Poland, and many small farmers see the increasingly ridiculous regulations as an attempt to force families off their land.

Furthermore, one of Poland's biggest industrial producers, Smithfield (the world's biggest pork producer, which bought Poland's Animex SA in 1999) is influencing the largely right-wing government. They own a string of sixteen hog farms where conditions have been called "hor-

rendous," so you know they are not interested in protecting small farmers' land rights or producing highquality, non-GMO, organic food.

The triad of government and corporate interests in Poland along with EU pressure is causing the protests to reach a more fevered pitch.

Another farmer said, "These protests are touching the raw nerve of what's wrong with the inhuman, neo-liberal and profit-obsessed practices of today, practices which ignore the real needs of farmers and consumers alike."

Polish farmers have joined millions of others in protesting against Monsanto, Cargill, and other biotech and Big Ag interests, which have little concern for the quality of our food supply. Farmers in over fifty countries have marched against Monsanto, so the thousands marching in Poland are not alone. Almost all states in the U.S. have marched against Monsanto and Big Ag, and Vermont recently staged a protest at the U.S.-Canadian border which involved more than seventy-nine Vermont towns.

Hillary Martin, a farmer from Burlington, Vermont, states the internationally shared aims against these bullies clearly:

"We are here at the border to demonstrate

the global solidarity of farmers in the face of corporate globalization. The corporate takeover of agriculture has impoverished farmers, starved communities, and force-fed us hazardous genetically-engineered crops, only to line the pockets of a handful of multinational corporations like Monsanto at the expense of farmers who are struggling for land and livelihood around the world!"

You can read more about land grabs by multinationals at the Pesticide Action Network, as well as other sites. The actions of these companies keep the world hungry and sick, not well-fed. As the Global Policy Forum explains, unfair distribution of land, and unfair access to ownership explain much of the poverty and hunger in the world—*not*, as biotech would have us believe, the inability to grow enough food. It's all about distribution.

It is the one-percenters, owning most of the multinational companies, not rural farmers, who commandeer the land. Even when small farmers do own land, they still suffer from inequality due to government regulations that favor these enormous companies.



The struggle for land reform, which would shift the balance of power in favor of marginalized landless farmers, has been going on for many decades. However the food and financial crises contribute to worsening the trend towards land concentration, in which gov-

ernments, agro-industrial corporations and private investors buy up fertile land in poor countries, largely to spread GMOs depriving small farmers of their ability to grow their own food.

Read more: naturalsociety.com/hundreds-of-farmers-block-roads-inprotest-of-monsantos-gmo-crops/#ixzz3TGZ6bto5.969

JOURNAL NOW AVAILABLE AS A DIGITAL TALKING BOOK FOR THE VISUALLY IMPAIRED

We now have our journal converted into an audio format for the visually impaired. Special software is required for this, such as Dolphin Easy Reader. Go to the JOURNALS tab on our home page. Starting with Fall 2011, click the journal you are interested in. Please tell others! Many thanks to Amy Adams of ePubUSA. com for this service!

Legislative Vpdates

ONE FEDERAL AGENCY? By Judith McGeary, Esq.

For almost two decades, officials have made proposals to combine all federal food safety regulation into a single agency. Currently, a total of fifteen federal agencies have some hand in implementing a patchwork of thirty different laws addressing food safety.

The USDA and the FDA are the two primary agencies, but figuring out even their respective responsibilities is enough to make one's head spin. The example that is often used to illustrate the byzantine nature of the current federal food regulatory system is that FDA regulates cheese pizza, but USDA is involved in regulating pepperoni pizza. FDA regulates all fish, except for catfish, which are overseen by USDA.

This illogical division of duties has serious real-world repercussions for food safety. As just one example, USDA egg graders saw the filthy conditions at a factory egg farm in 2010, but they did nothing about it because the food safety aspects were FDA's responsibility—USDA officials were there only to grade the eggs for size and appearance. Ultimately, more than three hundred million eggs were recalled from the operation because of Salmonella, in an outbreak that sickened nearly a thousand people across the country.

The "Safe Food Act of 2015," which would combine all food safety responsibilities into one agency, is the fifth such bill filed by Rep. Rosa DeLauro (D-CT) and Sen. Dick Durbin (D-IL). Historically, the idea has had no momentum. But the dynamics may be changing. President Obama's budget includes a restructuring of food safety responsibilities into a single new agency within the U.S. Department of Health and Human Services (HHS). Given the makeup of this Congress, the fact that the President supports the idea makes it less likely it will pass and become law. On the other hand, it guarantees greater public attention and discussion of the issue.

Combining food safety responsibilities into one agency separate from FDA does have potential benefits. The single biggest potential advantage would be a reduction in the complexity of food regulation, creating a "one-stop shop" rather than the current complex maze. Unfortunately that advantage may never be realized. A single agency is certainly capable of creating enough regulatory mazes of its own to keep farmers and food manufacturers confused.

INDUSTRY CAPTURE

Even if the new agency did provide some benefits, none of the proposals address one of the most serious problems with federal food safety regulation: industry capture of the agency. The revolving door through which agency officials come from and return to lucrative private industry jobs would remain unchanged. Without serious reform of the role Big Business plays in setting the agenda for the government, shifting from multiple agencies to a single one is highly unlikely to result in any substantive changes.

The current "food safety czar" at the FDA, Michael Taylor, exemplifies this problem. For the last thirty years, he has gone from private law practice with Monsanto as a client, to the FDA, to the USDA, back to private law practice, then a four-year stint as president of public policy for Monsanto, and now back to the FDA. In his earlier stint with FDA, he co-authored the agency's position that genetically engineered foods are "substantially similar" to non-GMO foods and thus no labeling is required; in his current position, he is overseeing the new Food Safety Modernization Act regulations, which show a very clear bias in favor of chemical and GMO agriculture. Simply moving people like Taylor from FDA to a new agency will not change what

Judith McGeary is the Austin, Texas chapter leader, an attorney and small farmer in Austin, and the executive director of the Farm and Ranch Freedom Alliance. She has a B.S. in biology from Stanford University and a J.D. from the University of Texas at Austin. She and her husband run a small grass-based farm with sheep, cattle, horses, and poultry. For more information go to farmandranchfreedom.org or call (254) 697-2661. they do.

The consolidation of food safety duties in a new agency under the HHS is also unlikely to solve another major problem with food safety, namely the lack of experience or understanding of the real-world conditions of growing food. The FDA's proposed FSMA regulations demonstrated all too clearly that the agency's expertise in laboratory science makes for extraordinarily poor rulemaking for farms, with their complex, dynamic functions. HHS, FDA's parent department, almost certainly suffers from the same lack of real-world experience or understanding of farms.

While the DeLauro-Durbin bill and the President's proposal are long shots for becoming law, we can expect to see a great deal of new discussion about federal food safety in the coming year. Hopefully, we can expand those discussions to include the problems that are more fundamental than simply the convoluted bureaucracy.

FUNDING

The budget contains another disquieting, albeit less high-profile, move in federal food safety regulation. The FDA's proposed budget calls for \$1.17 billion for food safety programs in fiscal year 2016. The budget would include just under one billion dollars in government funding and approximately one hundred eighty million dollars in "user fees"—government fees imposed on the regulated industry for the privilege of being regulated.

User fees can create two major problems. First, they can be used to impose significant financial burdens on small-scale producers when they have done absolutely nothing in violation of the law, but simply as a cost of being regulated. Second, to the extent that the agency depends on user fees for its continued existence (and the salaries of various employees), it has yet another incentive to be overly cozy with the big industry players who pay large user fees. In essence, the regulated industry literally buys a good relationship with the agency by helping to fund it. The FDA's estimate of the user fees for FY 2016 is seventeen times as much as it estimated that it will collect in FY 2015, raising significant concerns about how food safety regulation will be funded in this country.

Without serious reform of the role of Big Business in setting the agenda for the government, shifting from multiple agencies to a single one is highly unlikely to make any substantive changes.

WAPF on the WEB

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BLOGS: See blogs by Chris Masterjohn, PhD, and Kaayla T. Daniel, PhD, at westonaprice.org/blogs. And check out our realmilk.com/blog and realmilk.com/testimonials where you can read and share raw milk testimonials.

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Soy Alert!

"MOOBS": MAN BOOBS AND SOY By Kaayla T. Daniel, PhD, CCN



Men remain at risk for "moobs" throughout their lives and so would do well to take it easy on the soy. So many of our young men are growing breasts these days that the word "moobs"—short for "man boobs"—has entered popular vernacular. While the word itself sounds amusing, it's a heartbreaking trend for young men and their families, and a booming business for surgeons who specialize in breast reduction surgery.

Why is this happening? The *New York Times* and other major media report that while no one knows for sure why gynecomastia (the technical term for "moobs") is on the rise, many claim that environmental estrogens found in plastics, pesticides, drinking water, and supermarket meats and poultry should take the blame. Widely noted is the fact that in the past "moobs" rarely were found outside the bodybuilding community, where steroid use led to what the men liked to call "bitch tits." Today, however, they are appearing in fit and unfit young men alike.

Many of these boys and men have increased fatty tissue because they are overweight or obese. Although this gives the appearance of "moobs," it is not the same as true enlargement and is diagnosed as pseudogynecomastia. Doctors also report that fifty percent or more of boys experience at least periods of hormonal imbalance where "moobs" appear but then flatten out in a few months. True gynecomastia is a more long-term condition, and it can occur in boys and men who are underweight, overweight and normal weight.

Why is this happening? Environmental estrogens are surely a factor. But so is soy. Young men at the highest risk are those who were given soy infant formula during infancy and/or who regularly drank soy milk during their childhoods and teenage years. Such boys are not only at risk for "moobs" but may show other estrogenic signs as well, including lowered quantity and quality of sperm, undersized genitals, undescended testicles, and other reproductive system problems.

Scientists first linked phytoestrogens (plant estrogens) with lowered sperm count and other reproductive problems in the 1940s when they diagnosed clover disease in sheep. Red clover contains a type of phytoestrogen known as coumestans, which are similar in their effect to the isoflavones found in soybeans. When sheep graze heavily on red clover, they can develop red clover disease, which causes normal male sheep to became infertile and castrated males—called wethers—to experience teat enlargement and nipple discharge. Rodents, primates, and humans experience similar feminizing effects if their reproductive development is disrupted by estrogens that either interact directly with the

UPDATES ON SOY LITIGATION

SOY PRISON LAWSUIT: On February 25, 2015, Judge Baker of the United States District Court for the central district of Illinois cited conflicting scientific evidence when he dismissed the claim of Harris and others that the feeding of too much soy constituted a violation of their Eighth Amendment Constitutional rights. With the backing of the Weston A. Price Foundation, Harris and the other plaintiffs will appeal to the Seventh Circuit United States Court of Appeals, located in Chicago.

SOY LABELING PETITION: In 2008, WAPF sent a citizen petition to the FDA urging regulators to withdraw the claim that soy could prevent heart disease. After more than six years and no response from FDA, WAPF is suing the agency to address the petition. After meetings with FDA officials and James Turner, Esq, the Foundation's general counsel, the FDA promised a reply within six months.

testes or that affect plasma gonadotrophin or sex hormone concentrations.

Soy industry spokespeople tend to downplay side effects from estrogenization and testosterone-lowering by claiming phytoestrogen consumption to be protective against prostate cancer and atherosclerosis. Although the possibility that soy foods or supplements could prevent these deadly conditions makes headlines, few men hear that the downside is demasculinization, which in some men manifests as gynecomastia.

Although many studies link soy consumption to masculinization, few have looked at "moobs." A study for the National Cancer Institute completed at the University of North Carolina at Chapel Hill, however, reported that soy-eating men experienced "nipple discharge, breast enlargement and slight decreases in testosterone." Although the researchers concluded these side effects were inconsequential and few men would see visible "testicle shrinkage" or "massive breast enlargement," the bottom line is the subjects of the study showed feminization from high soy phytoestrogen consumption. Whether their "moobs" came in large or small, their development signified estrogenization, lowered testosterone levels and overall hormonal imbalance.

Can gynecomastia be reversed naturally? It depends, but cleaning up the environment and the diet to remove environmental and phytoestrogens are critical first steps. Many clinicians such as Kim Schuette of Biodynamic Wellness in Solana Beach, California, report reversals (as described below) just from eliminating soy milk and soy foods from the diet.

That's the good news, but sadly not all boys will be so fortunate. In addition to the obvious factors of dose and duration, a key issue is timing. The "windows of vulnerability" for phytoestrogen exposure is wide, and goes from conception to adulthood. High risk windows are *in utero*, infancy, shortly before puberty, and during puberty. That said, men remain at some risk for "moobs" throughout their lives and so would do well to take it easy on the soy.

For further discussion and full references, visit Dr. Kaayla's "Recovering from Modern Diets" blog at westonaprice.com.

Dr. Kaayla Daniel is The Naughty Nutritionist® because she outrageously and humorously debunks nutritional myths, including the myth that soy is a health food. She is the author of The Whole Soy Story: The Dark Side of America's Favorite Health Food and co-author with Sally Fallon Morell of the bestselling book Nourishing Broth: An Old Fashioned Remedy for the Modern World. Visit Dr. Daniel's website drkaayladaniel.com to subscribe to her newsletter The Naughty Edge and to receive free special reports.

EPIDEMIC OF GYNECOMASTIA

The number of boys and men challenged with gynecomastia (aka "man boobs") is on the rise. It is thought that one reason for the increase in gynecomastia is the use of certain antipsychotic medications. This week I came across an article regarding the prescription drug Risperdal. Risperdal is an antipsychotic drug commonly used for schizophrenia. It is also being prescribed for bipolar disorder, autism spectrum disorders, attention deficit hyperactivity disorder, sleep disorders and anxiety. As a prolactin-raising drug (which has a dopamine-blocking action) it can considerably increase levels of the pituitary hormone prolactin. One of its side effects is excessive breast development in men and in some cases galactorrhea (abnormal lactation).

Dopamine-blocking medications along with the pervasive use of soy isolates in commercial foods are creating a near epidemic in America of gynecomastia among boys and men. A few years ago I worked with a mother of two boys, ages twelve and fourteen, suffering with gynecomastia. Before using any iodine or other remedies to address the probable hormonal imbalance in both boys, I asked their mother to remove all soy from the diet. As she began to read labels she was shocked to learn how much soy her sons were consuming daily. Close to 75 percent of all processed foods in this country contain some form of soy protein.

Within two weeks both boys' breasts had returned to normal sizes. We have seen similar positive results in those struggling with ADHD, anxiety and bipolar disorder when the GAPS Diet was implemented. Wouldn't it be great if all products containing soy were required to have a warning label stating that soy can alter hormones in girls, women, boys and men? And wouldn't it be in the best interest of those struggling with schizophrenia, bipolar disorder, ADHD, and anxiety to be introduced first to the healing principles of the GAPS Diet prior to being prescribed strong medications with a multitude of side effects? It is critical that the information so well taught by the WAPF spread to the general public.

The same boys with the man boobs had an older sister who had decided to become vegetarian. The parents observed that almost overnight her bust size doubled. They brought her into my office in order for us to talk her off the vegetarian cliff. One month after removing tofu, soy bars and soy milk from her diet and adding wild fish, raw cheese and eggs her cup size went from an E to a C.

Kim Schuette, CN, Biodynamic Wellness, San Diego, California



A Campaign for Real Milk is a project of the Weston A. Price Foundation. To obtain some of our informative Real Milk brochures, contact the Foundation at (202)363-4394. Check out our website, RealMilk.com for additional information and sources of Real Milk products.

A Campaign for *Real Milk*

RAW MILK IN IRELAND By Elisabeth Ryan

The sale of raw drinking milk remains tenuously legal in Ireland due to the work of raw milk supporters who highlighted this issue and forced the department of agriculture to change its mind about an outright ban. Now we face new and as yet unknown difficulties as our government has started drafting regulations for the sale of raw milk with, as yet, no involvement from the food community.

Anyone who has traversed the Emerald Isle can attest to the common sight of green pastures and grazing animals—the high quality of our milk, butter and cheese is a testament to this. But a significant amount of this highest quality milk is exported a sinister powdered substances; in fact Ireland is the largest single supplier to the infant formula market worldwide. This is the main reason our government wanted to ban the sale of raw milk: their fear was, and still is, that an illness relating to consumption would singlehandedly destroy one of the shining lights of our difficult economic situation.

PREVIOUSLY BANNED

The sale of raw milk in Ireland is a recent phenomenon. When new European regulations were introduced in 2007 this caused a previous ban dating to 1996 to be invalidated. The campaign for Raw Milk Ireland was formed in 2010, when the food community realized the implications of the new regulations. Sadly, just as soon as we became aware that sales were permitted, the Department of Agriculture, "acting on the advice of the Food Safety Authority of Ireland," clearly indicated to us their intent to introduce a new ban.

The campaign had the support of many different food and farming organizations as well as some high-profile chefs and a number of back bench politicians, and we managed to garner much media attention. We took a very measured approach and consistently asked for the introduction of regulations in order to help minimize potential risk. We organized a very well-attended public debate in 2011, and representatives from the food safety authority also took part, though the department of agriculture declined. The utter determination of the authorities to stick to the idea of a ban over any other options was evident at this point. As well as much use of the term "Russian Roulette," one unfortunate panelist who grew up on a farm referred to himself as "a raw milk survivor." It was evident that a foregone conclusion had been drawn and that their approach was then to go backwards to garner scientific evidence to support their conclusion that raw milk is a hugely dangerous substance. Science, as we all know, should not start with a conclusion, but rather should reach a conclusion based on the evidence.

THE FIRST PRODUCERS

David Tiernan, Aidan and Mary Harney, Mary and Gerry Kelly, and Darina Allen were the first producers to bottle and sell their raw milk-they truly were heroic in the face of all they had to do just to sell their milk to the people who wanted it. In one early communication from the Department of Agriculture to brief all members of the Dáil (the Irish Parliament) about the proposed ban, a reference was made to "a farmer in the northeast taking advantage of the absence of the statutory instrument and selling milk at markets and or local shops despite the department's requests that he not do so." This farmer was David Tiernan, who has since tragically passed away, and the language used to describe him in such a way was deeply insulting to him; David operated his farm to impeccable standards and was exceedingly proud of his milk. In fact his inspector told him that the department of agriculture would not encourage him to sell raw milk, but he had never received a direct request to cease. The same communication from the

Department of Agriculture also included a host of other deliberately misleading "facts" about raw milk.

Those producers who are brave enough to bring their raw milk to market still face many hurdles and much uncertainty; however we now have at least fifteen farmers selling from the farm gate, and a few of these are now also selling in local markets and even shops. The authorities themselves seem unsure of how to handle any of the farmers selling to local retailers, and even when operators make efforts to register with local health or agriculture authorities there is no clear path laid out for them.

REGULATIONS IN PROCESS?

Five years down the road in this campaign, the government position has changed significantly. In 2012, the Department of Health declared their resistance to a ban in favor of regulating raw milk, so the Department of Agriculture was forced to follow suit, though they have had three years to do this now with no progress. We can only surmise that they are happy to allow the state of limbo which exists for farmers wishing to invest in their enterprise or enter the market.

Our government's disregard of the wider issues at play throughout has been frustrating. There are so many detailed examples of the constant and persistent use of phraseology and half-truths designed to misinform that it is difficult to be entirely hopeful that we will get a good outcome from the latest position. However we remain steadfast in our plea to use this process of defining regulations for the production of raw milk as a template for how we can all work together. Our desire is to ensure fair and straightforward regulations for careful small farmers, which have been designed scientifically to minimize actual risk.

Farmers producing raw milk can command a far greater price than they would from the local cooperatives. They can also sustain a much smaller scale of farming. The sense of satisfaction they achieve from the fruits of their hard labor is not to be underestimated—they can interact with families visiting their farm who are greatly appreciative of their work, or they can wave off a large bulk metal tanker on its way to an industrial co-op.

WIDER ISSUE

The raw milk issue is symptomatic of a much wider issue in Irish food, a persistent move towards industrialization and sterility in food versus a real unwillingness to recognize the significant role of small farmers and food producers in the country.

As well as the social consequences of smallscale direct farming, with a link between producers and consumers and a wonderful sense of connection and community, a significant body of commentators realize that the drive to the bottom is not viable for us as a food-producing nation, and that we must compete on quality rather than commodity produce. Small-scale local suppliers provide a viable economic model for this obviously not limited to raw milk. Sadly whilst the European average for direct sale of food to consumers is at 22 percent in Ireland it sits at a meager 0.5 percent.

At the first Irish Weston A. Price conference, held in February 2015, it was heartening to see the level of interest in raw milk for good nutrition and the support for the continued sale of raw milk in Ireland from the participants.

Raw milk is the ultimate expression of our wonderful land and our dairying traditions; its continued availability has the potential to provide a sustainable economic model for small dairy farmers. It would be a travesty if the government does not use the opportunity it has to finally learn to work with small farmers and to ask, "What can we do to help these farmers get their milk to market safely?"

Further details on rawmilkireland.com.

Elisabeth Ryan works for Sheridans Cheesemongers. They have been selling cheese and farmhouse foods in Ireland since 1995. Elisabeth Ryan, who came to work with food via a background in wine, has been with Sheridans for nine years looking after the wholesale side of the business and is passionate about working with and promoting local artisan produce. Along with Kevin Sheridan, Elisabeth has been active in getting raw milk to market in Ireland. Raw milk is the ultimate expression of our wonderful land and our dairying traditions.

RAW MILK UPDATES By Pete Kennedy, Esq.

MINNESOTA – DAVE BERGLUND

After having no success putting Gibbon dairy farmer Mike Hartmann out of business [See *Wise Traditions* Winter 2014], the Minnesota Department of Agriculture (MDA) has set its sights on another raw milk producer, Grand Marais farmer Dave Berglund of Lake View Natural Dairy. Berglund sells raw milk, cream, butter and other dairy products at his farm store; he does not sell any product off the farm. There has never been a complaint about any of Berglund's products.

The trouble began for Berglund in 2013 when a dairy cooperative to whom the farmer wanted to sell milk informed MDA about Lake View Natural Dairy. Department officials attempted to conduct two warrantless inspections that year but Berglund refused to allow them to inspect even though on the second attempt the officials went into his farm store without permission and took photos of equipment and various products for sale. When Berglund made it clear in subsequent correspondence with MDA that he was not going to allow the department on his property to inspect, MDA obtained an administrative warrant from Cook County District Judge Michael Cuzzo on October 14, 2014.

On October 22, MDA officials along with the Cook County Sheriff drove to Berglund's farm; while MDA officials waited at the farm gate, the sheriff spoke with Berglund, telling him that he didn't have to allow the inspection of his farm. The farmer said that he did not want MDA to inspect and so the sheriff went back to the MDA officials telling them that he [the sheriff] would not participate in the execution of the search warrant. The MDA officials left without attempting to inspect the farm.

The department responded to Berglund's refusal by petitioning the Cook County District Court to find Berglund in contempt of court for denying officials with a warrant access to his farm. MDA was seeking an order requiring Berglund to submit to an immediate inspection with civil fines of \$500 for each day the farmer refused. At a March 9 hearing in Grand Marais, Judge Cuzzo temporarily denied, pending issuance of a final order in the matter MDA's request for an order holding Berglund in contempt. The judge indefinitely stayed his order granting MDA the warrant to inspect. He said he would be taking into consideration arguments on the validity of the warrant; he did not set a date for the next proceeding in the case.

At stake in the case is the issue of whether a provision in the Minnesota Constitution exempts Berglund from MDA's jurisdiction. Under Article XIII, Section 7 of the state constitution, "Any person may sell or peddle the products of the farm or garden occupied and cultivated by him without obtaining a license therefor." Berglund has contended all along that the state has no jurisdiction over his operation.

The case is a chance to right the Minnesota Supreme Court's decision in State v. Hartmann. In that case the state brought criminal charges against longtime nemesis Mike Hartmann for selling meat products without a license and for the unauthorized sale of custom-processed meat. In a close 4-3 decision, the Court held that, while Hartmann did not need a license to sell meat since it was a product of the farm under the state constitution, he could not sell custom-processed meat since that was prohibited by Minnesota statute. The court held that Article 13, Section 7 "exempts farmers from licensure to sell products but not from substantive regulation of the production or sale of their farm products." In other words, farmers were exempt from licensing but not from inspection or other regulatory requirements.

In issuing its decision, the Court ignored the historical context in which Minnesota voters passed the constitutional provision in 1906. At that time, there was no inspection and regulation of farms in Minnesota; licenses were only a way to raise revenue, not a means to mandate inspection of food producers and sellers. The Court also failed to convincingly explain how a product that was legal to consume [custom-processed meat or, in Berglund's case, raw cream and butter] could not be sold as a product of the farm under the constitutional provision.

The Berglund case is an opportunity to revisit the 2005 decision. The case presents a chance for small farmers selling direct to consumers in Minnesota to get out of the current regulatory system and revert to a time when the government left farmers and consumers engaging in direct commerce alone.

STATE RAW MILK BILLS

As usual, a number of bills have been introduced this legislative session to legalize or expand raw milk sales or distribution. One has already passed into law with the possibility of several others to follow. Here's a rundown of the bills:

CONNECTICUT SB 360

Currently, the law only allows the licensed sale of raw milk; otherwise, raw milk can go only for personal use by

producers and their families. Under Senate Bill 360, herdshare dairies of "up to five cattle or fifteen goats or sheep" could distribute raw milk and raw milk products to shareholders. SB 360 was referred to the Joint Committee on Environment.

HAWAII SB 588 & 381

Currently, raw dairy sales are prohibited. Senate Bill 588 would allow sales either at a farm or farmstand; under this bill, the state health department may adopt rules to regulate production and distribution but must be consistent with laws in other states that allow the sale of raw milk and raw milk products. SB 588 passed both the Senate Agriculture Committee [AGL] and the Senate Health Committee [HTH] with amendments and was then referred to the Senate Committee on Commerce and Consumer Protection [CPN].

Senate Bill 381 (deferred by both the Senate Agriculture and Health Committees) would allow distribution of raw milk at a farm or farmstand through herdshares that have registered with the department of health; however, the department would have no rulemaking power over herdshares. SB 381 was also referred to the Committee on Commerce and Consumer Protection [CPN].

IOWA HF 209

House File 209 would legalize the sale of unpasteurized and ungraded milk and milk products as commercial feed for animals. The bill requires a label stating, "It is not legal to sell raw milk for human consumption in Iowa. This product is intended to be used solely for commercial feed to be consumed by animals." There would be no permit or inspection requirement if all the dairy does is sell milk or milk products as commercial feed. HF 209 would make it a misdemeanor to resell raw dairy products sold as commercial feed. Under the bill, "sale" is defined to include herdshares, effectively banning herdshares in Iowa. The bill was referred to the House Agriculture Committee.

INDIANA HB 1346

Current law prohibits the sale of raw milk. House Bill 1346 would recognize the legality of herdshares in Indiana; the bill would allow a person to obtain raw milk from animals, solely or partially owned by either the individual or members of the individual's family or employer. Numerous herdshares exist in Indiana but current law does not expressly prohibit or allow them. HB 1346 was referred to the House Committee on Agriculture and Rural Development.

MAINE LD 229 & LD 312

Legislative Drawer 229 (LD 229) would exempt from licensing "a milk distributor who daily produces for sale less than 20 gallons of raw milk or daily processes less than 20 gallons of raw milk into cheese aged at least 60 days, yogurt, cream, butter or kefir or other dairy product." Labeling and signage would be required; but sales can be at the farm, a farmstand or farmers market in Maine. The bill was referred to the Joint Committee on Agriculture, Conservation and Forestry and scheduled for a March 12 public hearing.

Legislative Drawer 312 would exempt on-farm sales of raw dairy products from state licensing and inspection requirements if the sales are made directly to an "end consumer" and if the consumer is allowed to visually inspect the farm, the farm does not advertise in any way, the farmer completes a course in dairy sanitation every three years and displays the course certificate at the point of sale. The farmer must also post at the point of sale the results of a water test. LD 312 was referred to the Joint Committee on Agriculture, Conservation and Forestry.

MONTANA HB 245

Under House Bill 245, small dairies [i.e., herds of lactating animals with no more than 7 cows or 15 goats or 15 sheep] would be able to sell raw milk and raw milk products on the farm if they obtain a small herd exemption permit. HB 245 includes requirements for testing, labeling and signage; Grade A dairies complying with these requirements may also sell raw milk and raw milk products on the farm. The labeling and signage must read:

THIS PRODUCT, SOLD FOR PERSONAL USE AND NOT FOR RESALE, IS FRESH WHOLE MILK THAT HAS NOT BEEN PASTEURIZED. NEITHER THIS FARM NOR THE MILK SOLD BY THIS FARM HAS BEEN INSPECTED BY THE STATE OF MONTANA. THE CONSUMER ASSUMES LIABILITY FOR HEALTH ISSUES THAT MAY RESULT FROM THE CONSUMPTION OF THIS PRODUCT.

Herdshares would be exempt from the bill's requirements if there is a written contract showing that the individual obtaining milk from the dairy has a bona fide ownership interest in the herd; the contract must also include a notification that the raw milk is not pasteurized. HB 245 passed out of the House and was referred to a Senate committee.

NEW JERSEY A543 & SB 1285

Assembly Bill 543 would allow the on-farm sale of raw milk and raw milk products subject to licensing, testing and inspection. Producers must also sign an affidavit stating that they will not use growth hormones in the production of raw milk. Labeling and signage must state, "Raw milk does not provide the protection of pasteurization." Herdshares would be exempt from the bill's requirements. A543 was voted out of committee last September but no vote on the Assembly floor has been scheduled. A Senate companion bill, S1285, was referred to the Senate Economic Growth Committee in 2014.

NEW YORK A3689

Under current law, the state's position is that any producer distributing raw milk must have a permit. Assembly Bill A3689 would recognize the legality of shared animal ownership agreements in which an individual acquires an ownership interest in a milk-producing animal. The bill was referred to the Assembly Agriculture Committee.

OREGON HB 2446

Current law allows the on-farm sale of raw milk subject to herd size limitations but prohibits advertising. House Bill 2446 would remove the advertising ban. This bill stems from a settlement between dairy farmer Christine Anderson and the Oregon Department of Agriculture (ODA) over a lawsuit challenging the advertising ban. Under the terms of the settlement, ODA stopped enforcing the ban; however, if the bill does not pass this session, the department will resume enforcement. HB 2446 was referred to the House Agriculture and Natural Resources Committee.

RHODE ISLAND S0091

The Raw Milk Act, Senate Bill 91, would legalize the sale of raw cow's and goat's milk, giving the state Milk Commission power to issue rules governing the production and sale of raw milk. The bill itself contains several requirements: the milk must be sold within five days from the date of production, labeling and signage at the point of sale, a permit is required for anyone selling more than 20 quarts of milk or cream made from more than 20 quarts of milk. S0091 was referred to the Senate Environment Agriculture Committee; at the hearing on March 4, the committee recommended to hold the bill for further study.

SOUTH DAKOTA SB 45

Current law allows the sale of raw milk by licensed producers at the farm and at farmers markets; licensees are subject to requirements that were initially instituted for Grade A producers and manufactured milk producers. Senate Bill 45 would also allow the sale of raw cream but would limit sales to on-the-farm and through delivery. Producers could deliver to farmers markets but no longer sell there. The bill would create a separate category for "raw milk for human consumption" with its own regulations issued by the Department of Agriculture. SB 45 passed the Senate and the House en route to the governor's desk. The bill was drafted by a workgroup that included among others, raw milk producers, consumers, and officials from the South Dakota Department of Agriculture that met several times in 2014.

TEXAS HB 91

Under current law, producers must have a license to sell raw milk and raw milk products; sales are restricted to the farm. Under House Bill 91, producers could sell at farmers markets and also deliver to the consumer's residence; they could also contract with an agent for transport and delivery. The Texas State Department of Public Health would be given power to issue rules for the safe storing, handling and transporting of raw dairy for sale. HB 91 was referred to the House Public Health Committee.

UTAH HB 104

The latest version of House Bill 104 would remove the current statutory prohibition on the distribution of raw milk through "cow-sharing programs" if there are no more than "two cows, ten goats and ten sheep per farm" in the program. HB 104 passed the House on March 5 and was forwarded to the Senate.

VERMONT H 426

Under current law, there is a two-tier system for raw milk sales; tier 1 allows the sale of 87.5 or fewer gallons per week direct to consumers on the farm only provided the farm meets basic sanitary standards and other requirements outlined in statutes. Tier 2 allows farmers who meet additional requirements (e.g., milk testing) to sell up to 40 gallons a day on the farm as well as through delivery direct to the consumer and at farmers markets. H426 would change this to create a 3-tier system with expanded sales for producers.

Under the new tier 1, farmers could sell on farm up to 70 gallons per week worth of raw milk or dairy products (as listed in the bill) made from raw milk; these farmers would have to meet only basic sanitary requirements. Under tier 2, farmers who also met additional requirements such as recordkeeping and labeling could sell on farm up to 100 gallons per week worth of raw dairy products. The third tier would require producers to meet additional standards beyond those for tier 2; these producers could sell more than 100 gallons per week worth of raw dairy products on farm, through delivery, at farmers markets, and to CSAs. Third tier producers who obtain a license could sell raw milk (but not raw milk products) at retail establishments. Tier 3 producers under H426 would not have to do as much milk testing as tier 2 producers have to do under the current system.

VIRGINIA HB 1461

House Bill 1461 would have legalized the unlicensed, unregulated sale of raw milk by any producer who owns three or fewer milking cows, provided that the sale be direct to consumer and that the milk container be labeled with the owner's name and address and the statement, "NOT FOR RESALE – PROCESSED AND PREPARED WITHOUT STATE INSPECTION." HB 1461 was referred to the House Agriculture, Chesapeake and Natural Resources but did not make it out of subcommittee.

WEST VIRGINIA SB 30

Three bills have been introduced in the West Virginia Legislature this session. HB 2448 would legalize sales of raw cow's milk while HB 2449 and SB 30 would allow the distribution of raw milk through herdshare agreements. SB 30 is the bill that has traction; it passed out of the Senate and was referred to the House Health and Human Resources Committee.

Under SB 30, the shareholder must sign a written document acknowledging the "inherent dangers of consuming raw milk" and must release the producer from liability; the agreement must be reported to both the Department of Agriculture and Bureau of Public Health. The dairy must meet animal health requirements established by the state veterinarian.

A licensed physician who makes a diagnosis that can be attributed directly to the consumption of raw milk is required to report nonidentifying information to a county health officer; rules regarding the contents of the report are to be proposed by the Department of Health and Human Services.

WYOMING HB 56

Governor Matt Mead signed into law groundbreaking legislation, the Food Freedom Act (House Bill 56), on March 3. The bill allows the unlicensed, unregulated direct sale from farm to consumer of any food except meat; the only requirement is that the producer inform the consumer that the food being sold is not from a licensed or regulated source. Producers can sell any raw dairy product, including un-aged cheese. The bill went into effect immediately.

For the latest developments on raw milk issues, go to www.thecompletepatient.com.

Those who have not joined the Farm-to-Consumer Legal Defense Fund are encouraged to do so. Membership applications are available online at farmtoconsumer.org or by calling (703) 208-FARM (3276); the mailing address is 8116 Arlington Blvd, Suite 263, Falls Church, VA 22042.

RAW MILK IN AUSTRALIA

Last year, four children who had drunk raw milk became ill and one—a terminally ill cancer patient—died. The connection between raw milk and the illnesses was never convincingly proved. Nevertheless, Australian authorities used the outbreak to go after raw milk sold as Cleopatra's Bathwater. Since February, new regulations require addition of a a "bittering" agent to raw milk sold as a cosmetic or pet food.

In reaction to this bureaucratic move, as well as to heavy handed application of regulations designed for large producers, citizens of Australia have set up a Farmer-to-Consumer Legal Defense Fund, modeled after the U.S. Farm-to-Consumer Legal Defense Fund.

Australian raw milk supporters will be working towards reinstating the Mountain View Herd Share Model, preparing their defense and raising money for the defense. For further information, visit https://www.facebook.com/aus.arm.

Healthy Baby Gallery

Theoden (age four and one-half) and Audrey (age one and one-half) have been raised on a WAPF diet for most of their lives. Theoden's WAPF diet began at five months, when his parents discovered the Foundation. This was a blessing, as his first food was switched from veggies to soft-boiled egg yolks. People often comment on how well-behaved, smart, healthy (they almost never get sick) and big they are. Radiant Life's little dried fish, fermented cod liver oil and bone broth are favorites. The family often gets strange looks about their "excessive" consumption of that golden goodness butter! Thank you, WAPF, for helping children have a great start in life, regardless of their future food choices!





Her parents' pride and joy, Sabine Kiki was eight pounds at birth and is pictured here at two weeks old. She came into the world in a water birth and was very alert and healthy since her first minutes. She was born with a full head of hair and a few hours after her birth she was already holding her head up from father's shoulder to look around. Mother and father began following WAPF guidelines in 2013 while studying for her holistic nutrition certification. Mother experienced no morning sickness and enjoyed pastured eggs, bone broth and gelatin, raw milk and butter, pastured meats, and fermented cod liver oil throughout pregnancy. At three months now, Sabine enjoys a slight variation of WAPF's goat milk formula since her mom has struggled with her milk supply since her birth, along with what breast milk her mom can provide. She is alert, joyful and smart. She has a nice wide palate and grows stronger and taller every day. Mom has been healed of a chronic health issue that troubled her since before the WAPF diet.



Moses Gabriel Lanati has benefitted from a nutrient-dense, traditional diet eaten by his mother throughout her pregnancy. The diet included grass-fed liver and butter, raw milk and cheese, bone broths, free-range eggs, kimchi, kombucha, a variety of wild game meats and fish, salmon roe, fermented cod liver and high vitamin butter oil for three years before conception. Royal jelly, thyroid and pregnancy supplements by Quantum Nutrition provided additional support as well. His wide-eyed expression causes people to do a double take as people sometimes think that he is a doll. Exclusively breast-fed, at three months he exhibits great strength and development beyond his young age. He can expect to enjoy egg yolks and liver as some of his first foods. His family is so thankful for the work the WAPF has done in promoting true, lasting health.

Please send photos of healthy babies to Liz Pitfield at liz@westonaprice.org. Photos must be labeled with the baby's first and last name and accompanied by an email with text.



Healthy Baby Gallery

Valentina Rossi MacKenzie was born healthy and immediately took to breastfeeding. During pregnancy and through lactation, Mom eats plenty of fermented foods, raw milk, grass-fed organ meats, butter and pastured eggs. Valentina continues to be robust and good-natured as evidenced by this picture, which was taken just after she turned five months old and had her first taste of egg yolk with frozen grated chicken liver! She also enjoys bone broth and has just started her fermented cod liver oil. We are so grateful for the gift of good nutrition that we learned about from WAPF.





Emily Claire Randolph was born to parents John and Kristie on October 2, 2014, after a healthy pregnancy and delivery. We praise God for her life and are thankful for the ability to eat nourishing foods that have helped all three of our children thrive. Emily is pictured here with big brothers Cole and Nathanael. She is perfectly healthy and beautiful!

Little angel Evangeline (Evie) was born in March 2014 to Anna and Jared. Her birth was natural, fairly quick and drug-free. During pregnancy Mom ate plenty of nutrient-dense foods including grass-fed butter, bone broth, fermented veggies, raw milk, fermented cod liver oil, wild-caught fish, pastured meats and eggs. Evie is a very calm baby, who loves to eat the same foods that her mom ate during pregnancy. Evie also enjoys her daily dose of fermented cod liver oil and butter oil. At eleven months Evie is still successfully nursing. People always comment on Evie's beautiful eyes, a well-shaped head and how observant and calm she is.



Nine-month-old baby George owes his good health to Mom's Weston Price diet, which she followed for about a year before George was conceived. She ate a lot of beef, lamb, chicken, pork and seafood, all with skin and fat intact, and



fish, chicken and meat stocks for soups, high vitamin cod liver oil, eggs, New Zealand butter, liver pâté, raw goat's milk, yogurt and cheese. George eats most of these foods as well. He has cod liver oil every morning and lots of liver and butter with his meals. Mom had a really good pregnancy and birth. The midwife couldn't believe how thick and ropey and strong the umbilical cord was and how it kept pumping blood through for about forty minutes. Mom also ate the placenta, made into pâté. George is a very strong robust baby. He was holding his head up soon after birth and began crawling at seven months. He has a lovely temperament. He is very content on his own or in social situations. He can occupy himself easily for an hour without needing attention. He only cries when there is reason to cry, as when he is hungry, tired or hurt. He has always grown proportionally well on his growth chart and has never been sick. He has never been vaccinated.

All Areas: Nourishing Our Children, Sandrine Love (415) 820-1474, info@nourishingourchildren.org, http://www.nourishingourchildren.org

- AK Copper River Basin: Janelle Eklund (907) 822-3282, jeklund@cvinternet.net, & Rebekah Donohue beck.donohue@gmail.com
- AL Auburn: Susan Ledbetter (334) 821-8063, gnomons@bellsouth.net Estillfork: John Langlois (256) 776-1499, john.langlois@foggybottomfarms.com, http://health.groups.yahoo.com/group/AL_WAPF/ Huntsville/Big Springs: Anne Cleve (256) 270-5980, healthyblood@gmail.com & Lori Warner (256) 975-2425 Madison County/Monte Sano: Patricia & Robert Heinisch (256) 337-9925, banjowoman@gmail.com Orange Beach: Sherry Miller (337) 258-5115, dupremiller@lusfiber.net Union Springs/Tuskegee: Debbie Vail (334) 750-3276, Debbie@created4youfoods.com
- AZ Flagstaff/Sedona: Cindy Krznarich (928) 225-1698, wapfsedona@gmail.com, wapfflagstaff@gmail.com Metro Phoenix: Chantelle Meade (480) 231-8237 (texts preferred), chantelles@cox.net, wapfsevalleyaz@yahoogroups.com Phoenix, North: Sarica Cernohous LAc (928) 856-0660, sarica@naturallylivingtoday.com Tucson-South: James Ward (520) 245-3132, james ward@yahoo.com & Mechelle Meixner (520) 300-4841, mechellemeixner@mac.com
- AR Fayetteville: Catherine & John Swenson (530) 587-2912, (479) 200-1908, catherine@tallactech.com & info@blacksheepranch.net Little Rock: Brandy & Jamie McAllister (501) 681-5747, brandybmcallister@gmail.com Texarkana - see TX: Ark-La-Tex
- CA Albany/El Cerrito: Sara Russell & Marco Prina (510) 644-8098, your.probiotic.kitchen@gmail.com Antelope Valley: Vanessa Ryan (707) 218-5180, vanessa.ryan1@yahoo.com Auburn: Angela Gonzalez (925) 528-9069, angela@meridiancoaches.com Bakersfield: Connie Wedemeyor (661) 301-8330, wapfbako@yahoo.com Berkeley/Oakland: Dave Rana (510) 473-7262 ext 2, waprice@niwas.net Carpinteria: Tatiana & Steve Larios (805) 284-2840, info@tatianaspilates.com Chico/Butte Valley: Carol Albrecht & Kim Port (530) 570-1684, ccakfa@aol.com, http://www.meetup.com/Chico-ButteValleyWAPFChapter/ Conejo Valley: Daniel Fish (818) 253-5519, danielfish51@gmail.com CREMA- California Raw Milk Association: Christine Chessen crema@comcast.net Davis: see Yolo County Dublin/Pleasanton/Livermore: Grace Liu (925) 364-1809, http://wapfeastbay.ning.com El Dorado County: Amanda Mercer (916) 300-5449, amandazmercer@gmail.com, https://www.facebook.com/groups/823249031066028/ Fair Oaks/Orangevale: Mike Kersten (916) 962-9975, kerstencastle@att.net Fresno/Madera County: Hillori Hansen (559) 243-6476, blissful_chef@yahoo.com & Megan Dickey (559) 355-1872, hiddenpathways@gmail.com Grass Valley/Nevada City: Shan Kendall (530) 478-5628, daveshanken@juno.com & Cathe' Fish (530) 432-5109, sunshine.works@gmail.com, www.meetup.com/GoldCountryChapterWAPF Humboldt County: Leah Stamper (707) 232-4205, humboldtcountytraditionalfoods@gmail.com Lake County: Desiree Todd (707) 279-1299, stablefood@gmail.com Los Angeles/Hollywood: Liz Voosen (323) 488-3438, lizvoosen@gmail.com, http://chapters.westonaprice.org/hollywoodla/, http://health.groups.yahoo.com/group/WAPF LosAngeles Hollywood/ Marin County: Karen Hamilton-Roth (415) 380-8917, marinwapf@gmail.com & Maureen Donohoe (415) 256-9424, medbmdd@yahoo.com, http://chapters.westonaprice.org/marincountyca/ Mendocino County: Anna Rathbun (707) 937-0476, mendo.wapf@yahoo.com Newport-Mesa: Marissa Gossett (949) 310-5935, marissagossett@gmail.com, www.facebook.com/newportmesachapter Orange County, North: Mona Lenihan-Costanzo (949) 448-0993, mona@vibrantwellnessnow.com Orange County, South: Marsha Youde (949) 425-1575, healthylifestyle101@yahoo.com, https://www.facebook.com/WAPFSouthOC Oroville/Bangor/Foothills: Caroleah Johnson (530) 370-4044, caroleah@gmail.com Pasadena: Karen Voelkening-Behegan (626) 836-5053, karen@realfoodtherapy.com & Chanlee Sutoyo (949) 328-4747, chanlee@cutevegetables.com, http://westonapricepasadena.blogspot.com/, http://chapters.westonaprice.org/pasadenaca/, http://westonapricepasadena.wordpress.com Redding: Trudi Pratt, DC (530) 244-7873, drtrudi@drtrudi.com, www.drtrudipratt.com Redlands/Loma Linda: Anna Penick NTP (909) 793-7055, anna@selahwellness.net Redondo Beach/South Bay: Angela Karlan (310) 540-6542, akarlan@yahoo.com & Vicki Keller (310) 422-0690 Riverside/Corona: Suzette Chavers (951) 682-9680, schavers@gmail.com Sacramento: Eve Mitchell (916) 899-0054, eveinnerwisdom@gmail.com, chapters.westonaprice.org/sacramentoca, http://www.facebook.com/groups/253923421376927/ San Diego/East County: Nancy Teas-Crain and Darrel Crain, DC (619) 659-0176, ntcrain@cox.net, http://chapters.westonaprice.org/sandiegoeastcoca/ San Diego/Encinitas: Kim Schuette, CN & Toni Fairman (858) 259-6000, kim@biodynamicwellness.com, wapfsandiego@gmail.com, www.facebook.com/WAPFSanDiego, chapters.westonaprice.org/sandiegoca San Diego/Escondido, Scripps Ranch, & Poway: Holly Chisholm & Barb Bezold, (858) 668-6502, hschisholm@yahoo.com San Diego/North County Inland: Garret D. Williams (760) 908-5754, garret@heritagewellness.com San Francisco: Vicki Page & Doug Miller-Fleig (415) 568-0027, dougatthebeach@yahoo.com, http://www.chapters.westonaprice.org/sanfranciscoca/, wapf-sf@yahoogroups.com San Jose & South Bay: Clarissa Clark (408) 881-3397, wapfsouthbay@gmail.com, http://health.groups.yahoo.com/group/WAPF-SouthBay/ San Mateo County: Lisa Smith (408) 234-1182, wapfsm@gmail.com, traditionalfoods@yahoo.groups.com Santa Barbara: Eric Brody & TJ Fortuna (805) 626-0265. wapfsantabarbara@gmail.com, www.wapfsantabarbara.blogspot.com Santa Cruz County: Jean Harrah (831) 761-3765, jalysonh@yahoo.com & Michael McEvoy michaelmcevoy601@hotmail.com Santa Maria Valley: Carly Neubert & Eric & Brieanne Rice (805) 354-8061, healthy.carly@gmail.com Santa Monica: see Los Ángeles Santa Ynez Valley/Lompoc Valley: Shelley H. Lane, OMD, L.Ac. (805) 245-0577, shelane13@comcast.net & Melinda Thompson davidandmelinda@msn.com Simi Valley: Tami Chu & Tracey Ellis-de Ruyter (805) 517-4641, wapfsimi@gmail.com, wapfsimi.blogspot.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, wapfsolano@gmail.com Sonoma County: Lisa Monroe (707) 373-1819, lisamonroe99@gmail.com, SonomaCountyWAPF.weebly.com
 - Sonora: Ann Hince (209) 588-0304 & Chara Shopp (209) 770-7052

South Lake Tahoe: Kathey Merten (530) 600-1713, katheymerten@hotmail.com Stockton & San Joaquin County: Martha E Zetter, Holistic RN, CRM (209) 478-7630, martha@zetter.com & Darren Didreckson, (209) 334-3585, darren.did@hotmail.com Three Rivers: Teriz Mosley (559) 561-3637 terizmosley@hotmail.com Truckee: see Tahoe, NV Ventura County: Joanie Blaxter (831) 246-0162, WAPFVentura@gmail.com Woodland Hills: Nina Heumann, DC (818) 884-2301,woodlandhillswapf@gmail.com Yolo County: Trish Trombly (530) 753-2237, tromblynutrition@gmail.com & Natalie Sidarous, nataliecanyell@gmail.com, http://groups.yahoo.com/group/WAPFYolo CO Black Forest: Emmy McAllister (719) 494-1546, healthsolutionsnow@earthlink.net Boulder: Betsy Sheffield (720) 334-8774, betsy@fitrwellness.com & Claire DeLeo (303) 619-8373, boulder.wapf@gmail.com, http://chapters.westonaprice.org/boulderco/ Colorado Springs, North: Carol Aleson (719) 282-1226 & Maria Kretchman (719) 723-4873, springswapf@yahoo.com, facebook.com/groups/wapfcos Colorado Springs, South: Maria Atwood (719) 573-2053, traditionalcook@hushmail.com, www.traditionalcook.com Denver: Dianne Koehler (303) 423-5736, Dianne.Koehler@gmail.com & Eric Eslich (303) 619-3703, wapfdenver@gmail.com, nourishingconnections.org Fort Collins: Nancy Eason (970) 493-7588 & Monica Corrado (970) 685-7797, wapffc@gmail.com, wapffc.org Grand Junction: Dawn Donalson (970) 549-4079, ddonalson@hotmail.com, WAPFGrandJunctionCO-WesternSlope@yahoogroups.com Gunnison Valley: Valerie Jaquith (970) 209-6732 & Meike Meissner (970) 901-7591, Gunnisonvalleywapf@gmail.com, www.westonpricegunnison.com Littleton: Leti Fanning (303) 888-0321, leti@bodyfuel4health.com, www.bodyfuel4health.com/events Pagosa Springs: Jenny Travis (707) 514-6488, jenny-travis43@yahoo.com, https://sites.google.com/site/pagosawapf/home Pueblo/Rye/Wet Mountain/Lower Arkansas Valley: Kim Wiley (719) 947-0982, farmerswiley@gmail.com Roaring Fork Valley: Jody Powell ND (970) 236-6178, drpowell@aspennd.com Steamboat Springs: Sara Gorevan (603) 306-6446, saragorevan@gmail.com Western Slope: Evette Lee (970) 256-0617, evenmike@acsol.net Fairfield County: John J. Kriz (203) 253-5934, wapfairfield@att.net, http://chapters.westonaprice.org/fairfieldcountyct/ CT Litchfield County: Helen Baldwin (860) 435-9839, helendaybaldwin@gmail.com , http://chapters.westonaprice.org/litchfieldcountyct/ Manchester/Glastonbury: Anita Schubert (860) 432-3131, anitaschubert@cox.net New London: LaDonnah Cardin (860) 376-2440, antladonna@yahoo.com & & Kristen Morelli , (401) 284-1802, http://www.meetup.com/Weston-Price-New-London-CT-South-County-RI/ Old Saybrook: Brigitta Jansen (917) 779-8444, brigitta@loudkat.com Tolland: Anna & Jared Simpson (860) 305-5888, wellbeyondnutrition@gmail.com Western New Haven Area: Janet Stuck, ND (203) 870-8529, janet7x70@aol.com Washington: Hilda Gore & Elizabeth Gilhuly (202) 599-0679, wapfdc@gmail.com DC DF Dover: Christopher Hume (610) 393-8740, hume227@aol.com Northern Delaware: Bob Kleszics (302) 234-2707, harvestbob@juno.com Rehoboth Beach: Sara Read (302) 227-2850, sread2850@aol.com & Cheryl Ciesa english008@comcast.net Altamonte Springs: Steve Moreau kmt205@gmail.com & Lee Burdett healthyeating@wellfedfamily.net Gainesville: Beth Michelson (352) 376-5908, bmichelson@bellsouth.net & Maria Minno (352) 375-3028, Maria.Minno@gmail.com Jacksonville: Diane Royal (904) 396-6881, droyalsmiles@gmail.com & Raymur Walton (904) 387-9234, raymurpwalton@yahoo.com Jupiter: Sheena Golish (434) 996-0003, golishfamily@gmail.com, http://chapters.westonaprice.org/jupiterfl/ Lee/Alva County: Caroline Coykendall (239) 450-6778, carolinecoykendall@gmail.com Miami/Miami-Dade County: Gary Roush (305) 221-1740, garyaroush@aol.com Naples/Collier County: Teri Pence (239) 353-1330, terigpence@yahoo.com Ocala: Shirley & Robert Sloan (352) 291-0935, rsloan19@cfl.rr.com Panama City: Jennifer Tarr & Jack Moore (571) 277-4206, Quinn.jennifer.lee@gmail.com Pensacola: Scott & Vicki White (402) 871-7639, info@nourishingpensacola.com, nourishingpensacola.com Pompano Beach: Mary Jo Fahey (954) 928-1852, maryjofahey@tds.net St Petersburg: Rachel Grunder (813) 447-4306, thegrunderfamily@gmail.com Sarasota: Angelia Anderson, CNHP, (941) 322-1010, angelia@abundant-wellness.net South Miami-Dade County: Mary Palazuelos-Jonckheere (305) 484-8402, marybenoit@aol.com Space Coast: Penny Norrie (321) 543-2327, penny@lovebythespoonful.org Tallahassee: Julie Konikoff (850) 224-4892, royaljewels@gmail.com Tampa/St. Petersburg: Sarah Pope thehealthyhomeeconomist@gmail.com, http://www.thehealthyhomeeconomist.com, http://health.groups.yahoo.com/group/WAPFTampaBay/ Titusville: Michelle Collins & Kathleen Burson (321) 269-0075, dmmmcollins@att.net Treasure Coast: Andrea Mastellone (516) 510-9920 aonthree@gmail.com Vero Beach: Jody & Randy Old (772) 539-0220, jold@rbold.com, rbold@rbold.com Volusia & Flagler Counties: Mary Beth Michael (386) 675-6178, sharingnatural@gmail.com, sharingnatural.com West Palm Beach: Gloria & Joe Cosmano (772) 489-7905, SeaBreezeOF@aol.com Windermere: Thomas Reitz (407) 513-2760, reitz@farmfreshwindermere.com

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CHAPTER RESOURCES

Resources for chapter leaders can be accessed at http://www.westonaprice.org/local-chapters/chapter-resources, including our trifold brochures in Word format, chapter handbook, and PowerPoint presentations.

LOCAL CHAPTER LIST SERVE

Thank you to Maureen Diaz a chapter leader in Pennsylvania, for administering the local chapter chat group. New chapter leaders can sign up at http://groups.yahoo.com/group/wapfchapterleaders/

- GA Atlanta: Lynn Razaitis (404) 294-6686, Razaitis_Lynn@yahoo.com, join GA chapter email group http://groups.yahoo.com/group/GA-WPF Carrollton/Douglasville/Dallas: Lainya Hutchins (770) 854-6174, mlwhutchins@gmail.com
 Dunwoody: Lee Moore & Terry Brown (770) 655-1365, perimeterctr.wapf@gmail.com
 Gainesville/Dawsonville/Dahlonega: Kat Stratton (678) 617-3577, kat@discovercedarhill.org
 Gray: Michele Stanford (678) 588-3338, j.michele.stanford@gmail.com
 Lawrenceville/Dacula: Mary Marlowe (770) 962-9618, marlowe@onlynatural.info & Pilar Quintero (770) 339-3065, info@ranchoalegrefarm.com
 Marietta: Debby Smith (770) 980-0921, dsatlanta@comcast.net & Lauren Riley (678) 221-4527, laurmerbr@gmail.com
 Newnan/South Metro Atlanta: Carmen L. Reddick (470) 215-0377, wapfsouthmetro@yahoo.com
 Northeast Georgia: Cathy Payne broadriverpastures@gmail.com
 Roswell: Sandra Walker (770) 841-3437, sandrahomemaker@gmail.com
 Snellville/Stone Mountain: Heather Tubbs (770) 367-5298, trulyhealthybaby@yahoo.com
 Warner Robins: Lori Freeman (478) 396-8379, lorifreeman1@cox.net
 Woodstock: Cindy Morrow (404) 775-1126, gloryspill@gmail.com
- HI Maui: Sue Tengan (808) 276-4700, sueanntengan@msn.com
- ID Boise area: Summer Knight (406) 451-3602, summerdknight@gmail.com Idaho Falls: Samantha Hanny (208) 313-4810, idahofallswapf@gmail.com, facebook.com/idahofallswapf Ketchum/Sun Valley: Leslie Manookian (208) 726-1088, leslie.manookian@me.com & Veronica Rheinhart, LAc (208) 450-9026, veronica@wellness101.org Rathdrum/CDA: Barbara Geatches (208) 457-1757, bgeatches@yahoo.com
- IL Carbondale: Beth Michaels (815) 347-4488, bethtub13@yahoo.com, http://chapters.westonaprice.org/carbondaleco/ Central Illinois: Kate Potter (309) 338-7876, potter_kate@hotmail.com
 DeKalb: Sandra Echevarria (773) 653-3418, rickoli@comcast.net
 Dixon: Vicki McConnell (815) 288-2556, vlmcconnell@gmail.com
 Fox Valley: Jennifer McManamee (773) 953-3848, Jennifer@traditionalfoods2U.com
 Kankakee Area: Sara Sharp (708) 269-1517, sarasharp78@gmail.com & Heather Makarewicz (309) 696-8531, hmakarew@gmail.com
 Lake County/Northwest Suburbs: Linda DeFever (847) 526-6452, ocfever01@yahoo.com
 Northern Dupage County: Kathryne Pirtle & Olive Kaiser (630) 543-5938, kathypirtle@sbcglobal.net
 NW Cook County Suburbs: Renee Renz (224) 244-7369, wapfnwchicagosuburbs@gmail.com, http://chapters.westonaprice.org/nwcookcounty/
 Oak Park: Gina Orlando (708) 524-9103, gina@ginaorlando.com
 St. Clair County: Gordon & Jennaver Brown (618) 567-1529, wapf_stclair@livewellinitiative.com, http://livewellinitiative.com/?page_id=14
- IN Bloomington: Larry Howard (812) 876-5023, info-wapf@betterlocalfood.org Fort Wayne: Krista Braman (260) 443-3325, WAPF.FortWayne@gmail.com Fulton County: Lanae Peter (574) 835-4020, lanaepeter@yahoo.com & Joe Gady (574) 835-4020, jgady@rtcol.com Indianapolis: BJ Shepard (317) 409-2402, bobbiejshepard@yahoo.com White/Carroll County: Laurel Eakin (765) 412-3470, laureleakin@gmail.com
- IA Cedar Rapids/Iowa City: Elaine Michaels, NTP, CHFS (319) 377-0040, Elaine@NatureWillNurture.com Council Bluffs: Luana & Glenn Harman (712) 483-2011, glennandluana@wiaw.net Des Moines: Teresa Fowler (515) 419-0731, roostersunrise@yahoo.com Holstein: Elaine Rolfs (712) 368-2391 Louisa County: Emily Brown (847) 651-6400, livewellnourished@yahoo.com Quad Cities: Lori Sullivan & Tiffany Spurgetis (563) 355-4864, lorisullivan.nww@gmail.com
- KS Clay/Dickinson County: Michael & Shasta Hamilton (785) 388-2107 Lawrence: Mary Douglas dooterb@yahoo.com
- KY Bath County: Sally Oh (859) 904-8018, oboykw@gmail.com & Courtney Byron (606) 336-6410, courtneygayle@gmail.com Elizabethtown: Missy Campbell (580) 574-2738, meli_be@yahoo.com & Lori Smith (270) 300-5412 heartlandwholelifeorders@yahoo.com Lexington: Tina Paul (618) 534-9581, tinapaul622@gmail.com Louisville: John William Moody (502) 291-2119, louisvillewapf@yahoo.com & Victoria Snelling, DC (502) 426-2033, vsnelling@drsnelling.com, http://chapters.westonaprice.org/louisvilleky/ McPherson/Hutchinson area: Connie Newcome (620) 585-2556, cnewcome@gmail.com
- LA Acadiana: Daphne Olivier & Sierra Majors (337) 296-1628, daphne@my-food-coach.com, http://chapters.westonaprice.org/lafayettela/ New Orleans: Christiane Wurmstedt (504) 756-6020, christiane.wurmstedt@gmail.com & Katie Williamson (985) 630-4878, katiew1@bellsouth.net Northshore: Kim Koepp, RD, (803) 349-5588, northshorewapf@yahoo.com Shreveport - see TX: Ark-La-Tex
- ME Auburn/Lewiston area: Sandy Parent (207) 225-6125, happycampers323@gmail.com
 Blue Hill Peninsula: Laura Livingston (207) 469-5281, lauralivingston@live.com
 Denmark: Donna Dodge (207) 452-2644, eatsmart@fairpoint.net
 Dover-Foxcroft: Eugene & Mary Margaret Ripley (207) 564-0563, marymargaretripley@gmail.com
 North Berwick & Sanford: David Plante (207) 676-7946, dplant@maine.rr.com & Pamela Gerry (207) 459-4146, pamelagerry@gmail.com
 Portland: Kate Mockus (207) 874-7445 mockuskaty@yahoo.com & Stacy Cimino www.nourishingmaine.com
- MD Baltimore, Canton Area: Angela R. Welch DiHom, (231) 409-7692, welcha231@yahoo.com
 Berlin: Monika & Lisa Lilley (443) 373-3115, worcestercountywapf@gmail.com
 Bowie: Liz Reitzig (301) 807-5063, liz.reitzig@verizon.net & Deneice Knauss (301) 352-7024, knauss20@excite.com
 Columbia: Gina Rieg & Brian Chialastri (301) 602-6560, gina@simplifiedwellnessforyou.com, brian44indy44@hotmail.com

Kensington: Nicole Handfield (860) 460-7677, handfieldshalom@gmail.com Linthicum: Amy DeVries (410) 789-1593, hysenthlaydew@yahoo.com, http://chapters.westonaprice.org/linthicummd Prince Frederick: Patrick Crawford (703) 283-6826, patrickcrawford2001@gmail.com Rockville: Lynda Moulton (301) 330-1148, jlmoulton@comcast.net St. Mary's County: Candace Jennings (843) 312-4065, stmarysMDWAPF@gmail.com & Rev. Rebecca L. Henderson, (240) 538-8473, handsofgreen@gmail.com Waldorf: Zanita Barnett (301) 873-0654, zanbarnett@yahoo.com Wicomico County: Julie McKamey (314) 604-1415, WicomicoCountyWAPF@yahoo.com Berkshire County: Jebb & Tracy Remelius (413) 243-3582, jebbandtracy@me.com MA Boston/JP/Hyde Park: Gena Mavuli (443) 527-0408, gfmavuli@gmail.com Burlington: Karen Potter (781) 799-5329, kpotter4health@gmail.com Cape Ann: Cyndy Gray (978) 767-0472, justdairry@comcast.net Concord: Kristin Canty (978) 369-5042, kristincanty@aol.com & Hilary Boynton (978) 287-0502 Groton: Karen Zimmerman & Linda Cox (978) 615-7230, chefkaren@grotonwellness.com & lindac@grotonwellness.com Newburyport: Jacqueline Carroll (978) 462-4982, Jackie@amazonpromise.org Northampton: Christine C Decker, ND drchrisdecker@gmail.com, on FB as Northampton MA Weston Price Pelham: Julie Rypysc (413) 253-7339, snowyowl@crocker.com Pepperell: Renee Cyr (978) 433-9732, rmcyr@charter.net South Shore/S. Eastern MA: Cathy Sloan Gallagher (781) 356-1842, cathy@realfoodstory.com Wayland/Natick: Patricia Callahan (508) 479-9117, pcallahan845@gmail.com MI Big Rapids: Bonnie Miesel (231) 823-8002, bmiesel869@gmail.com & Atlee Yoder Detroit Metro: Lisa Imerman, (248) 828-8494, info@htnetwork.org, htnetwork.org Frankfort: Abby Beale (231) 352-7463, wapffrankfort@gmail.com Genesee/Lapeer/N. Oakland: Kim Lockard (810) 667-1707, KimLockard@gmail.com & Lorna Chambers (810) 664-4372, chambersbl@charter.net Grand Rapids: JoAnna Phipps (616) 774-8314 & Melissa Malinowski (616) 365-9176, info@nourishingways.org, http://www.nourishingways.org, http://chapters.westonaprice.org/grandrapidsmi/ Holland/Zeeland: Delanie Aguilar (616) 240-6547, delanieaguilar@gmail.com Kalamazoo/Portage: Kelly Zajac (269) 929-8746, kmzajacah@gmail.com Lansing: Allie & Elise Thorp (517) 290-0968, info@wholerootnutrition.com Marquette Area: Tim & Fae Presley (906) 942-7188, presley131@zoho.com Midland: Grace Cummings (989) 687-5425, gracecummings@charter.net Milan: Kirsten Heath (734) 347-5021, bobkirfarmer@gmail.com Monroe County: Maurine R. Sharp, RN (734) 240-2786, maurine@monroehealthmatters.com Muskegon: Mark Christenson (231) 740-0816, mark_christenson@msn.com & Lisa Middlecamp-Lowder (231) 744-1991, lisa@thriveforreal.com Northeast Michigan: Bob Turek, DC & Lisa Turek (989) 724-7383, alconachiropractic@gmail.com Petoskey/Mancelona: Rajiv Kumar (231) 360-1435, service@indiahealthtoday.com St. Joseph: Katie Stull, DC & Jennifer Eby (269) 921-0032, Katiestulldc@yahoo.com Traverse City: Brenda Baran (313) 405-0760, realeyeshomestead@gmail.com MN Blue Earth & Nicollet Counties: Sherry Lorentz (507) 546-3344, lorentzsherry@gmail.com Duluth: see Superior, WI Minneapolis, Southwest Metro: Carrie Clark, DC carrieeclark@hotmail.com & Anne Marie Ashton mrsashton1993@comcast.net Minneapolis Urban: Edward Watson (612) 845-9817, ed@physiologics.org Moorhead/Fargo (Minndak): Todd Ferguson, ND (218) 284-1188, drtodd@prairiend.com Owatonna: Darren Roemhildt, DC (507) 451-7580, darrenr@drdarrenowatonna.com Park Rapids Area: Tanja Larson (218) 732-9402, prrealfood@hotmail.com Prior Lake: John Myser (952) 226-2208, johnmyser@me.com Rochester: Kay Conway (507) 421-0865, kcmckc@aol.com St. Cloud: Jane Frieler (320) 597-3139, bodyhealthyself@arvig.net, bodyhealthyself.info Sauk Rapids: Liz Thares (320) 253-7457, jetfam@charter.net Twin Cities, Northern Suburb: Trina Gentry (612) 226-3276, wapfnorthtc@gmail.com Twin Cities, West Metro: Andrea K. reichertrd@gmail.com & Kacey Morrow kaceyamorrow@gmail.com White Bear Lake Area: Diane Smith (651) 428-3462, dianesmith204@hotmail.com Winona Area: Kate Larson & Johanna Weissing (507) 460-2456, katolah@gmail.com, lapucelle@hbci.com Jackson: Sarah McCauley (334) 313-1849, sarah.mccauley.lpc@gmail.com MS Starkville: Lindsay Wilson (662) 324-1357, maypop@riseup.net & Ali Fratesi alifratesi@gmail.com Columbia: Shayna Fasken DC (573) 442-8959, shaynafaskendc@gmail.com MO Eastern Missouri: David J. Henderson (573) 242-3449, quality.djh@gmail.com Jefferson City: Ryan Robert Cornell (573) 326-9149, wapfjeffcitymo@gmail.com Joplin: Kimlyn Powers (417) 850-1245, wapfjoplin@hotmail.com Kansas City area/Lee's Summit: Donna Schwenk (816) 554-9929, sch.donna@gmail.com Farmington: Karin Ladd (573) 747-1889, nkladd@aptitudeinternet.com St. Louis: Josephine Lee MS, DC wapfstl@yahoo.com MT Bigfork: Audrey Keaveny-Coggins (406) 837-2216, keavenycoggins@yahoo.com Billings: Corinne Hart (215) 384-4819, eatwell.livwell@gmail.com Bozeman: Kaelin Kiesel-Germann (406) 600-6546, loverealfoodmt@gmail.com Drummond/West Central MT: Bonnie & Jerry Lauer (406) 241-1048, beabeajones@hotmail.com

Great Falls: Lynn Evans, RN (406) 268-8480, frontdesk@ahealthyhorizon.com, ahealthyhorizon.com

Helena: Andrea Jones (406) 202-1602, afotomama@gmail.com

Lincoln: Gus Ponstingl (402) 770-2277, groggygroggy@yahoo.com North East Nebraska: David & Barbara Wetzel (402) 858-4825, gppoffice@frontier.com NE Omaha, South: Miranda Sherman (402) 637-8929, sparkysherman@msn.com Gardnerville: Gillian Ferranto (775) 901-3614, gferranto@gmail.com, http://chapters.westonaprice.org/gardnervillenv/ NV Las Vegas: Rosemary Duma & Ken Hardy (702) 897-3730, panacea1@peoplepc.com Las Vegas, South/Henderson: Tara Rayburn & Debra Phelps (702) 533-4346, debraph10@gmail.com, http://community.westonaprice.org/index.php/butterbuddies/groups/viewgroup/18-NVLas+Vegas+Chapter, https://www.facebook.com/groups/541350722565268, http://www.meetup.com/Weston-A-Price-Foundation-Las-Vegas-South-Henderson-Chapter/ Reno: Bari Caine (775) 849-7940, blue.sky333@att.net Sparks: Chad Lemus (775) 313-3079, chad@liberationathletics.com Truckee/Tahoe: Lindsay Rojas (530) 414-8726, Lindsay@traditionalrootsnutrition.com Amherst-Nashua: Susan Stefanec (603) 673-0890, thinkglobal@comcast.net NH Exeter: Claire Houston (603) 772-0799, clairehouston@comcast.net & Nancy White (603) 801-5407, nancyjmwhite@gmail.com Gilsum: Sandra Littell (603) 209-2047, sandrateena@gmail.com & Celeste Longacre c@yourlovesigns.com Manchester: Christine Lauer (603) 483-2038, vitaminddaily@comcast.net New London: Linda Howes (603) 526-8162, linda@nourishingwellness.net Upper Valley: Louise Turner (603) 272-4305, journeytowholeness2000@yahoo.com NI Atlantic & Cape May Counties: Sheri Napier (609) 573-5641, millerbiodiversityfarm@gmail.com & Joy Flury Brown (609) 432-0927, joyflurybrown@gmail.com Bergen/Passaic Counties: Erica Evans (201) 452-2922, erica.e.evans@gmail.com Jersey City: Angela Davis (646) 522-9540, angelacdavis@aol.com Jersey Shore: Shannon Coffey (908) 675-6736, coffeybeans2000@yahoo.com Montclair (Essex County): Azizi Birkeland (917) 587-9709, azizij@gmail.com Princeton: Sandeep Agarwal, sandeep@wapfnj.org, http://www.wapfnj.org Southampton: Judith Mudrak (609) 859-3828, reversemydisease@yahoo.com Summit: Maria Tabone (973) 378-5285, maria@theholisticroot.com Sussex County: Lucille VanderPloog & Grace Engels (973) 600-9728, lucy@nac.net NM Albuquerque, West: Thomas Earnest DOM (505) 899-2949, tcearnest@comcast.net El Dorado: Lewis Gordon (505) 269-2363, eldoradowapf@gmail.com Las Cruces: Sarah Smith (575) 373-1622, skydisco3@gmail.com & Don Henderson (575) 202-8866, dhenderson@comcast.net Las Vegas: Delia Garcia (505) 425-6817, dgarciasf@gmail.com Santa Fe: Heathar Shepard & Jen Antill (505) 204-8556, heather.shepard@gmail.com, desertrootsfoodcoop.com Silver City: Cecilia McNicoll (575) 535-2664, wapfsilvercity@gmail.com Auburn: Ashley Hass (315) 567-2900, ashleymhass@yahoo.com & Melissa Weinberger (570) 702-3099, Melissa@nuravita.com NY Adirondacks, Northern: Cathy Hohmeyer (518) 891-1489 foods@aromavital.com, Lynn Cameron (518) 327-3470 Binghamton Area: Stuart McCarty & Lynn Thor (607) 693-3378, wsgcsa@tds.net Brooklyn: Hannah Springer (718) 490-2839, Hannah@theoliverwestoncompany.com Buffaló: Jill Tiebor-Franz (716) 655-5133, jatf62@roadrunner.com & Carol Poliner (716) 544-4157, carol.poliner@gmail.com Clifton Park: John Spence (518) 348-1935, jspencedc@gmail.com Columbia County: Betsy Cashen (518) 851-5101, betsy cashen@yahoo.com & Lilia Angello (518) 672-7360, lilia@angellosdistributing.com Franklin Square/Elmont/part of Nassau County (see also Suffolk County): Caroline Barringer (877) 773-9229, info@immunitrition.com, http://www.immunitrition.com/Milk-lt___Real_Food_Club.html Great South Bay: Jill Tieman (631) 563-8708, jill@realfoodforager.com Howard Beach: Debbie Jackson (917) 449-1880, bodyinbalance99@yahoo.com Ithaca: Sarabeth Matilsky (607) 431-8293, wapfithaca@gmail.com Jefferson County: Lara Wines (703) 568-4249, lwines@gmail.com Monroe: Joseph & Denise Lombino (845) 783-9797, drlombino@yahoo.com New York City: Claudia Keel, wapf.nyc@gmail.com Niagara County: Margaret M. Zaepfel (716) 523-3761, margaretzaepfel@gmail.com Oceanside/Lynbrook: Juliana Mazzeo (516) 593-5167, giulia07@verizon.net, www.nymedicalnutrition.com Oneida County/Clinton: Mackay Rippey & Lynn Shaw (315) 557-6892, mackay.rippey@gmail.com Orange County/Warwick: Robert Kramer, DC (845) 986-9027, kramernutrition845@gmail.com Putnam County & Westchester County: Arlene Figueroa (845) 628-7009, Arlene@arlenefigueroa.com Riverhead: Ashley Lewin & Chris Nelson (631) 727-1025, sales@desertherbals.net Rochester: Laura Villanti (585) 451-0038, laurav@rochester.rr.com & Kristine Brassie (585) 750-5069, kbrassie@rochester.rr.com, http://health.groups.yahoo.com/group/rochesterNYwestonaprice/ Rockland County: Jill Cruz (201) 360-1113, jill@bodywisefoodsmart.com & Laura Rose (917) 691-9589, managementgal@hotmail.com, wapfrocklandcounty.wordpress.com, https://www.facebook.com/RCWAP?ref=hl Ulster County-Hudson Valley: Dina Falconi & Charles Blumstein (845) 687-8938, waverider75@earthlink.net West Southern Tier: Timothy Koegel (607) 587-9684, chapter@wapf-stwny.org, www.wapf-stwny.org Westchester: Marizelle Arce & Louis Belchou (917) 282-5622, naturomari@gmail.com

The Weston A. Price Foundation currently has 567 local chapters; 456 serve every state in the U.S. plus the District of Columbia and 111 serve 28 other countries. Welcome to our new chapter from Hungary!



Klamath Falls: Teresa Penhall (541) 883-8821, Food4life@fireserve.net La Grande: Robert & Melissa Martin (541) 428-2177, valleyreformed@gmail.com

WAPF AT THE ANNUAL PASA CONFERENCE

Each year, WAPF participates in the annual conference of the Pennsylvania Association of Sustainable Agriculture (PASA). This year, Michael and Elisa Schmidt dropped in to the WAPF booth for a surprise visit. Elisa graciously took part in a panel discussion about recovering from and preventing illness with a WAPF diet for the whole family, led by Maureen Diaz with Judith Mudrak from the South Jersey chapter. It was a big hit! Everyone enjoyed their company very much. Many thanks to Farm Match and Max Kane for bringing them to this fantastic event!

Pictured here, left to right are Maureen Diaz, Mike Mudrak, Elisa Schmidt, Judith Mudrak and Michael Schmidt.



Medford (Rogue Valley, Southern OR): Summer Waters, L.Ac., NTP, CGP, (541)-772-2291, summer@summerwaters.com, health.groups.yahoo.com/group/RogueValley-Weston A. Price Foundation Portland: Sharon & Warren Moliken pdxwapf@gmail.com & Sandrine Love sandrine@nourishingchildren.org St. Paul: Charlotte Smith & Marc Rott (503) 860-6286, champoegcreamery@gmail.com Salem: Linda S. Ellis (503) 508-2803, salem.chapter.wapf@gmail.com, www.nourishingsalem.com South Lane County: Yaakov Levine, NTP (541) 895-2427, nurtritionallyspeaking@gmail.com, wapfsouthlanecounty@yahoogroups.com Yamhill County/Bethel Flores, ND: Leah Olsen, ND (503) 487-6018, leaholsenND@gmail.com PA Bucks County: Tiffany Adams (267) 240-4848, tif021687@gmail.com Chester County: Annmarie Cantrell (215) 499-8105, ambutera@verizon.net, Dan Wright (610) 933-1776, danw59@yahoo.com Clarion: Elise W. Deitz (814) 277-8101, elise1@atlanticbb.net Erie: Jamale Crockett (814) 566-0218, jamalecrockett@yahoo.com Gettysburg Area/Franklin County: Maureen Diaz (717) 253-0529, motherhenof9@comcast.net Greensburg: Sara Vivona, DC & Cullyn Consales, DC (724) 205-6260, drsara@ihwcenter.com Johnstown: Toni Sparling (814) 255-1068, jerf2014@atlanticbb.net, http://wapfjohnstownpa.wordpress.com Lehigh Valley: Martin Boksenbaum (610) 767-1287, wapf-lv@wapf.org, www.wapf4lv.wordpress.com Mansfield: Lawrence T. Bellows DC & Brit Reed DC (570) 662-0927, bellowshealthsystems@gmail.com Montgomery County: Jennifer Miskiel (267) 664-4259, vbean15@aol.com Northern Bedford County: Ella McElwee (814) 766-2273, emcelwee@healthbychoice.net & Kathleen Brumbaugh (814) 928-5135, kmbrumb@comcast.net Philadelphia: Amanda Smith (484) 629-2656, realfoodlover@yahoo.com Pittsburgh: Lucia Ruedenberg (212) 254-3551 lucia@lrw.net & Amelia Martin 304-288-1454 ameliamartin630@gmail.com Towanda: Mary Theresa Jurnack (570) 265-9641, jurnacks@hotmail.com Upper Delaware River: Lucia Ruedenberg-Wright (570) 224-4653, lucia@lrw.net & Maria Grimaldi, (845) 482-4164, pantherrock@hughes.net Waverly, North: Gail Weinberger (570) 561-6970, gailweinberger@gmail.com York County: Erin Shrader (717) 870-4225, eshrader1020@gmail.com

- RI Glocester: Lisa Serapiglia (401) 949-6222, homeandlifeabundantly@verizon.net Lincoln: Kathleen DiChiara (401) 654-7189, k_dichiara@yahoo.com
 Providence: Rachael McCaskill & Richard Suls (401) 270-3785, Richard@rachaelbakes.com, http://chapters.westonaprice.org/providenceri/ South County: See New London, CT
- SC Aiken: Rebecca Winans (803) 642-8898, 1280rebecca@gmail.com Charleston: Erikka Curia, DC (843) 971-1000, info@organicionhealth.com, organicionhealth.com Columbia: Kathryn Milliron (803) 238-9215, katsep@aol.com, http://chapters.westonaprice.org/columbiasc/ Greater Greenville: William Hendry, DOM (864) 365-6156, WAPFGreenville@gmail.com, http://chapters.westonaprice.org/greenvillesc/ Pickens County: Jill Fleeman (864) 506-4221, wapfpickenscounty@gmail.com, http://chapters.westonaprice.org/pickenssc/ Saluda: Mike & Patrice Buck (864) 445-7399, butterpatchjerseys@embarqmail.com Sumter: Robby Elmore (803) 469-0824, robby_elmore@msn.com
- SD Mitchell: Jon Neugebauer (605) 227-4663, joneugebauer@yahoo.com Selby: Julie & Bill Rosin (605) 649-7224, sdsavvygal@yahoo.com Yankton: Mary Walkes & Cindy Konopasek (605) 661-8642, mwalkes@gmail.com, ckonopasek@gmail.com, http://chapters.westonaprice.org/yanktonsd/
- TN Chattanooga: Michele Reneau (843) 814-6680, chattanoogaWAPF@gmail.com Cookeville: Marti Merritt (434) 882-1378, wapfcookevilletn@gmail.com Cumberland Plateau: Kathy Ramsey, DHM, PScD (931) 337-0700, totalyouwellness@gmail.com



2014 HEALTH FREEDOM CONGRESS

WAPF sends a representative every year to the Health Freedom Congress.

LEFT: Vaccine rights activist and keynote speaker Barbara Loe Fisher with her husband. Barbara received an award for her "lifetime of work protecting the human rights of parents, children and all members of the human family as it applies to vaccine safety."

RIGHT: Tony Romito of mercola.com, WAPF representative Rosanne Lindsay of the Madison, Wisconsin chapter and Kate Birch, classical homeopath and author of *The Solution-Homeoprophylaxis: The Vaccine Alternative*.



Wise Traditions

Knoxville: Abigail Reber (865) 240-9523, knoxvillewapf@gmail.com Nashville/Brentwood/Franklin: Shawn Dady (615) 336-2286, www.tennesseansforrawmilk.com Southern Middle: Nancy Webster (931) 527-3587, creativemess10@yahoo.com, http://health.groups.yahoo.com/group/WAPF-NourishingSouthernMiddleTN/ Sumner County: Codi R. Kirk (615) 714-6247, foodwise3@gmail.com Abilene/Eastland: Kerry & Joy Hedges (254) 725-4084, slowpokefarm@hotmail.com TΧ Amarillo Greater: Jennifer Landram (806) 683-0064, jimigirllala@aol.com, thegardenofnaturalhealth@facebook.com Ark-La-Tex: Jerica Cadman (903) 665-7076, jericacadman@gmail.com Austin: Bryan Lambeth oz4caster@yahoo.com, Judith McGeary, jmcgeary@pvco.net Beaumont: Vanessa Villate (409) 554-3351, vanessa.villate7@gmail.com Brazoria County: Jackie Hunt (979) 236-1019, jdhunt1288@hotmail.com Dallas: Ken Taylor & Bill Green (972) 233-2346, drtaylor5159@yahoo.com, www.traditionaltx.us Denton: Michelle Eshbaugh-Soha (940) 565-0517, ravensphere@gmail.com & Gail Wesson (940) 382-5120, roonkin@wans.net Deep East Texas: Dana Bundy (936) 275-3551, casabundy@earthlink.net Erath County: Connie Veldhuizen & Brandynn Stanford (254) 445-3712, wapf@bradstanford.com Fort Worth (NE Mid-Cities): Megan & Kyle LaPointe (817) 217-9732, mailformegan@yahoo.com Greenville: Eric & Nancy Wesson (903) 450-0917, wp@goodgut.com Houston-Galveston: Carolyn Biggerstaff & Amy Robison (281) 694-5612, info@wapf-houston.org, wapf-houston.org, realfoodhouston.com Houston, North/Montgomery County: Melissa & Robert Humphries (832) 818-7148, thehumphries47@yahoo.com HEB (Mid-Cities DFW): Hannah Setu (817) 590-2257, elshaumbra@yahoo.com Hill Country: Jurahee Silver & Caren Rueffer (806) 789-5600, jurahee.silvers@gmail.com Lubbock: Blake Gafford (806) 786-0014, boogafish@gmail.com & Megan Cannon megdcannon@gmail.com Mansfield: Susanne Engelbert (682) 518-1931, eternal@eternahealthfood.com Midland: Evelyn Dalton (432) 230-3806, calamityjanesfarm@gmail.com Palestine: Rashel Harris (903) 948-9860, rashelharris@gmail.com, www.thepromiselandfarm.org Plano: Christy Porterfield & Jennifer Taylor (972) 612-1800, care@healthworkstx.com Sherman: Ashley Brooke Holloway (903) 821-9250, ashleybholloway@gmail.com South Central/Texoma Area: Mary Friedlein (580) 795-9776, mary@myrhinomail.com Wichita Falls area: Monica Wilkinson (940) 357-9473, wilkinson.monica@gmail.com & Laura Fidelie (940) 766-5935, laura.fidelie@mwsu.edu Wise County: Pamela Klein Johnson (940) 427-2609, wapf@rosecreekfarms.com Wood County/Piney Woods: Nancy Gail & Karl Falster (903) 629-3034, chef@southerngrace.biz Alpine: Michelle Lye (801) 362-6933, mickylye@comcast.net UT Davis County: Katherine & Troy Atkinson (801) 292-7574, kacorner@comcast.net Layton: Norma Silver (801) 774-6218, rsilver@xmission.com Salt Lake City: Anji Sandage (801) 842-8756, anji.sandage@gmail.com Utah County: Betty Pearson (801) 477-7373, betty@ourldsfamily.com, https://www.facebook.com/groups/337490273004397/ Burlington: Eric Garza (802) 881-8675 eric@howericlives.com, http://www.howericlives.com/wapf/ VT Londonderry/Manchester: Anne McClaran (802) 824-4146, amcclaran@gmail.com Middlebury/Champlain Valley: Melanie Christner (802) 388-2448, Melanie@honestbody.com Northwest Vermont: Doug Flack (802) 933-7752 & Lehte Mahoney (802) 528-5000, info@nutritionvermont.com, www.flackfamilyfarm.com Southwestern Vermont: Cynthia Larsen (802) 645-1957, cynthial@myfairpoint.net Westminster: Clif Steinberg, ND (802) 722-4023, clifs@sojourns.org VA Alexandria: Janice Curtin (703) 751-5505, janicecurtin@gmail.com, http://chapters.westonaprice.org/alexandriava/ Bedford County: Ben & Carly Coleman (434) 299-5193, mtnrunfarm@gmail.com, www.mountainrunfarm.com Blacksburg: Kimberly Bears (540) 951-5473, wapfblacksburg@verizon.net Centreville/Chantilly: Monica Kuebler (703) 447-9078, monica@wholehealthelements.com Charlottesville/Albemarle County: Alexa Bell (434) 466-6854 & Dana Lofquist (757) 650-7149, wapfcville@gmail.com Chesterfield: Ana Mahoney (804) 560-7222, ana.p.Mahoney@gmail.com Eastern Shore of VA: Karen Gay (240) 393-5625, karengreergay@gmail.com Falls Church: Susan Blasko (703) 204-0283, susanblasko@verizon.net Fredericksburg: McKenzie Casad (757) 553-2780, mckenzie.casad@gmail.com Gloucester County (Middle Peninsula): Ann George, (804) 693-0226, mikegeorge333@gmail.com Lancaster County (Northern Neck): Bernadette Barber (804) 462-7255, virginiafoodfreedom@gmail.com Leesburg: Dr Lolin Hilgartner (703) 777-8891, http://drshilgartner.com/contact-us.html & Elaine Boland elaine@fieldsofathenryfarm.com Lynchburg: Rachel & Philip Weizenecker (434) 258-9686, p.r.weizenecker@mac.com & Christy Birch (434) 384-0941, cbirch2004@yahoo.com Manassas/Prince William County: Kellie Jordan (804) 986-0491, pwcwapf@gmail.com & Sally Holdener (703) 753-6492, sallyholdener@gmail.com Midlothian: Lisa Hazelgrove (804) 539-3251, lisa@lisahealthy.com Purcellville: Valerie Cury Joyner (540) 338-9702, fotoner2@aol.com Rappahannock County: Deverell Pedersen (540) 683-8113, wapfrappland@gmail.com Rice (Farmville): Gwen & Barry Martin (434) 392-6049, barryandgwen@icloud.com Roanoke: Michael & Monica Burgoon (540) 343-6696, monica@roanokechiropractor.com Smith Mountain Lake: Renee Brodin (540) 297-4219, smlwapf@gmail.com Vienna: Amber Condry (571) 418-2856, viennaWAPF@gmail.com Virginia Peninsula: Gennifer Johnson (804) 966-5984, wapfvpc@myway.com Winchester: Kelly Howard (540) 533-7736, howardkellyb@gmail.com Bellingham: Carla Witham (360) 671-2668, ccwitham@gmail.com, www.bellinghamrealfood.com WA Bremerton: Mark T. Goodman, DC (360) 377-1626, drgoodman@goodmanchiropractic.net Clark County: Nancy Jo Newman (360) 606-9628, njonewman@earthlink.net, http://chapters.westonaprice.org/clarkcountywa/

Enumclaw: Joyce Behrendt (425) 241-9528, odetojoyfarm@live.com

Lake Stevens: Sarah Lee & Jennifer Kelly (206) 999-9629, sarahleannlee@gmail.com Olalla: Christy Peterson (360) 275-9978, historicalnutrition@yahoo.com Point Roberts/Whatcom County/Lower Mainland of BC: John Hammell (360) 945-0352, (800) 333-2553, jham@iahf.com, http://www.meetup.com/WAPF-Point-Roberts/manage/settings/basic/ Redmond: Michelle Gallik (425) 881-6760, michelle@hdinger.com & Patricia Boesen patricia@boesens.info Richland/Kennewick/Pasco: Joanne Butler NTP (509) 205-9967, joanne@abcsofwellness.com San Juan Island: Megan Damofle & Gaven Horne (206) 551-1491, megan.damofle@gmail.com Skagit: Carol Osterman (360) 941-1533, carol@akylafarms.com Snoqualmie Valley: Maya Wallach (425) 522-3345, beets@flyingmtn.com Spokane: Wendy Fairman (509) 230-0804, nourishtoflourishus@gmail.com & Sean Cruz (509) 385-9361, cruz_sean@yahoo.com Tacoma: Susan Blake (253) 759-6770, hairandbodyshop@comcast.net Wenatchee: Allegra Hart, ND (509) 663-5048, info@naturaeclinic.com Whidbey Island: Roy Ozanne, MD (360) 321-0566, royozanne@whidbey.net & Lynn Parr (360) 221-2334, wholehealth@whidbey.com WV Huntington: Tinia Stratton (304) 784-4061, tinia@lucasfarmwv.com Preston County: Jennifer Kahly (304) 789-2704, jblandis100@gmail.com Shepherdstown: Allan & Maura Balliett (304) 876-3382, allan.balliett@gmail.com Appleton: Shirley Bauman (920) 734-5473, applewapf@tds.net & Thomasa Meinnert (920) 268-5839, thomasameinnert@gmail.com WI Ashland/Washburn/Bayfield: Julie Casper (715) 779-3966, westonprice@healthelite.org, http://chapters.westonaprice.org/ashlandwi/ East Troy: Brandon LaGreca, Joy Hernes (262) 642-4325, office@easttroyacupuncture.com, http://chapters.westonaprice.org/easttroywi/ Eau Claire: Lisa Ornstein & Scott Westphal (715) 410-9275, chippewavalleywisetraditions@yahoo.com Fremont: Ruth Sawall (920) 446-3551 Green Bay: Marian Schmitz & Vashni Seitzer (920) 865-7479, lehrermf@netnet.net Hayward: John & Susan Bauer (715) 634-6895, jb_cmt@hotmail.com Madison: Carolyn Graff (608) 221-8696, zgraff@charter.net, https://groups.yahoo.com/neo/groups/wapfmadisonchapter/info, http://chapters.westonaprice.org/madisonwi/, https://www.facebook.com/wapfmadison Milwaukee: Muriel Plichta (414) 383-2121, mplichta@milwpc.com Ozaukee/Washington County: Susan Wichman (262) 853-8000 & Bernie Rosen (262) 389-9907, wapfozwash@gmail.com South Eastern: Dan & Paula Siegmann (920) 625-2185, bttbcs@charter.net South Manitowoc & Sheboygan Counties: Emily & Laura Matthews (920) 273-1849, meg11851@ymail.com Superior: Ken Lindberg (218) 269-3251, carriageguy@yahoo.com Two Rivers & Manitowoc: Roy Ozanne (920) 755-4013, royozanne@whidbey.net & Lynne Manthey Prucha, NTP (920) 973-0320, lynne.a.prucha@gmail.com Viroqua: Laura Poe, RD, LD (816) 309-8708, risingmoonnutrition@gmail.com Waukesha: Elizabeth Schuetze (262) 542-6295, e713521036@aol.com WY Buffalo: Susan Pearce (307) 751-8505, spearce@vcn.com Evanston: Rhonda & Michael Lewis (307) 724-6537, highpointacupuncture@gmail.com Gillette: Frank Wallis (307) 682-4808, f.wallis@EZRocking-Ranch.com Jackson/Teton Valley, ID: Martha Berkesch (307) 690-1502, martha@mothernaturenutrition.com, http://chapters.westonaprice.org/tetonswy/ Thermopolis: Marianne Gular (307) 864-3072 marianne.gular@gmail.com AUSTRALIA NSW Bega Valley: Emily Stokes 0407 192 899, thewordgarden@hotmail.com Coffs Harbour: Melissa Chaston 04 2294 0085, melissachaston@gmail.com Griffith: Sheryl Venables 04 1741 3956, griffithwapfchapter@gmail.com Manning Valley (Taree): Samantha Zajko & Tim Thomas 61 407 766 525, earthybirthy@hotmail.com Port Macquarie: Rachael Wells 04 1203 4305, aquamarlin28@gmail.com Stuart Town: Hal & Sally Harris (02) 6846 8261 Sydney: Lara Rose 04 3109 91333, laramrose@gmail.com QLD Brisbane: Julie Phillips 0417470799, mail@wisefood.com.au & Edie Wicker 0404 56 1880, edie@nourishingecology.com.au Cairns & Atherton Tablelands: Tina Taylor 04 8804 0242, tina@thebreathingclinic.com, thebreathingclinic.com Oxenford/Miami: Kyle Grimshaw-Jones 0423 647 666, kyle@conscioushealing.com.au Sunshine Coast/Connondale/Mary River Valley: Sven & Karen Tonisson (07) 5435 0041, gaia@ozemail.com.au Sunshine Coast: James Cutcliffe (07) 5488 6488, jamescutcliffe@gmail.com Townsville area: Rene Erhardt 07 4789 2184, rene.erhardt@bigpond.com Cranbourne: Lorraine Pratley 03 5991 7403, 0403 845 278, lorrainepratley@hotmail.com VIC

VIC Cranbourne: Lorraine Pratley 03 5991 7403, 0403 845 278, lorrainepratley@hotmail.com Macedon Ranges: Seeley Kerr 0499 484 240, macedon_ranges_wapf@culturesalive.com.au



NATURAL FAMILY EXPO, MADISON, WISCONSIN

Representing WAPF at our booth is Carolyn Graff (Madison, Wisconsin chapter leader), and Rosanne Lindsay. The event was held Sunday, March 8th.

Melbourne Bayside: Alessandra Edwards 610 415 978 509, alessandra@nourishedbynature.com.au & Natalie Walsh 03 9592 1580, isnatgaz@bigpond.com Bendigo: Joy Stone 0417 164 756, jdhoneypatch@yahoo.com.au Castlemaine: Cathy Mifsud (04) 6855 8090 cathymifsud@bigpond.com Melbourne: Arabella Forge wapfmelbourne@gmail.com Pakenham Upper: Naomi McAntee 0416 004844, sales@greensoulorganics.com.au Yarra Valley: Fenja Schulze 0433 420 402, fenja schulze@yahoo.com Launceston: Christopher & Peppa Ann Tolley 613 6344 9945, chris_tolley80@hotmail.com Albany: Mike & Barbara Shipley & Justin & Susan Shipley (08) 9845 1609, Shipleysorganics@bigpond.com Fremantle: Lisa Thornton 0418 300 477, lisa_thornton@hotmail.com Perth: Aimee Ridgway 0408691309, aimeeridgway@hotmail.com South West WA: Sally Gray 04 335 421 89, info@realhealthykids.com Warren/Blackwood: Abbie Fetter 0897614764, wbwapf@yahoo.com.au WAPF Australia Email Chat Group: http://health.groups.yahoo.com/group/westonapriceaus/ Moderated by: Filippa Araki filippa91@yahoo.com.au BELGIUM Heusden-Zolder: Kristien Metten 0495990855 ,Kristienmetten@live.be BULGARIA Sofia: Grigor Monovski 359.87.635.9838, wapf.sofia@xpana.bg, http://chapters.westonaprice.org/sofiabg/ CANADA Calgary: Susan Quirk & Andrea Beaubrun (403) 483-4338, calgarywapf@gmail.com Edmonton: Lori Clapp & Eva Niven (780) 417-3952, nourishingtraditions@gmail.com Peace Country: Mary Lundgard (780) 338-2934, plundgard@telus.net or Levke Eggers (780) 568-3805, levke@telusplanet.net Red Deer: Jem Mathieson (403) 347-3047, jemlivewell@yahoo.com Burnaby-New West: Marianne Lightfoot (604) 420-6185, maryan24@telus.net Interior of British Columbia: Jasmine Schellenberg (250) 394-4410, jasmin@pasturetoplate.ca Nanaimo: Kelsey Botting (250) 585-6835, kelseybotting@hotmail.com Nelson: Lorraine Carlstrom (541) 645-0344, lorrainer61@gmail.com, www.freshhealthycooking.com Powell River: Dirk & Ingrid De Villiers (604) 489-0046, dirkdevilliers@shaw.ca Vancouver, North: Barbara Schellenberg (604) 988-6280, info@ethicalkitchen.ca, http://www.meetup.com/Vancouver-Whole-Foods-Meetup-Group/ Victoria: Linda Morken (250) 642-3624, wapf.victoria.bc@shaw.ca, www.facebook.com/wapfvancouverislandchapter, http://chapters.westonaprice.org/victoriabc/ Annapolis Valley: Shirley Scharfe (902) 847-1736, glscharfe@eastlink.ca Cumberland & Colchester Counties: Silvana Castillo (902) 257-2428, silvanacastillo@ns.sympatico.ca Halifax: Krista Butler (902) 440-4844, Krista_butler_@hotmail.com & Heidi Ship headship@hotmail.com Petoskey/Mancelona: Rajiv Kumar (231) 360-1435, service@indiahealthtoday.com Brantford & Brant Counties: Valerie Clement (519) 717-0249, brantwapf@hotmail.com Burlington and Oakville: Angela Kang (905) 582-3693, angelakang7@gmail.com Grey-Bruce: Elisa Vander Hout (519) 369-3578, csf@bmts.com Hamilton: Ken & Claire Dam (905) 580-1319, kenandclaire@gmail.com

LOCAL CHAPTER BASIC REQUIREMENTS

- Create a Food Resource List of organic or biodynamic produce, milk products from pasture-fed livestock (preferably raw), pasture-fed 1. 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.

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- 5. Be a member in good standing of the Weston A. Price Foundation.
- Sign a contract on the use of the Weston A. Price Foundation name and trademark. 6.

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.
- Present seminars, workshops and/or cooking classes featuring speakers from the Weston A. Price Foundation, or local speakers who 4. support the Foundation's goals and philosophy.
- Represent the Weston A. Price Foundation philosophy and goals to local media, governments and lawmakers. 5.
- Lobby for the elimination of laws that restrict access to locally produced and processed food (such as pasteurization laws) or that limit 6. health freedoms in any way.
- Publish a simple newsletter containing information and announcements for local chapter members. 7.
- 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.

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| | London: Donna Costa (519) 951-8182, donna@bowenworksinlondon.com Minto/North Wellington: Margo McIntosh (519) 338-2683, info@rawmilkconsumer.ca |
| | |
| | Ottawa: Jean-Luc Boissonneault (613) 859-2333, jb@freeformfitness.ca, http://nourishingottawa.com |
| | Prince Edward County: Karen Selick & Herb Cooper (613) 393-5320, kas@karenselick.com |
| | Tillsonburg: Crystal and Stephane Laverdiere, DC (519) 688-4175, laverdieres@rogers.com |
| | Toronto (Downtown): Patricia Meyer Watt (416) 653-7112, TorontoWAPF@gmail.com |
| | Toronto Area–West: Corey Evans, (905) 608-9314, info@healthisfreedom.net, www.healthisfreedom.net |
| QC | Saint-Lambert: Roanne Proctor (450) 812-7553, thewapfmontreal@gmail.com |
| | Saint Lazare (Greater Montreal area) Jani Teeter (514) 907-1622, jani.teeter@gmail.com |
| SK | Regina: Sandra Brandt & Tanya Romaniuk (306) 359-1732, brandt.s@sasktel.net, WAPFRegina.wordpress.com |
| CHIL | c. |
| CLIIC | ∟ Coyhaique: Ann Oldham Michael & Ema Morales 56 67 245288 or 56 09 812 4987, pacificorim@gmail.com, emacibel@gmail.com |
| | |
| COS | TA RICA |
| | Turrialba & San Jose: Gina Baker & Reinhold Muschler 2100 1033, gmuschler@gmail.com |
| | |
| CRO | |
| | Samobor: Domagoj & Josipa Dzojic 00385/(0)95/5681-881, Info@MudrePredaje.com, www.mudrepredaje.com, skype: dzojiczgcro |
| | MARK |
| DLIN | Koebenhavn: Aske Toegern Wissum 0045 2966 0338, astoewi@gmail.com |
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| EGYF | 7 |
| | Amber Acosta & Ahmed Galal Lotfy 0100-153-1973, ambergacosta@gmail.com |
| | |
| FRAN | NCE |
| | Charente: Berenice Weihl 05-17-20-65-92, bbweihl@me.com |
| | Luxueil-Vesoul: Elisabeth Roess 09 80 38 58 78, familleroess@yahoo.fr |
| CEDA | |
| UEKA | AANY |

Kingston: Sue Clinton & Bob Clinton DDS (613) 376 6652 sue@doctorbob.ca. wanfkingston.org

Eifel: Anita Reusch & Douglas Mitchell, 0049-(0)6555-242, anita@roylt.com München: Marlon Bonazzi marlonbonazzi@yahoo.de

HONG KONG

Miles Price 00852 9266 1417, mileypricey@gmail.com

HUNGARY

Budapest: Katalin Kokaveczne Nagypal 36 30 206 9722, katalin.nagypal@gmail.com

COOKING KIDS OF SLOVENIA INVITED TO DEMONSTRATE CULINARY SKILLS IN AMERICA—WITH YOUR HELP

In 2015 the Cooking Kids, a culinary competition for school-aged children, enters its fourth year in Slovenia, that gem of a country nestled in the niche between Austria and Italy. The program is gearing up and now underway with local competitions,



which turn into regionals and semifinals with the final competition held the end of April.

This is the second year that the Weston A. Price Foundation (WAPF), will be one of the financial sponsors for Cooking Kids. Sally Fallon Morell, president of WAPF, says that the Weston A. Price Foundation "is proud to be a sponsor of Cooking Kids, a program very important not only for Slovenia, but for families everywhere." The Cooking Kids are pictured here wearing chef caps bearing the WAPF logo.

The group has been invited by the Slovenian Embassy in Washington, DC to come to America and demonstrate their culinary skills at the European Union Day on Saturday, May 9, 2015 from 10:00 to 4:00 PM. To fulfill their dream of coming to the U.S., the Cooking Kids need funds for airfare, food and travel. To contribute, please visit http://bit. ly/18GjOS6.

IRELAND

Dublin: Kevin Eakins 353 1 8168 726, Kevin@krollintl.com, www.meetup.com/westonaprice-dublin, https://www.facebook.com/pages/Weston-A-Price-Foundation-Dublin-Chapter-Ireland/444400148973112 Tipperary: Anne Maher 353 8 7792 7311, maher.anne1@gmail.com

MEXICO

Monterrey/San Pedro Garza Garcia: Patricio Sarre, ICC 52 81 2091 0190, Patricio@sarre.com, www.facebook.comwapfmty San Miguel de Allende: Jorge E. Catalan 52 415 1548629, wapfsanmigueldeallende@gmail.com & Victoria Schneider, BRT, LDHS, NTP, Mex: 044-415-154-9740, U.S. (541) 954-4939, sauerkrautkit@gmail.com

NETHERLANDS

Limburg: Tanja Stevens 061 6474 192, info@gezondgestel.nl, http://limburg.westonprice.nl/ Nijmegen: Mike Donkers 31 6 4275 3107, westonpricegelderland@gmail.com, gelderland.westonprice.nl National forum: www.westonprice.nl

NEW ZEALAND

Auckland, North & West: Alison Ellett (09) 420-8548, alison@wapf-auckland.co.nz, www.wapf-auckland.co.nz/ Auckland, South & East: Caroline Marshall 64 9 528 7062, caroline@culturedkitchen.co.nz Christchurch: Carolyn-Rae 03 967 1040 or 0272733187, thrive@xnet.co.nz, www.bealivethrive.nz Dunedin, South Island: Michelle Wilkie 064 3 488 6061, chellec@clear.net.nz Hamilton: Marea Smith 07 8501587, wapfhamilton@gmail.com, https://wwwfacebook.com/WAPFHamiltonNZ Hawkes Bay: Phyllis Tichinin 64 6874 7897, phyllis@truehealth.co.nz Invercargill: Sherry Elton (64) 3213 1156, sherry@thecroft.net.nz, www.thecroft.net.nz Nelson City & Tasman District: Samantha Gentry 0274505940, sam.gentry@desirefitness.co.nz New Plymouth: Ian Haldane 06 659 7478, zenian@zenian.co.nz Palmerston North: Susan Calea 646 324 8586, susangalea@hotmail.com, www.realmilk.co.nz Porirua: Sarah Holloway 02 2315 2309, sarahholloway@gmail.com South Canterbury: Carol Keelty 03 6866 277, bckeelty@outlook.com & Inez Wilson inezmwilson@xtra.co.nz Wellington: Ian Gregson 64 04 934 6366 wapf@frot.co.nz & Deb Gully (04) 934 6366, deb@frot.co.nz, www.wapfwellington.org.nz NZ Resource List: Ian Gregson and Deb Gully, www.frot.co.nz/wapf/resources.htm

NORWAY

Oslo: Kim Orderud, DC & Ingerlise Wingaard (+47) 97772564, kimorderud@hotmail.com

PAKISTAN

Shagufta Feroz & Feroz Sharfuddin 92-321-8439362, drsferoz@gmail.com

PHILIPPINES

Metro Manila: Tess Young 63 917 357 7278, livingfoodsbc@gmail.com, http://chapters.westonaprice.org/metromanila/, livingfoodsbuyingclub.com

POLAND

Pokrzydowo: Adam Smiarowski 0 11 48 606 209914, szkolarycerska@gmail.com

PORTUGAL

Algarve: Julia de Jesus Palma (00351) 912320437, Julia@onelinedesign.info Porto: Hugo Dunkel Matos Couto e Neiva 00 351 914338761, hugo.dunkel@gmail.com

PUERTO RICO

Rocio Lopez, MD (787) 502-0607, lopezrmd@gmail.com



WISE TRADITIONS IRELAND

Enthusiasm for WAPF and raw milk is high in the Emerald Isle. The two-day conference, held February 7-8, featured Natasha Campbell-McBride, Sally Fallon Morell, breadmakers and raw milk producers. Pictured here are conference organizers Brendan O'Brien, Deirdre MacMahon, Caroline Rigney and Ann Maher with Sally Fallon Morell.

Wise Traditions

ROMANIA

Ilfov: Raluca Schachter0736 364 687, ralucaschachter@live.com, http://chapters.westonaprice.org/snagovrm/

SCOTLAND - see United Kingdom

SLOVENIA

Soca Valley: Vesna Veliscek 00386 41 432 488, vesna@slocally.com, www.slocally.com

SOUTH AFRICA

Cape Town: Pierre Morton 27 71 6056 772, jubywho@gmail.com

SPAIN

Madrid: Edurne Ubani (34) 616 232 166, evamuerdelamanzana@gmail.com, http://www.evamuerdelamanzana.com/wapf

SWITZERLAND

Bern: Judith Mudrak rohmilchjudith@gmail.com Geneva: Lauren Haddad-Olivet 41 76 695 60 00, lauren.haddad@gmail.com

SWEDEN

Eskilstuna: Nikola Lucaj 4673 1003 141, nikolalucaj@gmail.com Stockholm: Johanna Gunnarsson 46 76 040 7927, Johanna@stockholmnt.se

UNITED KINGDOM

ENGLAND

- Buckinghamshire: Sheila Sheppard 44 7799 132999 01908 605818, sheila@nutribaby.co.uk Cheshire: Carol Dines & Silvie Hall, 01270 873322 wap.cheshire@yahoo.co.uk
- Derby: Russell Davison 01332 737216, Russell@davisonproperty.co.uk
- Herefordshire: Sally Dean 01432 840353, sally@aspenhouse.net
- Kent: Keli Herriott-Sadler 01732 354 527, keli@herriott-sadler.co.uk

- London: Philip Ridley 07580141191, philridley@hushmail.com, http://chapters.westonaprice.org/londonuk/
- Wise Traditions London, Festival for Traditional Nutrition Phil Ridley 01442 384451, westonaprice.london@gmail.com, www.westonaprice.org/london,
- www.meetup.com/westonaprice-london
- East London: Deborah Syrett 020 8518 8356, medical.herbalist@ntlworld.com
- Nottingham, East Midlands: Claire Jessica Backhouse 0044 79 8046 2874, claradynamic@hotmail.com
- Surrey and Hampshire: Diana Boskma 44 1252 510 935, dboskma@gmail.com
- Sussex: Gavin Bluhen 07765 528 528, gavin.bluhen@natureprovides.com, Rachel Kelly 7738 222 425, Rachel.kelly@me.com

UK resource list: www.naturalfoodfinder.co.uk

SCOTLAND

Edinburgh: Frances Bavin 07505 053333, frances.bavin@gmail.com, http://www.meetup.com/westonaprice-edinburgh

WALES

North Wales: Ben Pratt 07952 555811, info@naturalfoodfinder.co.uk, www.naturalfoodfinder.co.uk

ANCESTRAL NUTRITION PRESENTATIONS IN CAPE TOWN, SOUTH AFRICA



LEFT: Pierre Morton, chapter leader in Cape Town, South Africa, presents information on ancestral nutrition to a Cape Town audience.

RIGHT: Pierre with his friend Angus Macintosh, farmer and WAPF enthusiast.



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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 Coop in Fort Collins. meadowmaidfoods.com, (307) 534-2289.

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CSA: Hi-Brix, nutritionally dense, biodynamically grown kitchen vegetables, grass-finished beef, pastured pork, broilers & eggs. Openings for 2015 season in DC Metro area. Contact Allan Balliett, info@freshandlocalcsa.com (304) 876-3382, freshandlocalcsa.com.

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Milk from 100% grass-fed Jersey cows, also a variety of raw milk cheeses, grass-fed beef, pasture-raised broilers, no-soy eggs, no-soy pork, honey and a variety of fruits & vegetables seasonally. Roodhouse, IL. Steve & Cindy Mansfield (217) 589-4554.

KS

Farm Shares! Old Order Anabaptist family seeking up to 15 families/individuals. We tend the open-pollinated garden and fodder and whey-fed heritage-breed livestock. You receive a "share" of fresh eggs, heirloom vegetables and raw cultured dairy products weekly. Our goal is to provide affordable nutrient-dense foods as well as a traditional agricultural experience through our monthly "Farm Days" and Work Bees". \$1 per pound liveweight whey and fodder-fed hogs in season. Please contact Old Paths Heritage Farm at (785) 388-2107.

MA

Many Hands Organic Farm in Barre, MA. Produces certified organic lard from pastureraised pigs fed Nature's Best Organic Feeds, whey and pasture. \$20/quart in yogurt containers. We ship in the U.S. Order at http:// mhof.net/meat/index.php. (978) 355-2853; farm@mhof.net.

MD

100% soy-free chicken, eggs, pork and beef. Chicken livers, chicken feet and heads. Bacon and sausage. 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 Thurs-Sat 10-6 or by appointment. P. A. Bowen Farmstead, 15701 Doctor Bowen Road, Brandywine, MD. (301) 579-2727, pabowenfarmstead.com.

Come to our peaceful family farm—your source for premium pasture-raised chicken, turkey, eggs, 100% grass-fed lamb, and raw honey! Poultry fed organic feed. Less than 1 hour from DC metro area in southern Frederick County, MD. JehovahJirehFarm.com (301) 874-6181.

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MN

Farm On Wheels offers animals raised green grass-fed & certified organic. Nutrient-dense beef, lamb, chicken, eggs, turkey, goose, duck, and pork, No corn or soy. Farmers Market year around in St. Paul, Prior Lake, Northfield. Linda (507) 789-6679, farmonwheels.net, farm_on_wheels@live.com.

OH

Sugartree Ridge Grassfed. Openings in a 100% grassfed herdshare with 9 delivery sites in the Cincinnati area. No grain, no silage. Eleven cows (cross between Jersies, Guernseys, Brown Swiss and British White) grazed yearround on sixty acres rotating through thirty paddocks (which are allowed to grow for sixty days between grazings and are spread with organic, Albrecht-based mineral supplements). Nutrient-dense milk, family-friendly farming and holistic stewardship. 6851 Fair Ridge Road, Hillsboro, OH 45133 or Cincinnati area: Bill & Marylou Wilson (513) 625-0197.

Three Moon Farm, Williamsport OH. We raise grass-fed beef, pasture-raised chicken, turkey & eggs. We also offer raw honey from our hives. For more information please check us out at threemoonfarm.com or call Kelly at (740) 253-9029.

OR

Windy Acres Dairy. Herd share providing grass-fed raw milk, cream, cultured butter, sour cream, kefir, yogurt, plus marketing of livestock (soy-free beef, lamb, pork, turkey, chicken) eggs, honey and by-products. windyacresdairy.com, windyacres26@gmail.com for more information or call (541)613-5239

PA

Bareville Creamery 100% grass-fed. We offer raw traditionally cultured butter from our grass-fed cows. We will ship to you or visit our farm to pick up. Daniel & Katie Zook, Leola, PA (717) 656-4422.

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100% Grass-fed Beef, Pasture-raised pork, chicken, eggs. All meat is GMO-free with no added hormones or antibiotics. Beef quarters and whole hogs available, as well as retail cuts. On farm sales: Peaceful Valley Farm, 2019 State Route 17, Millerstown PA 17062. No Sunday calls: (717) 444-0022

Fresh grass-fed raw milk, cream, butter, yogurt & cheese - veal, soy-free poultry, free-range eggs, grass-fed beef and lamb. Frozen meats also available. We **will ship**. You are welcome to stop in or give us a call. Mark & MaryAnn Nolt (717) 776-3417.

Creswick Farms. Dedicated to raising healthy, happy animals—lovingly cared for just as Mother Nature intended—which provide high-energy, nutritious and delicious food sources for health-conscious individuals. No antibiotics, steroids or GMOs ever fed to our animals! (616) 837-9226, CreswickFarms.com.

Raw milk cheeses from organically managed, 100% grass-fed Jersey cows. Retail & wholesale. Prices start at \$5.00/pound, **mail order** cheese. Raw milk & pastured eggs available. Eastern PA, 15 minutes N of I78, Hilltop Meadows Farm, 153 Martins Rd. Pine Grove, PA 17963 (570) 345-3305.

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VA

Cow/Herd shares available, with Member in Local Kine (M.I.L.K.) Project in Fauquier County at Western View Farm, 2028 Laws Ford Rd., Catlett, VA 20119. For information call Martha Bender (540) 788-9663.

Salatin family's Polyface Farm has salad bar beef, pigaerator pork, pastured chickens, turkeys and eggs, and forage-based rabbits. Near Staunton. **Some delivery available**. Call (540) 885-3590 or (540) 887-8194.

WY

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DVDS

DVD "Nourishing Our Children" recently launched a DVD that may be used for 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 **Free shipping!**

Share your passion for food with friends and family! The Diet for Human Beings affirms our human requirement for fats, with less emphasis on starchy carbs. "An Hour To Watch – 30 Days To Try – Your Life Will Never Be The Same" ondietandhealth.com.

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Pasture-based beef farm in beautiful Essex, NY seeks farm manager, herdsman. Family man/ woman/couple with young children preferred. Good housing, salary, benefits. Enthusiam, passion and willingness to work hard more important than extensive experience. Contact Mr. Lewis at (518) 963-4206, lewisfamilyfarm. com

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Integrative Diagnosis (ID) was developed by John Kozinski MEA to help you understand your overall health condition so traditional foods can be used for your healing or health maintenance needs. For ID Classes or a Health Consultation call: 413-623-5925 macrobiotic. com.

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STOOL DONOR WANTED - Seeking healthy stool donor for a fecal transplant procedure (1X/day, 10 days). Ideal donor: raised on WAPtype diet, no antibiotics, and at least 13-yearsold. Will travel & compensate the donor for their time. Contact: rk900@hotmail.com.

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INTENTIONAL COMMUNITY

Do you observe kashrut as well as follow a WAP lifestyle? Seeking others with whom to share the discoveries and challenges in the intersection of these choices. Anita Schubert Manchester, CT (860) 432-3131 anitaschubert@cox.net.

Eco Farm: Small, farm-based community located near Tampa, FL with a mission of sustainable living. WAPF friendly looking for others for direction and help, especially with our small pasture-based dairy operation. This year we have reached 400 PPM CO2 in our atmosphere, which makes our chance to prevent climate break-down close to zero (New York Times 5/11). Small, local, farm-based communities may be our only hope; it's ours at ecofarmfl.org, (813) 754-7374.

INVESTORS NEEDED

Group in Canada looking for individuals interested in creating a long-term care facility on a working ranch in order to have meaningful activities and produce food that is chemical- and GMO-free. Contact Dean Goddard at arcadiaranch@gmail.com.

Help the Cooking Kids group from Slovenia come to EU Day, Washington DC to demo their skills on May 9, 2015. Donate by Paypal: http://bit.ly/18GjOS6 & choose "personal payment for friends and family" OR by check to "University Research Associates" at 1602 Kent St. Portage, PA 15946.

"Get An Oil Change" is a documentary film showing one nutritionist's vision for a population to embrace once again the coconut – essentially, for the people of the Cayman Islands to change their oil in order to change their health. Sally Fallon Morell is featured in it. Check out the Facebook page, Facebook. com/GetAnOilChange, as well as the Vimeo teaser vimeo.com/118666649. You can make a contribution by "tipping" us using the tip jar on the Vimeo page.

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INVESTORS NEEDED

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WAPF RESEARCH

STUDY ON HEALTHY BABIES: Johanna M. Keefe, MS, MA, AHN-BC, RN, GAPs, certfied as an Advanced Holistic Nurse, is seeking volunteers for a PhD research project in Transformative Studies through CIIS (California Institute for Integral Studies). If you have had a healthy baby using the WAPF dietary guidelines, she would like to hear from you. She would like to interview you by Skype or Facetime, or in person if you are located in New England, Northern California or North Carolina—or at the annual conference in Novemember. Contact: johanna@ enhancedwellnessbythesea.com, (978) 290-0266.

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INFORMATION

Fish That We Eat Iqaluich Niginaqtuat

This manual by Anore Paniyauraq Jones is the second in a series of three detailing the traditional foods of the Inupiat. The first book in this series about Inupiat foods was *Nauriat Niginaqtuat*, *Plants That We Eat*, an ethnobotanical manual, long out of print but due to be re-printed in the fall of 2009 by University of Alaska Press. It is 150 pages with black and white photos and sketches.

The second manual, *Iqaluich Niginaqtuat, Fish That We Eat*, provides information regarding the traditional use of fish, their processing, recipes and eating enjoyment. It was compiled from the local traditional fish knowledge of northwest Alaska and was partially funded and placed on the web by the U.S. Fish and Wildlife Service.

The third manual in this series will similarly detail the traditional Inupiat processing techniques and recipes for sea mammals.

Presently there is no funding to support this work. Any suggestions would be welcome. The web link to *lqaluich Niginaqtuat, Fish That* We Eat, is below. The report is located under the U.S.F.W. Northwest AK section. From here you can read it and/or download and print it. It should be printed double-sided due to the length (341 pages), including 100+color photos, sketches.

http://alaska.fws.gov/asm/



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| CLASSIFIED ADVERTISEMENTS TEXT ONLY, BY STATE & CATEGORY \$40 per year for 40 words | MEDIUM COLUMN 2" tall by 2.5" v \$200 per year, (\$240 for non-r | 4 insertions. | DESIGN Please do not submit images smaller than 500k as they will not print well. Files should be grayscale tiff or press qual- ity pdf/eps minimum 300 dpi. There is an additional fee of \$50 for us to design your advertisement. | | | |
| TALL COLUMN 4" tall by 2.5" wide \$360 per year, 4 insertions. (\$400 for non-members) | WIDE COLUMN 2" tall by 4.5" wide \$360 per year, 4 insertions. (\$400 for non-members) 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

| Yes! | I would like to join the Westor | | | mely information i | n | | | |
|---------|--|---|---|-------------------------------------|--------------------------|--|--|--|
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| | | \$25 (62 and over) | Oversea | create card payin | ient only) \$ 50 | | | |
| Yes! | I would like to help the Weston A. Price Foundation by becoming a member at a higher level of supportSpecial membership \$100Benefactor membership \$1,000Sponsor membership \$250Millennium membership \$10,000Patron membership \$500Other amount \$(over \$25) | | | | | | | |
| Ves! | Count me in! I would like to help spread the word! Please send mecopies 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.) | | | | | | | |
| Ves! | 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.) Regular gift membership(s) \$40 Student/Senior gift membership(s) \$25 Canadian and overseas gift membership(s) \$50 | | | | | | | |
| Yes! | Please send me details a | bout starting a Weston A | . Price Foundation I | ocal chapter in my | community. | | | |
| l'm ene | closing \$for brochures an | d \$forannua | l membership(s), a t | otal of \$ | | | | |
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Upcoming Events

2015

- June 20 Chambersburg, PA: Wise Traditions Regional Seminar with Sally Fallon Morell on "Nourishing Traditional Diets," "The Oiling of America," and "My Own Health Secrets." Contact: http://conferences.westonaprice.org/traditional-diets/ or (202) 363-4394.
- May 2 Warren, MI: Vaccination Awareness Event, with Mary Tocco, vaccine investigator, and Dr. Tityana Obukhanych, Ph.D., immunologist. Contact info@htnetwork.org or (248) 828-8494.
- May 22-24 Plymouth, WI: Spring Foraging featuring Samuel Thayer, author of Foragers Harvest and Nature's Garden! Contact: http://moonwiseherbs.com/programs/wildplant-series/.
- June 4-6 Shelburne Farms, VT: Nourish Vermont: Traditional Foods and Health Gathering featuring Eileen McKusik, Dr. Louisa Williams, Jeff Leach, Ben Greenfield, Ben Hewitt and Monica Corrado. Contact: www.shelburnefarms.org.
- Oct 2-4 Plymouth, WI: Fall Focus on Mushrooms featuring Sarah and Nick Jordan. Contact: http://moonwiseherbs.com/programs/wild-plant-series/.



THE WESTON A. PRICE FOUNDATION®



for **WiseTraditions** IN FOOD, FARMING AND THE HEALING ARTS Education • Research • Activism

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SOY ALERT!

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LACTO-FERMENTATION

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COMMUNITY SUPPORTED AGRICULTURE

You teach, you teach, you teach!

Last words of Dr. Weston A. Price, January 23, 1948



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