

WiseTraditions

in Food, Farming and the Healing Arts Volume 21 Number 3 Fall 2020

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THE WESTON A. PRICE

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.

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

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Wise Traditions

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

Volume 21 Number 4

Winter 2020

WINTER 2020



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President's Message

The Universe works in strange and wonderful ways. After we cancelled our Wise Traditions conference, we suddenly found we were able to have a conference after all! The one-day event at Polyface Farm was a huge success, with three hundred people enjoying five excellent talks while sitting on hay bales in Joel Salatin's hoop house (see photos on page 4-5).

At this conference, November 16, 2020, we officially launched the New Etiquette. We asked everyone present to turn their cell phones to airplane mode. One participant had an EMF meter with her and saw a fairly high level of electromagnetic radiation fall to almost zero (see her letter on page 7).

Although the disease called Covid-19 is not contagious, there is a danger of contracting the illness when you are in a group. In a group, especially a large group, when everyone has a cell phone, everyone will be subjected to a large amount of pulsed microwave electrosmog. When not on airplane mode, your cell phones not only receive electromagnetic frequencies (EMFs), but also emit them. Of course, current thinking interprets this situation—several or even many people getting sick from EMFs after spending time in a group together—as contagion.

Fifty years ago, no one thought twice about lighting a cigarette in someone else's house; no one considered it impolite to light up a cigarette in front of another person. Today we consider such actions the height of rudeness. No one would take such an action unless invited. People no longer smoke in restaurants, airplanes, stadiums or even bars. This change has come about over several decades.

Let's hope that the New Etiquette will take over more quickly than that. Let's have announcements in theaters and stadiums for the audience to go to airplane mode; let's have student education programs about the dangers of over-exposure to cell phone radiation; let's have cell phone baskets inside the front and back doors of every house, with special reminders at parties. Let's make sure that choirs practice with their cell phones turned to airplane mode; let's make sure that no phones are on when we are around children.Let's require stores to put cell phone reminders on their front windows.

Even better, let's require cell phone manufacturers to make phones that automatically default to airplane mode.

And as you all join with family and friends for your maskless celebrations of Christmas and the New Year, please ensure that your guests stay safe by insisting on airplane mode.

Speaking of which, the Weston A. Price Foundation wishes you all most blessed holidays, filled with joy, gratitude and good health! \bigcirc



A SENSE OF COMMUNITY

I am writing to extend my love and appreciation for Hilda Gore and the WAPF family. Listening to the Wise Traditions podcast has been a beacon of light for me, specifically during Covid-19.

In the face of misinformation and fearmongering, the podcast has stood its ground and held firm in its mission to spread faith, love, inspiration and real education about the full potential of our bodies when properly cared for. The Wise Traditions family provides its listeners with real scientific information (not paid science!), hope for a brighter tomorrow, love and, most importantly, a sense of community.

Thank you for spreading your light and sharing such important information with the world! Thank you for providing the tools I need to become the best version of myself. Thank you for helping restore my faith in humanity and science. Most importantly, thank you for reminding me that I am not alone and that together, we can do anything. Marguerite Cogliano

Oak Bluffs, Massachusetts

PUSHING FOR VACCINES

I've just gotten off the phone with my daughter. Her husband took their two kids to a pediatrician because our granddaughter needed an exam for a dental procedure. She knows not to take them to a regular doc instead of the good, non-pushy doctor we've used in the past, but because their insurance covers it, they went the "normal" route.

The doctor gave them a *super* hard time for not vaccinating and not bring-

ing them in for regular checkups. He checked their genitals-ugh! He pushed and pushed for the vaccines. Needless to say, our daughter is very upset.

She looked at the vaccine schedule. It includes vaccines for HPV and of course HepB, which are sexually transmittable diseases (as well as for IV drug use). They're supposed to have these at two years old. This is total insanity. What are they trying to do to our kids?

Oh, and the icing on the cake? The youngest is due for an autism exam in six months. Sheesh, it's almost as if they "know" this crazy vaccine schedule is going to increase autism rates.

Besides all of the above, the children are in the lower percentile in weight, so considered underweight. This is of course because they are not fat, like so many kids today are. They eat real food and are super-active, but not skinny by any means!

From now on the kids only go to the country doctor who understands that children and parents don't need this garbage. But my big concern is that they will be turned in for child neglect. This happened years ago when our own kids were much younger and to another family from our local chapter. Scary!

Maureen Diaz WAPF Outreach Coordinator Front Royal, Virginia

QUININE AND ZINC

I've been using tonic water—a source of quinine, the granddaddy of hydroxychloroquine (HCQ)—and smoked oysters (source of zinc) this summer to fix some health problems. I'm not particularly interested in going to a doctor to get some of the disputed HCQ, but I figured if I could get some foods with quinine and zinc, I might be able to use those instead.

The first thing I fixed was a weird feeling I had after walking through my office suite while everyone else was working from home. No one was at my office and there were some disinfectant boxes running. (Later on, I heard they were Senexis boxes that put out UV light and "dry hydrogen peroxide" into the air.) There were four boxes. During the lockdown, I had to return to my office to perform a task that took only about ten to fifteen minutes. I closed myself in my office away from the disinfectant boxes to do the task.

After I had returned home and was working on my computer, I started feeling disconnected and lethargic. It was weird and unlike anything I had ever experienced. I wondered whether the feeling was anything like people feel when they get diagnosed with Covid. I had stockpiled some little cans of tonic water and tins of smoked oysters in case I thought I might need something like HCQ and zinc. I also had a bottle of a zinc and copper supplement in capsules. On the chance that I had breathed in some of the disinfectant and had damaged my lungs, I drank a can of tonic water and took a little supplement that had zinc and copper in it. (All my oysters were at my office, not at home.) In about ten minutes I felt fine again.

Another thing I fixed was a migraine aura. I never have migraine headaches, but if I'm burning the candle at both ends, working too much and sleeping too little, I might have a mi-



graine aura about once a year. I usually don't notice them until they're shiny crescent shapes disrupting my field of vision. I usually have to lie down for thirty to forty minutes, until they get large enough to get to the outside edge of my field of vision so I can see to work again. Well this time I noticed it at the beginning, when it was like a tiny Vienna sausage shape in the middle of my field of vision. I had so much work to do that I really didn't want to lie down and wait it out. I have thought that migraines have an electrical component, and it occurred to me that quinine and zinc might help fix the problem. So I drank a can of tonic water and ate a tin of smoked oysters. In about five to ten minutes, not only had the migraine aura gone away, but my energy level was nice and high (not depleted as it usually is when I'm overworked and sleep-deprived).

The third thing I fixed was a feeling of anxiety. I had been asked to come up with a list of emails of some

of our people, so they could be emailed about getting tested for Covid. I knew there was a possibility that I might get caught in that net, and I really don't want to be tested because I don't trust the tests and don't want to be a target for further "treatment" or restriction from working. I started feeling so anxious about that possibility that I couldn't work. Since Dr. Hamer says the cause of influenza symptoms is fear, or fright fear, or death fright fear, and I consider Covid to be caused primarily by fear, I figured it might help to take my tonic water and oysters. After I ate them, it was (again!) only five to ten minutes before the fear was gone and I could get on with my day.

I have been curious lately about how our bodies use electricity, and about Dr. Kaufman's and Dr. Cowan's discussion of how 5G (and probably the enhanced 4G) harm our bodies, causing physical symptoms. In fact, I have wondered whether the lockdown was not partially so the installation of 5G equipment could proceed without interference.

Another thing about zinc: I have been reading a book called *Breakthrough!* by Jon Queijo. In Chapter 5 ("I'm Looking Through You: The Discovery of X-Rays"), he mentions that Wilhelm Roentgen suspected that frequent exposure to X-rays could be harmful to living tissue, so he did his experiments in a zinc box. Some other research helpers had to have amputations done because of the damage to their hands and arms.

Since zinc and copper are supposed to be kept in balance in the body, I have wondered whether it is because copper is such an excellent conductor of electricity, while zinc may counteract that. I will have to keep reading because I don't know much about it.

Of course, there's also the fact that zinc is depleted by stress! When I look in the eyes of many people, I see much fear and anxiety in some. It doesn't surprise me that giving zinc and an

WISE TRADITIONS CONFERENCE AT POLYFACE FARM



A maskless crowd of three hundred gather before the hoop-house "auditorium."



Joel Salatin gives a tour on readying the farm for winter.



ionophore (ion carrier) like HCQ or quinine is so effective, especially if they get it at the first sign of illness. I know some people are taking quinine and zinc, vitamin D, vitamin C and some other supplements as prophylactics. I am only taking the quinine and zinc (in the form of smoked oysters or the zinc-copper supplement) when I am so stressed that I am noticing physical symptoms. I do also take cod liver oil and a variety of probiotics/prebiotics on a daily basis. Some doctors advise their patients to take vitamin D and probiotics regularly if they want to avoid the seasonal flu.

I also am very curious about how the tonic water and zinc have yielded such fast results when I have used them!

Aside from that, I have seen a brief comment about quinine, chloroquine and hydroxychloroquine, and how they serve as an ionophore for the zinc. The commenter said that zinc and our cells have the same charge, while the ionophores have the opposite charge, so that's how it's possible for the zinc to enter the cells and help heal things, or at least prevent further damage.

I had an ancestor who was a country doctor during the Spanish Flu epidemic. They say he treated more than seventy patients for it and lost none of them! I wish I knew what he did to help them. I heard that a medical textbook was published in the 1920s that included a discussion of how some doctors had used quinine to treat their Spanish Flu patients.

> Velvet Glover Tulsa, Oklahoma

Quinine water usually contains high fructose corn syrup and other additives. A better choice is quinine herbal drops added to sparkling water. Desiccated oyster capsules will work for those who don't like the taste of oysters.

ARITHMETIC DEFICIENCY

I believe I have made a new discovery about pathogenicity from the novel SARS-CoV-2. Very clear research, backed by extensive documentation, demonstrates that SARS-CoV-2 directly affects the ability of scientists to do arithmetic. This is probably neurologically based.

I took a nerve tonic and decided to do the arithmetic for the new study showing 95 percent efficacy of the new Moderna vaccine. Here are the numbers, even though the paper is unpublished, so these are not exact:

There were about twenty-eight thousand people in the trial, approximately fourteen thousand in each group.

In the Moderna trial, on day fourteen, ninety people in the "placebo" arm had symptoms of "Covid," while the number in the vaccine arm was five. This means that 0.6 percent (90 divided by 14,000) of the placebo "got Covid," while 0.04 percent (5 divided by 14,000) in the vaccine arm "got Covid."

People unaffected by arithmetic deficiency would say this is a reduction of 0.06 percent—nothing to get

NOVEMBER GATHERING—WE HAVE A CONFERENCE AFTER ALL!



Speakers Joel Salatin, Sally Fallon Morell, Mike Dickson (the Fit Farmer), Hilda Labrada Gore and Del Bigtree.



Interesting speakers, fellowship and fun!

excited about. But the researchers used the magic of "risk reduction," which ignores the sample size in order to exaggerate the benefits. Thus 90 +5 = 95 and 90 is 94.5 percent of 95. This is called the "efficacy." But it is a biologically meaningless number for if the same number of people got Covid out of one hundred million, you get the same result—this is the magic of "risk reduction"!

Then to complete the fraud they report side effects in the vaccine arm as around 3 percent—which by the way are the same symptoms as reported for "Covid." This means about 420 out of 14,000 people in the vaccine arm got side effects—that is "Covid"—versus none in the placebo. They magically report this not as a 400 percent increase in side effects but as an insignificant 2.6 percent increase.

The reality is all you can say from this trial is that if you take the vaccine you have a 3 percent chance (420 side effects plus five cases out of 14,000) of illness in the two-week period versus a 0.6 percent chance (90 cases plus 0 side effects out of 14,000) of illness in the placebo group.

My guess is that arithmetic deficit is an incurable side effect of Covid hysteria, particularly if you are a member of the medical profession.

Actually the trials on the vaccines have nothing to do with a virus, immunity or transmission of a disease; they were only studying the numbers of people who get "Covid, " that is, show "symptoms," so these were drug trials, not vaccine trials.

Tom Cowan, MD

PROTESTS IN GERMANY

There is a huge movement against the unspeakable and unseen crimes happening all over the world. People are demonstrating throughout Germany every day by the thousands, with numbers gaining daily. Information about the truth is now spreading like a wild fire and even the media are starting to show the truth here and there. Censorship in Germany is the worst in the world, even topping China; for example, one hundred fifty thousand German YouTube videos being deleted every day!

> Ulrike Germany

THE LEPROSY CONTAGION MYTH

In light of the question about illnesses being contagious, I was reflecting on an experience I had in the late 1980s. I lived in Louisiana and volunteered at a hospital in Carville, which was started in 1894 as the first U.S. inpatient hospital for those with leprosy. It closed in 1999.

Often people were brought there and left by their families for lifetime quarantine. The site had many buildings and there were enclosed walkways to get from one building to the other. I was told patients had to walk in those walkways, not outside, so they would not risk infecting others. By the time I was there, they said we could interact without fear of contagion because they now had a medication for the disease (not a vaccine). But in the past, these people were feared as 'biohazards' and were not allowed to leave except for short periods; many tried to escape but were captured and returned. For a long time, they were not allowed to marry

for fear of infecting the children, but that restriction was finally lifted. Many changed their names out of shame and fear for their family's reputation.

The hospital was run by Catholic sisters for a long time, and I learned that not one of them was ever "infected." At the time, this seemed like a miracle. They also said that researchers could not infect normal lab animals but they finally could infect the armadillo plentiful in Louisiana. All of it seemed sad and puzzling.

A friend organized a boat trip up the Mississippi River for some patients and others. Those with leprosy begged us not to tell anyone where they were from. They were thrilled to be out in normal life and accepted.

I met a woman patient from South America who had been sent there. She said that it took a long time but she was finally able to marry another patient. Her husband wrote a heartbreaking biography in which he explained that he grew up in a small mountain community. As a boy he started getting odd nerve twitches where he would swat at a bug on his leg only to realize there was no bug. He had other symptoms that puzzled the local doctors who eventually feared it was leprosy. The family, community and doctors were shocked because they knew the boy had never been exposed to leprosy. Unfortunately, the boy was sent to Carville where he lived his life, abandoned by his family.

For centuries leprosy has provoked fear as a terrible, contagious disease. But in light of the new ideas about what causes disease, I am seeing leprosy in a new light. For countless people suffering with leprosy over time, maybe

their plight could have been avoided had researchers been willing to ask—what if the cause is not what we think? What if it is not contagious? What other possible causes are there?

> Louise O'Brien Glenn Dale, Maryland

The symptoms of leprosy (severe, disfiguring skin sores and nerve damage in the arms, legs and skin areas) are similar to certain symptoms of B vitamin deficiencies, which were especially common in the South in the nineteenth and early twentieth centuries.

HOMEPAGE COMMENTS

I just went on your site for the first time in many years to read up on making yogurt with raw milk. Finding your comment on your homepage about this current "respiratory illness outbreak" was refreshing. I have been so discouraged at the continuous alerts and messages on websites and have not seen anything that has sounded positive or as though we could actually help ourselves be healthy in order to protect ourselves from illnesses. I just wanted to say thanks for putting up a nicely worded and logical statement about "coronavirus" on your website.

> Jennifer Medley Baldwin, Wisconsin

THE NEW ETIQUETTE

I was at the Polyface conference November 16, when the Weston A. Price Foundation launched the New Etiquette. The group was asked to turn their cell phones to airplane mode. As an electromagnetic-sensitive individual suffering from a limbic system disorder, I felt very excited when I heard this announcement. Even small amounts of non-native man-made electromagnetic frequencies (EMFs) have a cumulative effect on me throughout the day. Often, when I'm around EMFs, I'll feel symptoms of pain, exhaustion and disorientation, and my digestive system and heart suffer greatly.

I carry a Trifield meter (trifield. com) with me in my travels, and I had my meter with me that day. I measured the farm readings a few times in the morning—first upon my arrival, and then after the group was asked to turn their cell phones to airplane mode. I was not anticipating the New Etiquette announcement, and both my friend (who saw my readings) and I were amazed at the before-and-after difference. If only I had captured my results in photographs to show you!

In the hoop house the morning of the Polyface conference, my meter's RF readings were peaking at 0.120 mW/m². Typically, in rural settings at least 1.5 miles from cell towers, I've seen the meters peak at 0.040-0.060 mW/m²—so I thought this reading was high, especially for an open-air setting at a farm! When I entered Joel's farm, my meter was peaking at 0.020. When I sat down in the hoop house (further away from the crowd, on the far end), that reading went way up, six times higher.

At first I didn't understand the reason for the big peak in my readings, and then I realized it could be from all the cell phones carried by folks in semiclose quarters. When I noticed the peak in the meter reading, I felt surprised and nervous, because I was afraid of feeling sick. Because my initial readings at the farm were low, I had not thought to bring along my various helps, which mitigate negative effects on my body within "hot zones." I was so relieved when the audience was asked to turn their phones to airplane mode, and I felt shocked and amazed when my Trifield meter RF reading went all the way down to 0.000, then stayed below 0.020 for the remainder of the morning. And I felt great.

For perspective, the meter can peak all the way up to 8.000 + (and max out with an error message!) when I am driving through towns. I haven't measured any cities (because I no longer can tolerate even going near them).

> Ruth Amanda Black Mountain, North Carolina

SAFE COMPUTING

I have a suggestion that might help all of us minimize our exposure to EMFs. Using an EMF meter I found that my laptop tested in the red for high EMFs even though we have no WiFi in the house. But the laptop was still searching for wireless. I went to Settings and turned off WiFi altogether, and also turned off Bluetooth, and tested again. This time the laptop was in the green or safe level.

> Beth Verity Washington, DC

NO LONGER VEGAN

I was a vegan for over ten years. My daughter, without pressuring me whatsoever, was sharing with me her attempts to heal her gut with the GAPS diet. She told me some things she learned from the Wise Traditions podcast, and I thought it sounded quite interesting. So I tuned in to one episode and it led to another, then another. . . a few weeks later, here I am no longer a vegan! I slowly started with eggs, butter and cheese and have been introducing pasture-raised meat! I never ever believed I would ever go back to eating animal products!

I can't believe I fell into the lies that animal products were the cause of illnesses, cancer, etc. I am amazed at everything that I have learned from the Wise Traditions podcast. It has changed my life immensely! I thank God for opening my eyes to the truth and also for my daughter and her example. It all makes sense.

> Maria J. Murphy Simi Valley, California

AUTISM AND THE FUTURE

I heard Dr. Andrew Wakefield today at the courthouse in Fairfax, Virginia, speaking to a group called Virginians for Health Freedom. He's traveling the country on behalf of children. About the election he says this is a one-issue election; vote for those candidates that support freedom. The one issue you must vote for is the future of your children and grandchildren. About autism he says it is still rising and if it continues at this rate, by the year 2030, autism will affect one in two children.

He asked for the veterans to stand up and said that if we don't stop autism, by 2030 we will not have a military. We will not have a country. We will have half of our people with autism and the other half will be caretakers.

> Janice Curtin Alexandria, Virginia

LOOMING MEAT CRISIS

My farmer delivered my fall meat order this morning and we had a short chat. There is so much to learn and the rules are constantly changing. She said it is challenging here (in Ontario, Canada) to get a butcher to work with the small, independent farmers. She has just made a reservation for next autumn's butchering for piglets that she doesn't even own yet.

It's also difficult for independent farmers to get a vet to come to the farm. (It's more profitable for vets to be on hire for the CAFO operations.) Pigs on the CAFO farms do not have any access to open air, not even a hole the size of a snout, due to the fear of birds contaminating the herd. There are even rules about the fans that circulate the air (in case a bird should sneak in there). But the animals are not considered "in distress" or "treated cruelly" because, hey, there's a vet on staff you know.

> Donna Costa London, Ontario, Canada

LYME DISEASE

I have learned from personal experience that with Lyme, it's the terrain and not the "germ"; the spirochete is not the cause. Ten years ago, I pulled off a deer tick. I developed the bullseye rash, went on a course of antibiotics and assumed that was that. I had thought it was the bacteria that "infected" me.

Fast-forward to five years ago when I had all the poisonous mercury amalgam removed from my teeth. Now I actually know what happened. The tick probably did transfer the bacteria. However, bacteria are not pathogens. They are the clean-up crew. They eat waste, venom, metals and rot-all unhealthy substances-all for excretion! I still had the highly toxic mercury in my system at the time, ten years ago. Lyme spirochete bacteria "eat mercury like candy." Chronic Lyme sets in when a dangerous condition in the host, like mercury blight, is persistently present and continues to go unresolved. Of course, there are other things besides mercury that cause this trouble.

The bacteria were there to begin remediating all the mercury in my system. They were there to help. But if there is no resolution to the underlying poisoning, the clean-up crew can eventually cause disease themselves.

Unfortunately, with chronic mercury assault, the bacteria cannot keep up with mercury excretion. I was "lucky" in that, though I did not know yet about the horrible condition of my teeth, the antibiotics killed off the bacteria. I got a reprieve.

Five years ago, when I learned of the dangers of mercury amalgam, I was livid that I had not heard about this much sooner. As a chemist, it was an ah-ha moment about how bad this stuff is, but also much anger at the criminal American Dental Association, which touts and promotes this menace.

> Laurie Lentz Stillwater, Oklahoma

LIFE-SAVING

Thank you so much for all you do! I have been a member for twenty years and I can't tell you how much your organization has meant to my family and me. Some of the information in the journal has literally been life-saving!

It is so important to have dissenting voices in these crazy times. It seems like everyone is yelling, yet WAPF goes about its business in its quiet way, telling the truth. I'm a big reader but not everyone is, so the podcasts help fill that gap. I often listen to them while I'm cooking or washing dishes. Hilda is an outstanding host and she is always so warm and inspiring, while getting to the core of the issues. She never fails to make her guests and her audience feel welcome despite the sometimes controversial topics.

Let's stay the course. Each time we have a crisis (9/11 or this pandemic, for example) our government does not hesitate to take our rights away. Once those rights are gone, it's unlikely we will get them back. I always remind my kids of Benjamin Franklin's famous quote: "Any society that would give up a little liberty to gain a little security will deserve neither and lose both."

Let's all be brave! Let's work hard to preserve our rights to farm, to have access to clean healthful food, to make decisions about health for our families, to have access to natural "alternative" healthcare, and our right to speak out against what is wrong with the world. Erin Matica

Worthington, Massachusetts

FALLACY AND REALITY

California has announced a statewide initiative to phase out or ban the sale of internal combustion engines by 2035 and replace them with electric vehicles powered by solar- and windgenerated electricity. In his Executive Order N-79-20, California Governor Newsom is following the global environmental playbook and throwing in a little coronavirus justification to boot. The third paragraph of the order states, "Whereas the COVID-19 pandemic has disrupted the entire transportation sector, bringing a sharp decline in demand for fuels and adversely impacting public transportation. . ." Aside from its human health effects and societal disruption capabilities, the Covid-19 virus is most cunning. Unbeknownst to us, it also infects machines and as such provides political justification for remaking California's transportation sector.

Here's the question: can California support the transition to an all-electric fleet of light duty vehicles (LDVs) using only solar- and wind-generated electricity? Assuming that California would need 15,000,000 LDVs, requiring 300 watt-hours per vehicle per mile for an average of 10,000 miles per year, each vehicle would need 3 megawatt-hours per year.

Using current technologies, you need 7.5 acres of land to produce 1 megawatt-hour from solar and 5 acres of land to produce 1 megawatt-hour from wind turbines for an average of 6.5 acres for 1 megawatt-hour from solar and wind, or .001 square miles per megawatt-hour.

At 3 megawatt-hours per year, the electricity needed for 15,000,000 light vehicles is 45,000,000 megawatt-hours per year, thus requiring 45,000 square miles. The land area of California is 163,696 square miles so the conversion to all-electric vehicles would require 27.5 percent of California's total land area.

In addition to the transition to allelectric vehicles, California has competing initiatives to phase out natural gas and nuclear power generation.

Currently, California generates 102,000,000 megawatt-hours from natural gas and nuclear. All told, California would need something on the order of 150,000,000 megawatt-hours of new solar and wind generation capacity to support these dual initiatives over the next fifteen or twenty years, requiring 150,000 square miles of land area or 91.5 percent of California's total surface area!

Never mind the fact that California's forty million citizens need somewhere to live and that large swaths of the state are either desert or mountains and impractical for large scale commercial electric utility generation. (Desert is good for solar, but it tends to be remote from the grid and lacks transmission lines and substations needed to support large scale commercial electric development.) Maybe the yet unannounced secret plan on the part of California is to annex Nevada and Alaska to support their all-renewable electricity generation cloud dream.

Actually, California knows that its grand plans are impractical. If you visit the website poweringcalifornia. com, they ask the same question: how much land would it take for California's utilities to go all renewable? This is even before the additional electricity demand from an all-electric vehicle fleet. The state's own conclusion: "The Manhattan Institute, a policy research think tank, took a deep-dive look at the math behind the 100%-renewableenergy concept and found it unrealistic, particularly when it comes to land use."

On the upside, California wouldn't have to worry about wildfires in this future state as a key ingredient for wildfires, namely vegetation, would be totally eradicated to support wind and solar farms.

> James Kirkpatrick Chicago, Illinois

APPRECIATION

I wanted to drop you a note to say a hearty thank you for covering the issue of the horrible, unsafe, unethical practice of using aborted fetal tissue in vaccine development and research (Wise Traditions, Fall 2020). I have always appreciated the foundation's willingness to take a strong stance on important health issues, and this is one for which so few people understand the implications. Kendall Nelson's article was very well written and lays out an excellent case for the health hazards of this horrific practice, in addition to the reasons so many find it morally abhorrent.

> Sara Sharps Manteno, Illinois

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

Sally Fallon Morell takes on the Diet Dictocrats

COVID VERSUS THE FLU

We have consistently stated that the illness called Covid-19 is not just a bad case of the flu, but something completely different and far more serious. A study published December 15, 2020 in the British Medical Journal confirms this view. Researchers compared hospitalized flu patients 2017-2019 with Covid patients February 1 through June 17, 2020. Among those hospitalized with either Covid-19 or the flu, those with coronavirus were nearly five times more likely to die than those with influenza. Those with Covid-19 had an increased risk of acute kidney and liver damage, as well as heart disorders, stroke, severe septic shock, low blood pressure and excessive blood clotting. A surprising finding was a higher risk of developing diabetes among Covid-19 patients-nine more cases per one hundred people. The Covid-19 patients most at risk for death were those seventyfive years and older, who had pre-existing conditions (BMJ 2020;371:m4677). Not surprising: a study published in the journal PeerJ (October 1, 2020) found a higher death rate in older people who had the flu vaccination and no significant differences in illness rate due to lockdown or mandatory masks (The Spectator, December 18, 2020).

COMBATTING VACCINE HESITANCY

In one of the largest public education campaigns in history, the Ad Council and the COVID Collaborative have invested fifty million dollars to "educate the American public about the safety and efficacy of new Covid-19 vaccines," with a particular focus on reducing vaccine hesitancy in the African American and Hispanic communities. A recent survey conducted by the COVID Collaborative found that only 14 percent of African Americans and 34 percent of Latinos trust the vaccine. According to Michelle A. Williams, Dean of the Faculty, Harvard T.H. Chan School of Public Health and a co-founder of the Collaborative, "It's not having a vaccine that saves lives, it's people actually getting vaccinated. For that to happen, we need to understand why so many are hesitant and help overcome that." In other words, browbeat the understandably skeptical minorities into overcoming their better judgment. According to Professor Howard Koh, health professionals will play a key role in persuading the public that vaccines are safe; unfortunately doctors and nurses are getting "confused messaging about safe vaccine development." According to Koh, it is crucial "for companies developing vaccines to publish full results from clinical trials as soon as possible to persuade physicians that the vaccine is safe" (*Chicago Tribune*, November 26, 2020). Of course, if the vaccines are so safe, they would have published the full trial results weeks ago.

STILLBIRTH RATE RISES DURING PANDEMIC

A significant rise in stillbirths worldwide since the coronavirus "pandemic" began has experts worried. Based on data from more than twenty thousand women in India, stillbirths increased from fourteen per thousand to twenty-one by the end of May, a rise of 50 percent. Birth data from a large London hospital indicate a fourfold increase in the incidence of stillbirths. Public health officials are blaming the increase on "disruptions in health care," such as lack of prenatal visits to physicians, but we can think of other reasons: hypoxia due to mask wearing; domestic abuse due to lockdowns; and exposure to fifth-generation wireless (realclearscience.com, September 16, 2020).

NO SCHOOL FOR YOUR KIDS

State governments have denied an education to sixty million American children during the past six months. And for no reason. Public health officials admitted that kids are better off in school. Anthony Fauci, director of the U.S. National Institute of Allergy and Infectious Diseases, said in late November we should "close the bars and keep the schools open." According to an April study published in the Journal of the American Medical Association, children "... develop only mild symptoms and typically recover in two weeks." In New Jersey, a state with a high number of "cases," not a single school-age child has died of Covid-19. Teachers under the age of fifty have a 99.98 percent survival rate; under age seventy the rate is 99.5 percent (www.bitchute.com/video/ DQVZGtIJqHR2/). Meanwhile parents who still have jobs are coping with working and homeschooling simultaneously, and many children have fallen behind in reading and math due to Covid closures.

GOOD ADVICE

The Weston A. Price Foundation suggests cod liver oil and fermented foods as important parts of a healthy diet; and we

have consistently warned the public to avoid taking toxic statin drugs. Turns out that this is especially good advice in the coronavirus era. Preliminary data from Norway suggest that cod liver oil users may have a reduced risk of contracting Covid-19 and less severe disease outcomes if they are infected (sciencenorway.no, November 10, 2020). The researchers credit vitamin D and omega-3 fatty acids in cod liver oil, but cod liver oil is also an excellent source of vitamin A. The participants in the study group will receive the Moller's brand of cod liver oil, a brand that is fairly high in vitamin A.

A European study suggests that coronavirus mortality rates are lower in countries where diets are rich in fermented vegetables. In Europe the death rate in Italy, France and the UK has been very high compared with the Balkans and Nordic countries. Although many factors can explain the discrepancy, researchers found that only fermented vegetables consumption had a significant impact on mortality rate by country. For each gram per day

increase in the average national consumption of fermented vegetables, the risk for Covid-19 mortality fell by 35 percent (news-medical.net, July 8, 2020). Finally, in a study published in October, 2020, researchers found that routine statin treatment is significantly associated with increased mortality in diabetic patients hospitalized for Covid-19 (pubmed.ncbi. nlm.nih.gov/33091555/). Higher coronavirus mortality is another condition that should be added to the warning list for statins like Zocor—which is already nineteen pages long and all in fine print!

VITAMIN K₂ AND LUNG FUNCTION

Vitamin K_2 plays an important role in lung function because it helps activate elastin, the protein responsible for lung tissue flexibility. Constantly expanding and contracting, the lungs must be very flexible to do their job. When vitamin K_2 is lacking, elastin becomes stiff and fibrous, making breathing and oxygen exchange more difficult. In a recent study, researchers determined vitamin K status in one hundred twenty-three people hospitalized with Covid-19 and those in a healthy control group; they found that low vitamin K status was highly associated with severity of symptoms, and could even be a factor in determining who contracts Covid in the first place (www.preprints.org/manuscript/202004.0457/v1). The best sources of K_2 are poultry liver and fat, aged cheese, egg yolks and butter, all preferably from grass-fed animals. Just another reason to enjoy a Wise Traditions diet during these difficult times.

FINALLY!

The U.S. Food and Drug Administration (FDA) has spent



the last twenty years holding public discussions on the safety of dental amalgam (mercurycontaining) fillings. At long last, the agency has come up with guidelines that recognize the potential adverse health effects of mercury exposure, identifying seven groups that should not receive mercury fillings: pregnant women; women planning to become pregnant; nursing women and their newborns and infants; children, especially

those younger than six years of age; people with pre-existing neurological disease; people with impaired kidney function; and those with known heightened sensitivity to mercury. The guidelines did not go as far as activists had hoped; they did not result in an outright ban on amalgam fillings. But these guidelines are a step in the right direction. The FDA did not recommend anyone removing or replacing existing amalgams unless it is considered "medically necessary" and warned that removal of intact amalgam fillings "may result in a temporary increase in exposure of mercury vapor released during the removal process" (www.fda.gov/medical-devices/ dental-devices/dental-amalgam-fillings).

SHAMELESS

Formula companies are shameless in the ways they exploit medical situations to their advantage, and the coronavirus situation is no exception. For example, in April, Danone of India facilitated a YouTube channel called VoiceofExperts that advised women with Covid-19 to maintain a distance of at least six feet from their infants and to stop breastfeeding until free of fever for more than seventy-two hours, free of

other symptoms for at least seven days, and had two negative PCR results. . . a suggestion that would result in the mom quitting breastfeeding altogether. After complaints, Danone removed the video but the channel still exists. During the pandemic, many companies have donated milk powder to communities in Canada, India, Italy, Pakistan, the Philippines and the UK, violating both national laws and the WHO code. And in a recent online survey of over one thousand mothers who had recently breastfed in the UK, 80 percent reported contact from formula companies, typically on social media, even though this violates the WHO code (*Lancet* October 8, 2020).

B₁₂ DEFICIENCY AND COGNITIVE IMPAIRMENT

In a systematic review, researchers from the University of Melbourne examined the associations between low vitamin B₁₂ levels, neurodegenerative disease and cognitive impairment (International Psychogeriatrics 2010;24(4):541-556). They found that vitamin B₁₂ levels in the subclinical lownormal range (less than 250 pmol/L) are associated with Alzheimer's disease, vascular dementia and Parkinson's disease. They found that outright vitamin B₁₂ deficiency (less than 150 pmol/L) is associated with cognitive impairment. Vegetarianism and use of metformin (a widely used drug to control symptoms of diabetes) contribute to depressed vitamin B₁₂ levels and may independently increase the risk for cognitive impairment. They found that a small subset of dementias are reversible with vitamin B₁₂ therapy and noted that this treatment is inexpensive and safe. Unfortunately, few patients incarcerated in our nursing homes are offered such beneficial treatment.

STARVATION DIET FOR CHILDREN

In light of what we know about vitamin B_{12} , the fact that some groups are objecting to the new dietary guidelines for infants borders on the incredible. For the first time, the U.S. Dietary Guidelines for Americans include guidelines for children younger than two. While there is plenty to criticize in these guidelines —which recommend lots of whole grains without any caution on how they should be prepared, and which include lowfat dairy foods and no encouragement to provide youngsters with butter —at least they include red meat, poultry, seafood and eggs "to meet the needs for critical nutrients for growth and development, particularly iron, zinc and choline." In fact, one member of the Committee, Dr. Kathryn Dewey, specifically recommends chicken liver. But the Physicians Committee for Responsible Medicine is not happy. "There isn't scientific evidence to suggest somehow infants would be better off consuming meat, seafood, eggs and dairy," says Susan Levin, a registered dietitian and the organization's director of nutrition education. According to Levin, infants and toddlers can get iron from foods like fortified cereals, spinach and lentils (*Wall Street Journal*, October 13, 2020). Iron, zinc and choline aren't the only nutrients that toddlers get from animal foods —there's also vitamins A, D, K_2 , B_6 and B_{12} , and minerals like calcium, magnesium and iodine. A diet without animal foods is a fast track to cognitive impairment throughout life.

MYCOTOXINS

A survey of four hundred corn samples from five continents harvested in 2018-2019 discovered that 95 percent were contaminated with mycotoxins (toxins produced by fungus) (mycotoxinsite.com). Mycotoxins cause allergic reactions and can adversely affect the major organs, gut health, the brain and the respiratory system. The primary toxin infecting the corn was fumonisin, which can have carcinogenic and estrogenic effects. In addition to corn, rye, wheat, barley, coffee and chocolate are major sources of mycotoxins in animal and human diets. Scientists attribute blame to unusually wet weather or poor drying and storage procedures, but we wonder whether poisons sprayed on crops and accumulating in the soil make our grains more prone to fungal infection.

HAVANA SYNDROME

First reported by U.S. embassy workers in Havana in 2016, people suffering from "Havana syndrome" complained of dizziness, fatigue, headaches and loss of hearing, memory and balance. U.S. diplomats in China and Russia

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.

have reported similar symptoms, often resulting in life-long disability. Reporting for the National Academies of Sciences, Engineering and Medicine, a committee of nineteen experts in medicine and other fields has concluded that the most plausible mechanism for the illness is "directed, pulsed radiofrequency energy," a type of radiation that includes microwaves and wireless communications. The microwave radiation exposure levels to which the U.S. embassy employees were subjected were at least one hundred times *less* than the Federal Communications Commission's (FCC's) current limit—a limit that has now increased fourfold to accommodate higher radiation exposures from 5G devices and infrastructure compared to 4G. The list of symptoms is identical to the symptoms suffered in "long-haul" Covid-19 patients. According to a December 5 article published in the *New York Times*, the committee considered other causes, such as chemical exposures and infectious diseases, unlikely. The authors of the article err, however, in stating that the microwave energy from a cell phone is "continuous" and not "pulsed." All wireless communications, including cell phones and Wi-Fi, are "pulsed." It's no wonder that we are seeing waves of illness follow the rollout of 5G millimeter wave technology, and it's time to stop placing the blame on a wily infectious virus.

COVID-19 VACCINES: IMPORTANT POINTS Please Share with Family and Friends

MINOR IMPACT: Vaccine manufacturers claim that Covid-19 vaccines are 95 percent "effective," but the FDA is allowing companies to define effectiveness as "prevention of mild symptoms." The studies are not designed to detect a reduction in outcomes such as severe illness, hospitalization or death.^{1,2} For individuals who develop severe symptoms, the vaccine is not a remedy. Instead, nutritional and oxidative support can help keep the illness from going into "overdrive."³

EXPECT ADVERSE REACTIONS: Participants in every Covid-19 vaccine trial have reported adverse reactions including high fever, chills, muscle pains and headaches.⁴⁻⁶ Some have even reported severe reactions that required hospitalization and invasive treatment. According to the FDA, potential long-term effects may include Guillain-Barré syndrome, brain swelling, muscle weakness and paralysis, convulsions and seizures, stroke, narcolepsy, shock, heart attack, autoimmune disease, arthritis and joint pain, multisystem inflammatory syndrome in children, and death.⁷ Some UK health workers have experienced anaphylactic shock after receiving one dose of the approved vaccine.⁸

WON'T PREVENT COVID-19: An FDA Pfizer briefing paper published December 10, 2020 revealed 43 percent more suspected cases of Covid-19 in the vaccinated group than in the placebo group within seven days of vaccination.⁹

NO LIABILITY: Covid-19 vaccine manufacturers will be protected from all liability—if you are injured, you cannot sue.¹⁰ Manufacturers will have complete indemnity even though all previous attempts at creating coronavirus vaccines caused harm and never advanced to regulatory approval.¹¹

WILL NOT END RESTRICTIVE MEASURES: Dr. Anthony Fauci of the National Institutes of Health acknowledges that the vaccines may prevent symptoms but will not block spread of the virus, so vaccine recipients will still need to wear masks, practice social distancing and avoid crowds.^{12,13}

NOT NECESSARY: According to the CDC's current best estimate, the "infection fatality rate" (IFR) for Covid-19 is less than 1 percent for people age 69 and younger, including a .003 percent IFR for children and adolescents.¹⁴

COULD MAKE YOU STERILE: Two prominent doctors, including the ex-head of Pfizer's respiratory research, warn that Covid-19 vaccines contain a spike protein called syncytin-1, vital for the formation of the placenta.¹⁵ If the vaccine triggers an immune response to this protein, then female infertility, miscarriage or birth defects could result.

FOR FURTHER INFORMATION and REFERENCES: westonaprice.org/coronavirus/ PRINTABLE FLYER: (please share this with people and ask them to do the same): westonaprice.org/covid-19-vaccines-important-points/

The Contagion Fairy Tale

By Thomas Cowan, MD and Sally Fallon Morell

Ur book, *The Contagion Myth*, is now available (banned on Amazon but sold on other outlets) and has already generated dozens of comments, many of them challenging our contention that the corona "virus" does not exist and that the illness attributed to this virus is not contagious. One comment even referred to our book as a fairy tale!

Unlike most coronavirus skeptics, we are not arguing that the illness is just a bad case of the flu, with deaths due solely to pre-existing conditions or inappropriate hospital care. Rather, we postulate that the illness can be very serious and that the likely cause is radiation poisoning, probably from the worldwide deployment of 5G, starting in Wuhan, China, and followed by major cities throughout the world.

EPIDEMIOLOGICAL OBSERVATIONS

Comments we have received include the following:

- Okinawa does not have 5G but people are getting infected there. (Actually there is 5G in Okinawa.)
- Some friends went to a wedding in Kirkland, Washington, and got Covid, so it must be infectious.
- There's 5G in New Zealand but very few cases of illness.
- A school in our neighborhood has opened for in-person classes and there has been an outbreak—two people have tested positive.
- A lot of people "got the virus" after a big no-mask motorcycle rally in Sturgis, South Dakota.
- What about rabbits getting myxomatosis, a known viral disease?

With the exception of the rabbit comment (see sidebar, page 20-21), these observations are just that—epidemiological observations. They are certainly interesting and deserve further exploration, but in no way do they disprove our main contentions that this virus does not exist and that the illness attributed to it is not contagious.

NO PURIFIED SAMPLES

Why take our word for the shocking claim that no scientist has found the so-called coronavirus? Of course, you shouldn't take our word for it; you should listen to what the experts are saying. In July 2020, the FDA posted a CDC document entitled "CDC 2019-Novel Coronavirus (2019-nCoV) Real-Time RT-PCR Diagnostic Panel. For Emergency Use Only. Instructions for Use." Buried in the text, on page thirty-nine, is the following statement: "[N]o quantified virus isolates of the 2019-nCoV are currently available."

In other words, our government is telling us in July 2020—after plunging millions of people into poverty with a worldwide lockdown—that no purified isolated samples of this "novel coronavirus" exist, which means that the virus has never been isolated and purified. What they are finding in the RT-PCR swab tests are fragments of genetic material, one of which is found in human DNA.² This means that the results of all RT-PCR tests are invalid—the only thing they can tell us is that we are human beings.

A January, 2020 paper on testing tells us the same thing: "The ongoing outbreak of the recently emerged novel coronavirus (2019-nCoV) poses a challenge for public health laboratories as *virus isolates are unavailable*" [emphasis added].³ Nevertheless, even without knowing what this virus is like, the researchers' aim was "to develop and deploy robust diagnostic methodology for use in public health laboratory settings without having virus material available." A challenge indeed!

Here is an analogy to describe what is going on. Let's say you are a paid Lego specialist and someone offers a reward to construct an exact replica of King Beauregard's medieval castle. The referees put all the known Lego pieces out on a table and promise to pay you well to do the reconstruction. Naturally, you ask to see a picture of what the castle looked like or at least some sort of architectural plan so that you will know what to build. But the referees say that you must reconstruct the castle without having access to any information about the original castle.

You think this is downright bizarre, but since a job is a job, you start looking. You find pieces for a moat; you know that castles have moats and think that this must be part of the castle. Then you find windows, turrets, soldiers, etc.—and with each new finding, you are given a castle-building Lego award and an increase in salary.

You write some software that fills in the rest of the castle from the fragments you have. Then you publish a peer-reviewed paper on the "completed" castle for all the world to see.

Unfortunately, a child appears who looks like he has time-traveled from the Middle Ages. You show him the castle. "Everybody knows that Beauregard didn't have a castle," he says. "Beauregard was an impoverished aristocrat who was afraid of moats; he lived in a garret in London." But the show must go on, so the child's remarks are never published, while the Lego expert (who knows the child is right) keeps quiet and enjoys his hefty salary. This means that the results of all RT-PCR tests are invalid the only thing they can tell us is that we are human beings.

PROOF OF PATHOGENIC VIRUSES?

A number of readers have sent us studies "proving" the existence of pathogenic viruses. In fact, one virologist claimed that "thousands of papers" show that isolated bacteria or viruses cause disease. (He also tried to convince us that one could sterilize one's hands, cover them, and they would remain sterile "indefinitely.")

One of these studies, published in 2003 in the prestigious journal Nature, had the promising title "Koch's Postulates Fulfilled for SARS Virus."4 We discuss this study in The Contagion Myth. The researchers claimed that severe acute respiratory syndrome (SARS) is caused by a coronavirus. The title itself is misleading, not to say fraudulent, because the researchers did not in fact satisfy Koch's postulates-which is the common-sense way of proving that a microbe causes disease. They did not satisfy Rivers' postulates either—Rivers' postulates are for proving that a virus causes a disease (see sidebar, page 18). These methods involve isolating and purifying a specific microbial organism from a number of individuals suffering from a specific disease and then injecting the isolated, purified bacteria or virus into healthy organisms (animal or human). If every sick person has the organism and every test subject becomes ill, then you know that the specific microbe causes the specific disease.

Let's focus on the process of isolating and purifying a virus—it's hard to do but not impossible. In 1973, the Pasteur Institute published guidelines for doing this.⁵

- First. the virologist *takes mucus or secretions* from a person with the disease.
- The secretions are *diluted* and then put into a kind of blender.
- The resultant liquid is then *passed through a very fine filter*—fine enough to keep out bacteria and fungi but let the viruses through; sometimes researchers do this separation with a centrifuge. The resulting liquid, called a supernatant, contains the virus but lots of other stuff as well.
- The supernatant must then be *ultracentrifuged* in such a way as to get bands of particles of the same size and weight. The scientist can determine which band is the virus using the known size and weight of viruses.
- This band is removed from the supernatant with a pipette. This is the *properly isolated and purified* virus.
- The virus is then *transferred to some tissue* to grow and multiply.

An important point is that when the virologist has finished the purification process of macerating, filtering and ultracentrifugation, he must then take an electron micrograph of the final, purified virus to show his colleagues that he has in fact successfully purified and isolated the virus. Virologists have done this many times and for many different viruses. Without an electron micrograph picture showing purification, no reputable journal should publish this work. The reason is simple: scientists are essentially told not to believe each other just because someone says so. If you say you isolated a virus, you must show the picture to prove it—period. Absent the picture, it could be a total fabrication. In addition, after you have isolated and photographed the virus, other scientists in other labs need to follow the exact steps that you outlined in your paper and show pictures of the same isolated virus. Once a number of labs have done this, you have real proof that the virus exists. That is the way science is supposed to work.

FIGURE 1. Unpurified "virus" structures inside and outside a cell⁶



Wise Traditions

In the case of the novel coronavirus, every single published photograph we have seen showing the "isolated" virus shows no such thing. Instead, it shows tissue with a number of dots, usually with an arrow pointing to the so-called coronavirus. If you see tissue in the photograph, by definition it's not isolated. An example of such a photograph comes from "Virus Isolation from the First Patient with SARS-CoV-2 in Korea," published February 24, 2020 in the Journal of Korean Medical Science (Figure 1, previous page).⁶ Although the authors claimed to have isolated the virus, the photographs they published show "virus" structures inside and outside a cell (indicated by arrows); they do not show isolated virus. In comparison, you can see a properly isolated "virus" in the electron microscopy image of the chickenpox "virus" shown in Figure 2, below. (By the way, although health officials claim that chickenpox is "highly contagious," no studies have shown that exposing people to isolated chickenpox virus makes them sick.)

MORE ON THE SUPERNATANT

Today's virologists use the supernatant the liquid obtained after filtration or sometimes centrifugation—processes that remove bacteria, fungi and other larger material. This is what they refer to as "purification." However, this is like filtering the grounds out of coffee to get caffeine; your aim may be to study caffeine's effects, but there are hundreds or thousands of other compounds in the coffee, so you will still need to isolate the caffeine.

What virus researchers ought to do after obtaining the supernatant is to put it in a "sucrose density centrifuge column," which spins out the various compounds into bands. One of these bands will contain the pure virus, which can then be photographed and analyzed as discussed. This is the equivalent of isolating caffeine from coffee.

Instead of working with pure virus, however, researchers commonly continue to use the supernatant, which contains all kinds of molecules and particles. In other words, instead of doing a genetic analysis of the isolated virus, they do genetic analysis on the mess of compounds in the supernatant.

Now, to get enough "virus" to use experimentally, virologists must grow it in a biological medium such as an animal (or at least cells from an animal). Unlike bacteria, which can be grown in Petri dishes, viruses are not alive and can only "grow" in other living cells. However, virologists do not transfer the supernatant to healthy tissue, but to tissue that has been poisoned with strong antibiotics and starved of nutrients (using what's called a "minimum-nutrient medium"). They do this to make sure that what is left is only viruses and not bacteria. Moreover, the main type of tissue used is kidney cells from various species (often monkey kidney cells called Vero cells) or lung cancer cells. When researchers do this, the "viruses" seem to multiply, allowing them to sell the resultant mess of "viruses," particles, poisons, dead tissue and cellular debris-called "cultured" virus-to other researchers as samples of "purified" or "isolated" virus for use in studies.

By the way, the CDC has published guidelines on "transport medium" for viruses.⁷ Transport medium is what they use to inoculate the starved tissue, which then grows the "virus." The three main ingredients ("reagents") are fetal bovine serum (extracted from still-living fetal calves and preserved with antifungals, among other poisons) along with two highly toxic antibiotics, amphotericin (affectionately called "ampho-terrible") and gentamicin. This Instead of working with pure virus, however, researchers commonly continue to use the supernatant, which contains all kinds of molecules and particles.

FIGURE 2. Properly isolated chickenpox "virus"



ungodly mixture is then grown on monkey or fetal kidney cells.

Interestingly, all doctors know that the main organ affected by gentamicin and amphoterrible is the kidneys. So, you poison the kidney and the kidney breaks down; then the virologist claims that the virus killed the kidney—without performing any controls. Don't look behind the curtain, folks!

These practices are fraught with obvious problems if one wishes to prove that it is the virus-and not the cancer cells or poisoned kidney cells-that are causing disease when the "viruses" get injected into healthy test animals. Remember, to prove that a specific virus is making humans or animals sick, scientists need to find the identical virus in many subjects who are sick with the same symptoms-and then make healthy humans or animals sick by exposing them to this virus. However, when researchers try to grow purified virus on healthy cells, they don't get a lot of viruses-and when they subject healthy tissue, healthy animals or healthy people to these "viruses," illness does not result-yet this is the wily virus that is going to kill us all!

VIRUSES OR EXOSOMES?

Why do "viruses" multiply in the starved and poisoned kidney or cancer cells? The answer is that when cells are starved or poisoned, they produce exosomes. These tiny particles, which are identical in appearance and characteristics to what are called "viruses," are helpful, not toxic. Exosomes do not attack the cells and then multiply; rather, they are produced *inside* the cell, often in large amounts, when the cells are stressed by poison and starvation.

A study titled "The Role of Extracellular Vesicles as Allies of HIV, HCV and SARS viruses," published in May 2020 in the journal Viruses, explains that viruses and exosomes (which the authors call "extracellular vesicles" or EVs) are indistinguishable.8 To quote from the paper, "The remarkable resemblance between EVs and viruses has caused quite a few problems in the studies focused on the analysis of EVs released during viral infection. Nowadays, it is an almost impossible mission to separate EVs and viruses by means of canonical vesicle isolation methods, such as differential ultracentrifugation, because they are frequently co-pelleted due to their similar dimension. To overcome this problem, different studies have proposed the separation of EVs from virus particles by exploiting their different migration velocity in a density gradient or using the presence of specific markers that distinguish viruses from EVs. However, to date, a reliable method that can actually guarantee a complete separation does not exist" [emphasis added]. In other words, researchers can't distinguish viruses from exosomes. That's because they are the same thing; in reality, all viruses are exosomes. Stated another

KOCH'S POSTULATES AND RIVERS' POSTULATES

In 1890, the German physician and bacteriologist Robert Koch set out criteria for determining whether a given bacterium is the cause of a given disease. Koch's postulates are as follows:

- 1. The bacteria must be present in every case of the disease.
- 2. The bacteria must be isolated from the host with the disease and grown in pure culture.
- 3. The specific disease must be reproduced when a pure culture of the bacteria is inoculated into a healthy susceptible host.
- 4. The bacteria must be recoverable from the experimentally infected host.

In reality, scientists have failed to fulfill all of the postulates for any disease. In fact, Koch had to abandon the first postulate when he discovered asymptomatic carriers of cholera and, later, of typhoid fever.

Koch's postulates are for bacteria, not for viruses. In 1937, Thomas Rivers modified Koch's postulates in order to determine the infectious nature of viruses. Rivers' postulates are as follows:

- 1. The virus can be isolated from diseased hosts.
- 2. The virus can be cultivated in host cells.
- 3. Proof of filterability-the virus can be filtered from a medium that also contains bacteria.
- 4. The filtered virus can produce a comparable disease when the cultivated virus is used to infect experimental animals.
- 5. The virus can be re-isolated from the infected experimental animal.
- 6. A specific immune response to the virus can be detected.

As with bacteria, scientists have never proved Rivers' postulates for any so-called viral disease.

way, scientists are discovering that all of these "viruses" originate in our own tissues—they don't attack us from the outside.

CORONAVIRUS PROOF?

With this background, let's look in more detail at the methods described in a 2003 study titled, "Koch's Postulates Fulfilled for SARS Virus."4 First, the researchers took unpurified sediment from the snot of sick people and grew it in lung cancer cells until they got a sufficient quantity of cellular material to work with. Next, they centrifuged this mess-not even attempting to purify any virus from the mixture. Finally, they took this unholy mixture (of snot sediment, lung cancer cells and who-knows-what-else) and injected the cellular-debris-laden goop into two unfortunate monkeys. There was no control group (which could have been achieved by injecting saline or lung cancer cells or even the liquid from the centrifuged material into other monkeys for comparison). One of the injected monkeys got pneumonia, the other got a rash, and the researchers claimed this as the proof that a "coronavirus" can cause disease and that Koch's postulates have been satisfied.

"The Coronavirus Unveiled," an October 9 article appearing in the New York Times,9 continues to give the impression that researchers are working with a genuine isolated coronavirus, despite telling readers that "In February, as the new coronavirus swept across China and shut down entire cities. . . the best pictures anyone had managed to take were low-resolution images, in which the virus looked like a barely discernible smudge." How did the researchers isolate the virus? In the New York Times reporter's words, they "doused the viruses with chemicals to render them harmless. ... "In other words, they poisoned them. After they somehow "concentrated the virus-laden fluid from a quart down to a single drop" and flash-froze the drop, they saw, under microscope, structures they called "viruses"-most likely helpful exosomes responding to the poisonous chemicals.

We reiterate that this is not the proper way to isolate and characterize a virus. Proper isolation involves ultrafiltration and centrifuging—not dousing with chemicals and flash freezing—and requires the performance of various physical, biochemical and immunological analyses. Nonetheless, researchers concluded that the coronavirus's "intimately twisted genes commandeer our biochemistry" and "throw wrenches into our cellular factories, while [other viral proteins] build nurseries for making new viruses." This is highly imaginative horrormovie speculation, not science.

TESTING PATHOGENESIS

Leaving aside the fact that virologists never actually isolate and purify viruses—which they openly admit and which we have now explained—let's assume that the unpurified fluid they use does contain the relevant virus and, therefore, should be able to transmit infection. After "isolating" a virus, virologists have three "hosts" they can use in their attempts to prove that viruses cause illness: they can expose humans to the virus; they can expose animals to the virus; or they can use tissue cultures taken from various animal or human sources and expose the tissue cultures to the virus.

In the history of virology, most virologists have decided not to do their experiments on human subjects, as this is considered unethical. In the case of the SARS-CoV-2 virus, we know of no published study that has used humans as the test subjects. Virologists also admit that in the case of most viral infections, there are no studies available proving infection in animals. How a virus can infect and kill humans-but not animals-is left unexplained. Researchers get around this obvious biological conundrum by saying, "There are no animal models on which to test such-and-such a virus." In other words, "We know that the virus infects and kills humans even though we've never tested the virus on humans because that would be unethical. Therefore, we do our tests on animals, even though when we test animals, they don't get sick, because they are not proper 'hosts' for the virus. So, you'll just have to trust us."

In the case of SARS-CoV-2, we know of two animal model studies that used unpurified "virus," one in hamsters and one in mice. In the hamster study,¹⁰ researchers took the unpurified, lung-cancer-grown, centrifuged animal secretions and squirted them down the throats and into the lungs of a group of unfortunate

One of the injected monkeys got pneumonia, the other got a rash, and the researchers claimed this as the proof that a "coronavirus" can cause disease and that Koch's postulates have been satisfied.

hamsters. Some—but not all—of the hamsters got pneumonia, and some even died. Perplexingly, however, some of the hamsters didn't even get sick at all, which certainly doesn't square with the deadly contagious virus theory. Because there was no comparison group, we also have no idea what would have happened if the researchers had squirted plain lung cancer cells into the lungs of the hamsters; probably not anything good.

In the mouse study,¹¹ researchers infected both transgenic mice (that is, mice genetically programmed to get sick) and wild (normal) mice with unpurified virus. None of the wild mice exposed to the "virus" got sick. Of the transgenic mice, a statistically insignificant number either lost some fur luster or experienced weight loss. Thus, scientists have not been able to show that the Covid-19 "virus" causes harm to animals. The third method virologists use to prove infection and pathogenicity—the method they usually rely on—is to infect human and animal tissue with a "culture" of the virus to see what happens. As we have already pointed out, this inoculation of solutions reportedly containing the virus onto a variety of tissue cultures has never been shown to kill (lyse) the tissue, unless the tissue is first starved and poisoned.

Nevertheless, researchers used this third approach in a study entitled, "Severe Acute Respiratory Syndrome Coronavirus 2 from Patient with Coronavirus Disease, United States" published in the CDC's *Emerging Infectious Diseases* journal in June 2020.¹² The purpose of the study was for a group of about thirty-five virologists to describe the state of the science dealing with the isolation, purification and biological characteristics of the new SARS-CoV-2 virus, and to share this information with other scientists for their own research. A thorough and careful reading of this important paper reveals some shocking findings.

First, in the Methods section titled "Whole Genome Sequencing," we find that rather than having isolated the virus and sequencing the genome from end to end, they "designed 37 pairs of nested PCRs spanning the genome on the basis of the coronavirus reference sequence."¹² What this

MYXOMATOSIS

In response to our claim that so-called "viruses" are actually helpful exosomes—which do not cause disease but which the body makes in response to toxins, starvation and injury—we received a chiding email.

"As a young girl, living in rural Manitoba, Canada, my brother would harvest wild rabbits for our winter protein. When my brother was skinning the rabbits, he was extremely careful to check for bubbles under the skin and in the meat. If he found bubbles, he knew that the rabbits had a virus, due to overpopulation. We were not able to eat those rabbits that year. . . and would have to wait until nature had taken its course. My point being, there is no 5G or anything that would support your theory." The writer also describes tuberculosis (TB) among the northern Inuit, "which had taken hold, due to living in crowded conditions and of course eating the foods that the Europeans had introduced to them. Killing people off with fast foods and the like has brought us to where we are. This Covid virus is just the beginning of the major viruses that are just around the corner." The email's author also referred to very crowded and filthy living conditions in China, presumably in connection with diseases like cholera.

The rabbit disease to which she refers is called myxomatosis. The official view is that a virus carried in the saliva of fleas, mosquitoes and other insects causes the disease, with overcrowded rabbit populations being the most vulnerable to illness. Symptoms include swelling at the site of the "infection"—the insect bite—followed by fever, swelling in other areas (eyelids, face, base of ears, anogenital area), skin lesions, ocular and nasal discharge, respiratory distress, hypothermia, closure of the eyelids due to swelling, and death. These are some very miserable rabbits!

A typical study cited for a viral cause of myxomatosis is a paper published in the *British Journal of Experimental Pathology* in 1953, titled "The Pathogenesis of Infectious Myxomatosis; the Mechanism of Infection and the Immunological Response in the European Rabbit (*Oryctolagus cuniculus*)."¹⁹ The study reported that the researchers were able to make rabbits display the symptoms of myxomatosis (including death) by injecting them with "virulent myxomatosis." The recipe for this witches' brew included ground-up organs and heated blood of sick, flea-bitten rabbits, "passed through" other rabbits, which were then bled to death to obtain the serum and then grown on chicken embryos. Healthy rabbits injected—often several times—with this "virulent myxomatosis" usually do sicken and die.

The Wikipedia entry for "myxomatosis" includes a discussion of how to diagnose this so-called viral disease and hints at the problems involved.²⁰ According to the entry, a myxomatosis diagnosis usually follows a description of the "characteristic clinical appearance"—in other words, you can tell whether a rabbit has it by the symptoms. For further confirmation, however, researchers have turned to three other techniques: histopathology, electron microscopy and "virus isolation." As regards the first, Wikipedia states, "Histopathologic examination of affected skin typically shows undifferentiated mesenchymal cells within a matrix of mucin, inflammatory cells, and edema. Intracytoplasmic inclusions may be seen in the epidermis and in conjunctival epithelium." In other words, researchers do not actually see

means is that they actually looked at a mere thirty-seven primers out of the approximately thirty thousand base pairs claimed to be the genome of an intact virus.

Next, the virologists took these thirty-seven segments and put them into a computer program, which filled in the rest of the genome. This computer-generation step—called "whole genome sequencing"—constitutes scientific fraud of the highest order.

Here is an equivalency: A group of researchers claims to have found a unicorn because the group has a piece of a hoof, a hair from a tail and a sliver of a horn. After putting that information into a computer and programming it to re-create the unicorn, they claim that this computer re-creation is the real unicorn. Of course, they have never actually seen a unicorn, so they could not possibly have examined its genetic makeup to compare their samples with an actual unicorn's hair, hooves and horn. In the case of SARS-CoV-2, the authors of the June study report that they decided on the virus's real genome by "consensus"—in other words, by vote.¹² Because different computer programs will come up with different versions of the imaginary "unicorn" (virus), scientists have to come together as a group and decide which is the "real" imaginary unicorn. (By

the way, this is also how scientists characterized the measles "virus"—by consensus!)

The real blockbuster finding in this study comes later, however, a finding so shocking that it is hard to believe what we are reading. Summarizing their procedures in the paper's Results section, the authors explain that they "examined the capacity of SARS-CoV-2 to infect and replicate in several common primate and human cell lines, including human adenocarcinoma cells (A549), human liver cells (HUH7.0), and human embryonic kidney cells (HEK-293T), in addition to Vero E6 and Vero CCL81 cells." Their aim was to monitor "cytopathic effects" (CPEs)-meaning structural changes in host cells caused by "viral invasion"-where the infecting virus causes either lysis (breaking up) of the host cell or, if the cell dies without lysis, an inability to reproduce. Both of these

isolated virus—just messed-up cells. As for the second approach, Wikipedia acknowledges that electron microscopy also has shortcomings. Negative-stain electron microscopic examination may allow for "rapid visualization of poxviruses," but it "does not allow specific verification of virus species or variants."

The entry describes "virus isolation"—the third technique—as "the 'gold standard' against which other methods of virus detection are compared." This is true; virus isolation is the gold standard. Wikipedia continues, "Theoretically at least, a single viable virus present in a specimen can be grown in cultured cells, thus expanding it to produce enough material to permit further detailed characterization." Theoretically, yes, but in practice, pure virus introduced into animals or animal cells has little effect. Only "virulent virus" will appear to multiply and cause disease.

These challenges explain why scientists readily use molecular methods such as polymerase chain reaction (PCR) and real-time polymerase chain reaction assays, which Wikipedia credits with "faster and more accurate methods of myxoma virus identification." The site explains that "Real time PCR simplifies the diagnosis of myxomatosis by allowing nasal, ocular, or genital swabs to be quickly tested." Wikipedia does not mention the fact that PCR does not identify specific viruses, only snippets of genetic material. So, while this method may be "faster," it is certainly not "more accurate."

Even if scientists do isolate pure virus, they still need to show that this pure virus can make healthy rabbits sick. Yet we don't need an "infectious virus" to explain myxomatosis. During the 1950s, myxomatosis was intentionally introduced in Australia, France and Chile to control wild European rabbit populations. Brought to these countries in the eighteenth and nineteenth centuries to serve as a food source, and having few enemies, these rabbits bred like

... like rabbits... and soon overwhelmed the countryside, eating every green thing in sight. Did scientists kill them off by introducing pure isolated virus or even "virulent" virus into the rabbits? No; they introduced fleas.²¹ The fleas dutifully bit the rabbits and myxomatosis followed, killing off huge numbers. Blood-sucking insects like fleas, mosquitoes and ticks contain an enzyme called apyrase in their saliva, which prevents platelet aggregation (clotting) at the site of the bite. Apyrase keeps the blood liquid until the insect has had its fill. In animals that are breathing bad air in overcrowded warrens, are undernourished due to scarce food (including clot-promoting vitamin K in green fodder) and then are bitten many times, the enzyme can overwhelm blood-clotting capabilities and act as a poison. In short, fleas and mosquitoes are one of nature's ways to control overpopulation in various species of animals, and they do it by poisoning them.

Likewise, we don't need to call on "infectious viruses" to explain human diseases like TB in the Inuit or cholera among the Chinese. Nutrient deficiencies, crowding and filth are perfectly capable of causing suffering and death without the help of "viruses." Finally, are researchers seeing "viruses" in their swabs and isolates, or helpful exosomes which multiply in situations of stress and disease?

In plain English, this means they proved, on their terms, that this "new coronavirus" is not infectious to human beings. effects are said to occur due to CPEs. Yet, as the authors plainly state, though each cell line "was inoculated at high multiplicity of infection and examined 24 h post-infection," the investigators observed no CPE "in any of the cell lines except in Vero cells."¹²

So did this viral material with its "intimately twisted genes" commandeer the cellular biochemistry and throw wrenches into the cellular factories, while other viral proteins built nurseries for making new viruses? Nothing of the sort! In fact, the shocking thing about these findings is that, using their own methods, the virologists found that solutions claimed to contain SARS-CoV-2-as well as poisons, even in high amounts-were not infective to any of the three human tissue cultures they tested. In plain English, this means they proved, on their terms, that this "new coronavirus" is not infectious to human beings. It is infective only to Vero monkey kidney cells, and only when you add two potent drugs (gentamicin and amphotericin)-drugs known to be toxic to the kidneys-to the mix.

Interestingly, the authors don't mention this important fact in their conclusions. Only virologists who read the whole paper will find out that if they want to grow the virus, they needn't bother to use human cell lines. As you can read yourself, in all three human cell lines, no CPE (meaning no cell death, no infection) was observed. Only Vero monkey kidney cells were adversely affected-and remember, the material injected into the Vero cells contained kidney toxins. Basically, the study proved that the SARS-CoV-2 virus does not infect human tissue. Meanwhile, we have worldwide lockdowns predicated on the idea that something called "coronavirus" is highly infectious and causes disease.

SMOKE AND MIRRORS

Another study sent to us comes with the fancy title, "A Novel Chimpanzee Adenovirus Vector with Low Human Seroprevalence: Improved Systems for Vector Derivation and Comparative Immunogenicity."¹³ In the "Viruses and Cells" portion of the methods section, the researchers explain that they used "wild type chimpanzee adenovirus isolate Y25. . . originally obtained from William Hillis, John Hopkins University of Medicine [*sic*]." This virus was then "passaged in HEK293A cells (Invitrogen, Cat. R705-07) and purified by CsCl gradient ultracentrifugation." Finally, "Viral DNA was phenol extracted for genomic sequencing and cloning."

In other words, the researchers purchased some material (not properly isolated even though it is called an "isolate"), which they then "passaged" through human embryonic kidney cells (called HEK293A) and "purified" by CsCl gradient. This "purification" method separates DNA molecules (not viruses) after mixing them with cesium chloride (a heavy metal salt) and ethidium bromide (a mutagen that can affect DNA biological processes like DNA replication and transcription).¹⁴ This is the same smoke and mirrors we have seen before—not true separation and isolation but "surrogate" techniques that use various poisons.

Another study sent to us, a preprint published on June 23, 2020, is entitled, "SARS-CoV-2 Structure and Replication Characterized by in situ Cryo-electron Tomography" (cryo-ET).¹⁵ The authors begin with the creed of the faithful: "β-coronaviruses, including SARS-CoV-1 and Middle Eastern Respiratory Virus (MERS-CoV) are highly contagious pathogens that can cause severe lower respiratory infections. At the end of 2019, SARS-CoV-2 emerged in the city of Wuhan, China, likely through zoonotic transmission via a bat reservoir and a still unidentified intermediate host that subsequently led to a pandemic, accumulating to date to over 8 million cases and close to 500,000 deaths worldwide."

The article provides no references for the statement that the SARS virus is "highly contagious" but does contain a lot of fuzzy electron-microscope photographs of tissues and cells whose genetic material the authors determined using PCR tests—the equivalent of finding moats and turrets in a bunch of Lego pieces. The researchers did not isolate and purify the virus but instead used "monkey kidney derived VeroE6 cells" and "human pulmonary cell lines." In other words, they used cell lines grown in starved and poisoned cultures.

Later in the paper, the authors state that they got different "morphologies" of the virus depending on which cell line they used. In other words, the virus looks one way when grown on monkey kidney cells, but the same virus looks different when grown on lung cancer cells. That is like saying that if you plant some seeds in one garden, you will get tomatoes, but if you plant them in another garden, you will get turnips. What this observation tells us is that what the researchers found comes from the tissue, not the source "virus"; that is why the "viruses" are different.

In their concluding remarks, the authors state, "Our report provides the first *in situ* cryo-ET analysis of coronaviruses at high preservation levels." Wait a minute—this study was published on June 23, 2020. You mean they had no analyses of this virus before health officials called for universal lockdowns?

By the way, Stefano Scoglio, PhD, from Italy, has come to the same conclusions that we have. In a talk posted on social media entitled "THE INVENTED PANDEMIC, the lack of VIRUS ISOLATION and the IN-VALID COVID-19 test," Scoglio says, "At the center of the pandemic project stands the Covid swab test, which is based on the RT-PCR (Reverse Transcriptase-Polymerase Chain Reaction): a sample of organic material is taken from the throat, or more rarely from the broncho-alveolar fluid, of the individual, and then the presence of the SARS-Cov-2 virus in the sample is tested. This is done by using the same RT-PCR methodology used to originally 'isolate' the virus from patient zero. Thus, the Covid test depends essentially on the original isolation, or lack thereof, of the SARS-Cov-2 virus, the original PCR isolation of the virus constituting the golden standard necessary to validate any subsequent Covid test. The problems with the original virus isolation, and thus with the ensuing swab test, are many, and they all point to the truth that the SARS-Cov-2 virus has never been isolated and never tested for its pathogenicity."¹⁶

KOCH'S POSTULATES IRRELEVANT?

One argument we hear is that Koch's postulates are irrelevant, out of date, useless or even "wrong." If so, why do researchers claim to have satisfied Koch's postulates, not only for Covid-19 but for other diseases like HIV/AIDS and Lyme disease?

In 1997, for example, scientists announced that human immuno-

deficiency virus (HIV) fulfills Koch's postulates and hence is the proven cause of AIDS.17 The study involved taking blood from an HIV-positive person and injecting it into one chimpanzee. The researchers did not purify or isolate anything but just injected the blood into one chimpanzee. They then kept the chimp for ten years (and who knows what they fed it or anything about its conditions of confinement?). After ten years, the chimp developed an "opportunistic infection" (which could even have been a yeast infection) and tested "HIV-positive" (a test result that can occur in at least thirty-three other medical conditions). As with so many of the studies we have looked at, this study had no controls-such as injecting a different chimp with blood from someone with cancer or from a healthy person. And this was the proof that HIV causes AIDS! This is not science (but it keeps the grant money flowing).

With Lyme disease, the "proof" that Koch's postulates were fulfilled comes from a paper published in the *New England Journal of Medicine* in 1983 that reported detection of spirochetes (a family of common spiral-shaped bacteria) in the blood of two Lyme patients.¹⁸ The researchers then examined some ticks in the neighborhood and found the same spirochete. That's it—that was the "proof" of Koch's postulates.

As we have explained, finding bacteria at the site of an injury or in a person with a disease in no way constitutes proof of causation, any more than finding firemen at the site of a

DID SEMMELWEIS PROVE THE GERM THEORY?

We've had numerous objections to *The Contagion Myth* that invoke the story of Ignaz Semmelweis. Semmelweis discovered that the incidence of puerperal fever (also known as "childbed fever") could be drastically cut by the use of hand disinfection in obstetrical clinics. Puerperal fever was common in mid-19th-century hospitals and often fatal. Semmelweis proposed the practice of washing hands with chlorinated lime solutions in 1847 while working in Vienna General Hospital's First Obstetrical Clinic, where doctors' wards had three times the mortality of midwives' wards. Semmelweis's practice earned widespread acceptance only years after his death, when Louis Pasteur proposed the germ theory, and Joseph Lister, acting on the French microbiologist's research, practiced and operated using hygienic methods, with great success.

But does the reduction of infections after hand-washing prove the germ theory? At the Vienna General Hospital, medical students began their day in the morgue performing autopsies on the formaldehyde-soaked bodies of women who had died in childbirth. Then, without washing their hands, they delivered babies in the obstetrical wards. Their hands were coated in poisons—not only formaldehyde but also toxins such as ptomane produced by bacteria during the breakdown of tissue—and this was introduced into the birth canal and broken skin. Why blame bacteria—always on hand when living tissue is poisoned or decayed—when poison is more than adequate to cause illness and death?

fire means they caused the fire. Among other roles, bacteria act as scavengers in nature; they "eat" dead or diseased tissue. Maggots play the same role. If you see a dead dog crawling with maggots, it would be crazy to conclude that the maggots killed the dog, so why do scientists assume that the presence of "viruses" in a cell means that the cell has been attacked from the outside and taken over by hostile compounds?

If anyone can show us a properly done study in which the "coronavirus" from many sick people was isolated, purified, photographed and characterized—according to the consensus agreement of the 1973 Pasteur Institute guidelines—and then was shown to cause disease in healthy organisms (animals or humans), we will gladly withdraw the book. Meanwhile, we contend that the idea of a contagious coronavirus is a fairy tale.

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REFERENCES

- Centers for Disease Control and Prevention. CDC 2019-Novel Coronavirus (2019-nCoV) Real-Time RT-PCR Diagnostic Panel. For Emergency Use Only. Instructions for Use. Division of Viral Diseases. Effective: 07/13/2020. https://www.fda.gov/media/134922/download.
- Fauxlex. Bombshell: WHO coronavirus PCR test primer sequence is found in all human DNA. Piece of Mindful, April 6, 2020. https://pieceofmindful.com/2020/04/06/bombshellwho-coronavirus-pcr-test-primer-sequence-is-found-in-all-human-dna/.
- Corman VM, Landt O, Kaiser M et al. Detection of 2019 novel coronavirus (2019-nCoV) by real-time RT-PCR. *Euro Surveill*. 2020;25(3):2000045.
- Fouchier RAM, Kuiken T, Schutten M et al. Koch's postulates fulfilled for SARS virus. Nature. 2003;423(6937):240.
- Papadopulos-Eleopulos E, Turner VF, Papadimitriou JM, Causer D. Isolated facts about HIV – a reply. n.d. http://www.virusmyth.com/aids/hiv/epreplyek.htm.
- 6. Park WB, Kwon N-J, Choi S-J et al. Virus isolation from the first patient with SARS-CoV-2 in Korea. J Korean Med Sci. 2020;35(7):e84.
- Centers for Disease Control and Prevention. Preparation of viral transport medium. SOP#: DSR-052-05. https://www.edc.gov/coronavirus/2019-ncov/downloads/Viral-Transport-Medium.pdf.
- 8. Giannessi F, Aiello A, Franchi F, Percario ZA, Affabris E. The role of extracellular vesicles as allies of HIV, HCV and SARS viruses. *Viruses*. 2020;12(5):571.
- 9. Zimmer C. The coronavirus unveiled. *The New York Times*. October 9, 2020.
- Chan JFW, Zhang AJ, Yuan S et al. Simulation of the clinical and pathological manifestations of Coronavirus Disease 2019 (COVID-19) in golden Syrian hamster model: implications for disease pathogenesis and transmissibility. *Clin Infect Dis.* 2020 Mar 26;ciaa325.
- Bao L, Deng W, Huang B et al. The pathogenicity of SARS-CoV-2 in hACE2 transgenic mice. Nature. 2020;583(7818):830-833.
- 12. Harcourt J, Tamin A, Lu X et al. Severe acute respiratory syndrome coronavirus 2 from patient with coronavirus disease, United States. *Emerg Infect Dis.* 2020;26(6):1266-1273.
- Dicks MDJ, Spencer AJ, Edwards NJ et al. A novel chimpanzee adenovirus vector with low human seroprevalence: improved systems for vector derivation and comparative immunogenicity. *PLoS One*. 2012;7(7):e40385.
- 14. https://www.mun.ca/biology/scarr/CsCl_density-gradient_centrifugation.html.
- Klein S, Cortese M, Winter SL et al. SARS-CoV-2 structure and replication characterized by in situ cryo-electron tomography. *bioRxiv*, June 23, 2020. doi: https://doi. org/10.1101/2020.06.23.167064.
- https://www.facebook.com/notes/stefano-scoglio/the-invented-pandemic-the-lack-of-virusisolation-and-the-invalid-covid-19-test/10219132803013133/.
- 17. Novembre FJ, Saucier M, Anderson DC et al. Development of AIDS in a chimpanzee infected with human immunodeficiency virus type 1. *J Virol*. 1997;71(5):4086-4091.
- 18. Benach JL, Bosler EM, Hanrahan JP et al. Spirochetes isolated from the blood of two patients with Lyme disease. *N Engl J Med.* 1983;308(13):740-742.
- Fenner F, Woodroofe GM. The pathogenesis of infectious myxomatosis: the mechanism of infection and the immunological response in the European rabbit (*Oryctolagus cuniculus*). *Br J Exp Pathol.* 1953;34(4):400-411.
- 20. "Myxomatosis." https://en.wikipedia.org/wiki/Myxomatosis.
- 21. "Myxomatosis." https://www.sciencedirect.com/topics/neuroscience/myxomatosis.

HAVE WE PROVED THAT 5G CAUSES COVID-19?

Many have asked us to show causation studies proving that 5G radiation causes Covid-19. Of course, there aren't any. What we can say is the following:

- 1. There is no proof that Covid-19 is caused by a virus.
- 2. We therefore need to use epidemiological observation to generate other hypotheses to test.
- 3. We believe we have presented more than enough epidemiological evidence to test the theory that 5G and possibly other frequencies are causing Covid-19.
- 4. Tests dating back to the 1970s are consistent with our hypothesis; EMF millimeter waves create tissue damage, hypoxia, metabolic dysfunction and hyperinflammatory responses.
- 5. Therefore, our position is an urgent call for formal testing of the effects of 5G frequencies on human and animal health. The budget for the effort to study viral causation is in the many, many billions. We urge that at least one-tenth of this budget be shifted into testing EMF effects. These studies should and must be done by truly independent scientists with no connection to industry, government or international organizations. The design of these studies must be open to public comment and scrutiny. The results of these studies must be open to public inspection; the data and design must be matters of full public knowledge.

CORONAVIRUS COMES TO SMALL TOWNS AND RURAL AREAS

The spread of "coronavirus" cases in large cities has followed the rollout of 5G millimeter small-cell emitters in major cities across the world, first in Wuhan, China, then in Europe, then in New York and other major U.S. cities. Now the disease has spread to small towns and rural areas with outbreaks in the Southwest and Midwest. The small-cell devices emit millimeter electromagnetic frequencies (microwaves), which go only a short distance and cannot penetrate buildings, so they require close spacing and are installed only in areas of high population and dense buildout.

So how do we explain the increase in cases in more sparsely populated states like New Mexico, South Dakota and North Dakota? One explanation is simply that more people in these areas are getting tested and more testing translates into more "cases." But if reports of full hospitals are true, the increase in cases requires further explanation.

During the last few months, T-Mobile has installed its version of 5G on cell towers throughout the country. Called "5G Lite," this technology involves base stations that emit the 600 MHz frequency—which is a lower frequency than 4G, and much lower than the millimeter-wave 5G installed in cities. Theoretically, the 5G Lite should be less toxic to humans and animals than the regular millimeter-wave 5G. . . except for one inconvenient fact.

In 2011, researchers from Norway and Iran tested various electromagnetic frequencies (EMFs) for their effects on the brain, ostensibly to find ways of treating Alzheimer's disease. Citing a study in which mice subjected to EMFs exhibited "enhanced brain mitochondrial function caused by the induced electric field in the brain," they tested electromagnetic frequencies in the 100-1000 MHz range on a three-dimensional model (called a voxel model) of the brain. While not living tissue, the model contains material of the same size, density and frequency dependence as brain tissue. The researchers found that the average electric field intensity induced in the brain had two local maxima (high points) at 300 and 600 MHz. The highest specific absorption rate (SAR) occurred at 600 MHz, with white matter exhibiting a larger average SAR than grey matter. At 600 MHz, "The propagation of enhanced neuronal activities in a population of tens of thousands of neurons can give rise to the appearance of interesting spiking patterns, correlation and synchronization between clusters of neurons." The authors speculated that "Such a scenario may be desirable for an eventual treatment of Alzheimer's disease. . . " but the average person might hesitate before subjecting his brain to the "interesting spiking patterns" induced by the 600 MHz electromagnetic frequency. And unlike the millimeter waves used in cities, the 600 MHz frequency travels a longer distance—up to hundreds of miles—and can penetrate buildings.

These facts cry out for more research. Are those living near the 5G Lite cell towers more vulnerable than those living far away? Do the symptoms of Covid-19 in small towns and rural areas differ from those in large cities? Do "interesting spiking patterns" translate into seizures, convulsions and behavioral changes? Unfortunately, with the focus on the wily Covid-19 virus, researchers will not be looking into these important questions.

SOURCE: A Khaleghi and others. Exposure of the human brain to an electromagnetic plane wave in the 100-1000 MHz frequency range for potential treatment of neurodegenerative diseases. *IET Microw Antennas Propag* 2012, Vol 6, Iss 14, pp 1565-1572.



ABOVE: Small-cell millimeter wave base stations (emitters) in large cities.

RIGHT: T-Mobile 600 MHz base stations in small towns and rural areas.



The Chlorine Dioxide Controversy

By Stephanie Seneff, PhD

hlorine dioxide (CD) is a strong oxidizing agent that has found many applications in wastewater treatment and food disinfection. It is popular among campers as a way to disinfect water taken from a lake or stream prior to using it as drinking water. In recent years, it has become a popular treatment choice among alternative medicine specialists for various diseases and conditions, despite the fact that the mainstream medical establishment has come down very hard against it. To say that it is controversial would be an understatement.

A gas at room temperature, chlorine dioxide is highly soluble in water. It is made by mixing 28 percent sodium chlorite solution with an acid such as citric acid or hydrochloric acid. With its very simple molecular structure (one chlorine atom and two oxygen atoms), CD spontaneously breaks down into hypochlorite and superoxide. These two molecules are very commonly produced by living cells, particularly by immune cells in response to an infection. Jim Humble, originally trained as an aerospace engineer, is the person most responsible for bringing to light the many special benefits of CD. While using CD as a water-treatment solution during a gold mining expedition in South America, he made a serendipitous discovery. He observed that CD quickly restored health to victims of malaria, evidence of CD's apparent ability to strengthen the immune cell response to infection. Intrigued by this success story, he became completely committed to sharing his discovery with the world, and to exploring CD's benefits in treating other diseases. This became for him a lifetime obsession.

On the first page of one of his books on CD, Jim Humble "humbly" claims that CD is recommended as a treatment for a wide range of diseases. These include "cancer, diabetes, hepatitis A, B and C, Lyme disease, MRSA, multiple sclerosis, Parkinson's, Alzheimer's, HIV/AIDS, malaria, autism, infections of all kinds, arthritis, acid reflux, kidney or liver disease, aches and pains, allergies, urinary tract infections, digestive problems, high blood pressure, obesity, parasites, tumors and cysts, depression, sinus problems, eye disease, ear infections, dengue fever, skin problems, dental issues, problems with prostate (high PSA), erectile dysfunction, and many others."¹

Many of these diseases have been linked to glyphosate exposure, either because their rate is rising alarmingly in lockstep with the rise in glyphosate usage or because glycine dysfunction in particular proteins could cause the diseases. Glyphosate is the active ingredient in the herbicide Roundup, which conventional agriculture uses liberally on crops to control weeds and as a desiccant; as a result, it is a widespread contaminant in our food supply. I have written extensively on the idea that glyphosate, acting as a glycine analogue, might be getting inserted into proteins during protein synthesis by mistake in place of the coding amino acid glycine.^{2,3} If this is true, it would explain the stunning correlations that are found between glyphosate usage on core crops and the rise in prevalence of many of these debilitating diseases.4

CHLORINE DIOXIDE TREATS AUTISM Kerri Rivera is the mother of an autistic child. Like many other parents of autistic children, she was desperate to find a way to improve her child's autistic symptoms. She spent over a million dollars trying to find a treatment that would work to heal her son. She was sufficiently impressed with the improvements she witnessed following CD treatment that she decided to become actively involved in promoting the idea that it might be useful for autism.

Kerri has developed a protocol to treat autism that includes various nutritional supplements (such as chondroitin sulfate and vitamin D) and a modified ketogenic diet that eliminates gluten and casein. Although the protocol can also include a number of other components anti-parasitic medications, humic and fulvic acid, black seed oil, digestive enzymes, binders, thyroid supplements, ionic foot baths and hyperbaric oxygen—she believes that an essential aspect is the idea of frequent tiny doses of CD throughout the day.⁵

Kerri uses a questionnaire called the Autism Treatment Evaluation Checklist (ATEC) as a metric of progress.⁶ A high score means more severe autism, and a score under ten indicates that the child is not autistic. She has helped thousands of children. Over six hundred children have had their autism completely reversed through Kerri's protocol (meaning they achieved a score of under ten); she maintains that chlorine dioxide is the key to this success. Kerri refers to CD as an "inexpensive, broad spectrum, gentle anti-pathogenic." I am not aware of any other practitioners who have been able to achieve such dramatic results in treating autism. Some of Kerri's patients have parents who refuse to use chlorine dioxide due to the controversy surrounding it; none of those children have had their autism successfully reversed. Predictably, the mainstream media have tried hard to discredit her work, and Amazon even removed her book, Healing the Symptoms Known as Autism.⁷

My hunch is that CD is a miracle worker in part due to its ability to break down glyphosate nonenzymatically. If small doses are taken throughout the day, the hope is that natural mechanisms in place to detoxify hypochlorite (into which CD breaks down) can keep pace with exposure levels, such that it never causes sufficient harm to lead to permanent damage. Over six hundred children have had their autism completely reversed through Kerri's protocol; she maintains that chlorine dioxide is the key to this success. Both ozone and chlorine dioxide are powerful antimicrobial agents and, perhaps more importantly, both are able to break down glyphosate nonenzymatically.

OZONE AND CHLORINE DIOXIDE: POSSIBLE MECHANISMS

Paracelsus presciently wrote in the 1500s: "The body possesses the high art of wrecking but also restoring health. . . . Poison is in everything, and no thing is without poison. The dosage makes it either a poison or a remedy." This is an apt remark regarding chlorine dioxide therapy and also ozone therapy. Alternative medicine specialists find ozone therapy to be useful in treating infected wounds as well as a number of difficult diseases, such as circulatory disorders, geriatric conditions, macular degeneration, viral diseases, rheumatism and arthritis, cancer, severe acute respiratory syndrome (SARS) and AIDS.8 Ozone has been used in medicine for at least one hundred fifty years, but-probably because like chlorine dioxide it is inexpensive and not patentable-the medical establishment likes to play up the risks and play down the benefits.

Both ozone and chlorine dioxide are oxidizing agents, and, as such can cause oxidative damage. However, both are also powerful antimicrobial agents and perhaps more importantly, both are able to break down glyphosate nonenzymatically.^{9,10} Both are commonly used in water treatment plants as disinfectants. This is very fortunate from the standpoint of glyphosate contamination; I suspect that we would have had a much bigger problem with glyphosate exposure through the water supply if this was not the case. Chlorine dioxide can be purchased without prescription to be used for purifying lake water or river water for safe drinking while camping in the wilderness.

Glyphosate was likely an important contributor to the catastrophic failure of the water supply in Flint, Michigan, where dangerously high levels of lead were found in the drinking water.¹¹ This occurred during a period when the water supply was temporarily diverted to a river source, and the river ran through agricultural areas where glyphosate was routinely used on GMO crops. A water treatment plant that had been in disrepair was hastily brought back into action before it had been properly refurbished. I suspect this meant that significant levels of glyphosate was first patented as a pipe cleaning chemical due to its ability to strip metals from pipes. Although this has not been properly researched and therefore remains speculative, I believe it is possible that there were high levels of glyphosate in the water that ran through the lead pipes supplying water to Flint, and this caused much more of the lead to be stripped off of the pipes into the water.

The medical establishment maintains that chlorine dioxide—a simple, inexpensive, nonpatentable molecule—is a dangerous substance that should never be used in medicine. However, this is a gross exaggeration. Oxygen is highly reactive as well, but that does not mean that we advise people not to breathe.

CHLORINE vs CHLORINE DIOXIDE

Chlorine is superior to chlorine dioxide in breaking down glyphosate, but chlorine is definitely too toxic to take medicinally. Chlorine also reacts with organic matter to produce highly toxic chlorinated products, whereas chlorine dioxide does not. In fact, chlorine dioxide has very different chemical properties than pure chlorine. CD preferentially oxidizes sulfur in sulfur-containing molecules.¹² This could be highly beneficial in overcoming deficiencies in sulfite oxidase, due either to genetic defects or toxic chemical exposures such as glyphosate.

Hypochlorite (one of CD's breakdown products) reacts with the sulfur-containing amino acid taurine to produce taurine chloramine. Taurine is generally considered to be inert, but taurine chloramine is capable of getting oxidized to sulfate, particularly with the help of gut microbes. Thus, it is possible that CD enhances the bioavailability of sulfate to the body through this mechanism. I have written several papers arguing that sulfate deficiency is a common problem associated with many diseases, most notably with autism. I have proposed that taurine, which is stored in large quantities in the brain, heart and liver, may be serving as a buffer for supplying sulfate, mediated by hypochlorite, when sulfate levels drop too low.13

Both hypochlorite and superoxide (another CD breakdown product) are common oxidizing agents naturally produced by immune cells in their fight against pathogens. Thus CD enables the immune cells to be more effective in fighting pathogens in the gut. CD may also be a source of chloride to help the stomach maintain an acid pH. The parietal cells in the stomach release hydrochloric acid through chloride channels to maintain acidity. Insufficient stomach acid results in impaired ability to metabolize proteins, leading to autoimmune disease.

CHLORINE DIOXIDE vs ANTIPSYCHOTICS

Risperidone (brand name Risperdal) is an atypical antipsychotic drug prescribed to treat aggressiveness and irritability associated with schizophrenia and mania associated with bipolar disorder. In 2006, the drug was approved for use to treat similar symptoms associated with autism. Its manufacturer, Johnson & Johnson, is now facing over thirteen thousand lawsuits based on severe side effects of Risperdal.

Most striking is its ability to induce the growth of breasts in males (gynecomastia), but it also causes an increased risk to hyperglycemia (high blood sugar) and diabetes, seizures and tardive dyskinesia (uncontrollable spontaneous movements), among other unwanted effects. Elderly patients are at increased risk to cerebrovascular events, stroke and death. A lawsuit in Philadelphia led to a jury decision to award the plaintiff, Nicholas Murray, eight billion dollars, including punitive damages.¹⁴ Nicholas has autism and was originally prescribed Risperdal to treat sleep disorder in 2003.

Risperidone and aripiprazole (Abilify), both atypical antipsychotics, are the only drugs approved for treating the symptoms of autism. I downloaded data available from the FDA Adverse Event Reporting System (FAERS) website, just for the year 2017, to compare side effects for these antipsychotic drugs and for chlorine dioxide. In 2017 alone, there were 22,759 events where risperidone was listed as the primary drug responsible for the reactions, and another 10,736 events where Abilify was listed as primary. There were only three cases where chlorine dioxide was mentioned at all as one of the drugs being taken, and it was never listed as primary.

I gathered more detailed information for risperidone, focusing on the fourth quarter of 2017. In just three months, from October through December of 2017, there were 3,216 cases where gynecomastia was reported; 450 cases reporting weight gain; 75 cases of galactorrhoea (excessive or inappropriate production of milk); 69 attempted suicides, of which 29 were successful; 37 cases with fatigue; 20 involving cardiac or respiratory arrest; 20 reporting tachycardia; 19 cases of neuroleptic malignant syndrome (a lifethreatening reaction); 19 cases of acute kidney injury; and 15 cases of coma.

These antipsychotic drugs are being widely prescribed to autistic children. A study published in 2013, involving over thirty-three thousand children with autism, found that 64 percent of them had been prescribed at least one psychotropic medication, with 35 percent taking more than one psych drug concurrently.¹⁵ Clearly, the hype in the media arguing against chlorine dioxide is way out of line in the face of these adverse reactions to pharmaceutical drugs commonly prescribed for autism.

SUMMARY

CD is a powerful oxidizing agent. This can be beneficial, not only for keeping pathogens in check but also for breaking down toxic chemicals and for oxidizing sulfur to produce sulfate. Clinicians treating children with autism have found that CD has an amazing ability to reverse autism. I know of no other medicine that can claim such an extraordinary effect. It makes sense to me that it would be useful for autism, because I have identified sulfate deficiency and glyphosate toxicity, as well as gut dysbiosis due to an overgrowth of pathogens, as all being features of autism.

An important thing to keep in mind is that it is necessary to administer small doses at frequent intervals throughout the day. In this way, the dose is never high enough to cause oxidative damage because antioxidant defenses can keep up with production of reactive molecules. CD's ability to treat malaria suggests that it might also be of benefit in treating Covid-19. It is intriguing that hydroxychloroquine, another chlorine-containing molecule that is commonly used to treat malaria, has shown promise in treating Covid-19.¹⁶

Clearly, the hype in the media arguing against chlorine dioxide is way out of line in the face of adverse reactions to drugs commonly prescribed for autism.

Dr. Stephanie Seneff is a senior research scientist at MIT's Computer Science and Artificial Intelligence Laboratory. She has a BS degree from MIT in biology and a PhD from MIT in electrical engineering and computer science. Her recent interests have focused on the role of toxic chemicals and micronutrient deficiencies in health and disease, with a special emphasis on glyphosate and Roundup. She has authored over three dozen peer-reviewed journal papers in recent years on these topics.

REFERENCES

- 1. Humble J, Lloyd C. *MMS Health Recovery Guidebook* (first edition). James V. Humble; 2016.
- Samsel A, Seneff S. Glyphosate, pathways to modern diseases V: Amino acid analogue of glycine in diverse proteins. *Journal of Biological Physics and Chemistry*. 2016;16:9-46.
- 3. Seneff S, Morley WA, Hadden MJ, Michener MC. Does glyphosate acting as a glycine analogue contribute to ALS? *Journal of Bioinformatics, Proteomics and Imaging Analysis.* 2016;2(3):1-21.
- Swanson N, Leu A, Abrahamson J, Wallet B. Genetically engineered crops, glyphosate and the deterioration of health in the United States of America. *Journal of Organic Systems*. 2014;9:6-37.
- Thomas JP. Autism can be cured How to use the chlorine dioxide protocol to recover broken lives. Retrieved November 11, 2019 from https://healthimpactnews. com/2019/autism-can-be-cured-how-to-use-the-chlorine-dioxide-protocol-torecover-broken-lives/.
- 6. Rimland B, Edelson SM. Autism Treatment Evaluation Checklist (ATEC). Autism Research Institute. Retrieved October 20, 2019 from https://www.autism.org/autism-treatment-evaluation-checklist/.
- 7. Rivera K, McDaniel K, Bender D, Humble JV, Kalcker A, Ruggiero M, Sands RL. *Healing the Symptoms Known as Autism* (second edition). AutismO2l; 2014.
- Elvis AM, Ekta JS. Ozone therapy: a clinical review. JNat Sci Biol Med. 2011;2(1):66-70.

- Assalin MR, De Moraes SG, Queiroz SCN, Ferracini VL, Duran N. Studies on degradation of glyphosate by several oxidative chemical processes: ozonation, photolysis and heterogeneous photocatalysis. J Environ Sci Health B. 2010;45(1):89-94.
- Mehrsheikh A, Bleeke M, Brosillon S, Laplanche A, Roche P. Investigation of the mechanism of chlorination of glyphosate and glycine in water. *Water Res.* 2006;40(16):3003-3014.
- 11. Teller M. Lead in the water: Flint's cautionary tale. *Wise Traditions*, Spring 2016;17(2).
- 12. Kutchin AV, Rubtsova SA, Lezina OM et al. Studies on oxidative transformations of thiols, sulfides and alcohols in the presence of chlorine dioxide. *Pure and Applied Chemistry*. 2017;89(10).
- Seneff S, Lauritzen A, Davidson RM, Lentz-Marino L. Is encephalopathy a mechanism to renew sulfate in autism? *Entropy*. 2013;15:372-406.
- Mundy J. Has J&J lost its way? LawyersandSettlements.com. October 25, 2019. Retrieved October 30, 2019 from https://www.lawyersandsettlements.com/ legal-news/risperdal/has-j-and-j-lost-way-23155. html.
- 15. Spencer D, Marshall J, Post B et al. Psychotropic medication use and polypharmacy in children with autism spectrum disorders. *Pediatrics*. 2013;132(5):833-840.
- Risch HA. The key to defeating COVID-19 already exists. We need to start using it. Newsweek, July 23, 2020. Retrieved September 25, 2020 from https://www.newsweek.com/key-defeatingcovid-19-already-exists-we-need-start-using-it-opinion-1519535.

HUGH LOVEL (1947 - 2020), AUTHOR, FARMER, INSPIRING BIODYNAMIC INNOVATOR

Hugh Mark Sten Lovel of Blairsville, Georgia, passed away peacefully at age 73 on August 25, 2020, surrounded by his wife, loving family and lifetime friends Bill Miller and Catherine Monet at Birds Nest Retreat on Dockery Road in Australia.

Hugh was a dedicated anthroposophist who studied the teachings of Rudolf Steiner, the Austrian philosopher and founder of the biodynamic approach to agriculture. Hugh moved to Union County, Georgia, in 1976 where he established a small biodynamic farm that became the first CSA (community-supported agriculture) in the Southeastern U.S. CSA members at Hugh's farm received a weekly box of fresh organic vegetables, corn meal, cheeses, homemade hot sauce, dill pickles and Hugh's famous garlic pigtails sauce.

Hugh co-founded the Southeast Biodynamic Conference in the late 1980s with mentors Harvey Lilse and Hugh Courtney and his longtime friend and collaborator, Jeff Poppen of Long Hungry Creek Farm in Red Boiling Springs, Tennessee. This annual on-farm conference was held for twelve years in Blairsville before migrating to Tennessee. The 32nd annual conference took place in October 2019 at Jeff Poppen's farm. Hugh was on

the program every year as a featured speaker.

A natural-born teacher, Hugh was the author of two books: A Biodynamic Farm for Growing Wholesome Food (1994) and Quantum Agriculture: Biodynamics and Beyond (2014), as well as numerous articles published in Acres USA, Acres Australia, the Biodynamic Journal, and other periodicals. Hugh migrated to Australia in 2005 to teach and consult.

Hugh and his wife Shabari Bird established Quantum Agriculture in 2009 and became worldwide travelers teaching at conferences, workshops and field days, and conducting on-farm consultations in many countries. Hugh was internationally known for developing the theory and practice of quantum agriculture. Friends are welcome to comment on the Facebook group Hugh Lovel Tribute. facebook.com/ groups/744706289423320/



On the Prejudice Against Coconut in the Land of Ecuadorian Encocados (Coconut Stews)

By Pilar Egüez Guevara, PhD

In an era of trendy diets and "superfoods" from around the world, it is hard to believe that those foods could be inaccessible or even rejected by the people who live near or who grow them. Here is a summary of the complex story of why people in the tropical regions of Ecuador, where coconut is an ancestral food, have a prejudice against coconut, why they have less access to it and what you can do to help make a change.

Esmeraldas (literally "emeralds") is known in the South American country of Ecuador as the "green province," alluding to the lush vegetation of its humid tropical forests. Located on Ecuador's northern Pacific Coast and bordering Colombia, Esmeraldas is a region populated mostly by people of African descent. For working class *mestizos* (mixed-race people) from major cities in the highlands, Esmeraldas has always been the number-one vacation destination. Esmeraldas' beaches are a mere six- to seven-hour drive from Quito, the capital city. The coastal area highlights the regional cuisine of Esmeraldas, particularly seafood, which is also a major attraction for visiting tourists! Older men and women testify to having eaten coconut in almost every single meal of their day. Ecuador has a rich and varied cuisine due to its diverse ecological geography. Whereas a high-altitude tuber like the potato makes the food of the highlands distinctive, coconut is the essential ingredient in Esmeraldan cuisine. *Encocado* (literally "coconut-ed"), the iconic Esmeraldan seafood or meat stew cooked in coconut sauce, sparks the imagination and ignites the taste buds of Ecuadorians. For black Esmeraldans, *encocado* is also a potent symbol of their identity—an essential part of their cultural heritage as an ethnic and regionally distinctive people.

ONCE UPON A TIME, EVERYTHING *ENCOCADO*

Fifty years ago, coconut palms grew on rural farms and in every backyard. In the old days, coconut was ubiquitous in Esmeraldans' everyday life—but no longer.

Back then, Esmeraldans made everything encocado. Older men and women testify to having eaten coconut in almost every single meal of their day. A typical day could include hot chocolate made with freshly pressed coconut milk and local cocoa bean paste for breakfast, guanta¹ or fish encocado for lunch and vegetable soup in coconut milk for dinner. Coconut meat pieces with grated panela (evaporated cane juice) made a snack,

and *masato*—a smoothie made from ripe sweet plantain, coconut milk and cinnamon—was a refreshing, energizing drink at any time of day. Boiling hand-grated and pressed coconut milk with panela and spices made *manjar de coco*, a thick, sweet coconut treat. Grated coconut and *panela* are the only two ingredients in a still popular traditional dessert called *cocadas*. Homemade coconut oil was also commonly used as a skin and hair conditioner, and medicinally as a laxative.

Habits changed when new industrialized foods were introduced into the diet of Ecuadorians, particularly since the 1970s. However, the dramatic shift away from coconut in Esmeraldans' diet is likely primarily due to the sharp rise in prices. In the early 2000s, one coconut cost as little as ten to twenty-five cents, but today they sell for as much as USD \$1.50 to \$2.50 in times of scarcity.

THE RISE OF THE COCONUT TRADE

How were coconuts made scarce in the local markets of one of the major coconut-producing areas of Ecuador? Over the past few decades, plagues have decimated coconut palms, although that's not the whole reason for the price hike. In addition, Ecuador's major cities—Quito, Guayaquil and Cuenca—have become huge markets for coconuts from Esmeraldas for use in the growing food industry, and particularly as an ingredient in pastry products and granola. More recently, government programs have included granola (with grated coconut from Esmeraldas)

as part of school breakfasts in public schools throughout the country. At one point, demand for coconuts in Ecuador's urban-centered food industry increased to the point of sustained importation of coconut, especially from Peru, Mexico, Colombia, the Philippines and the United States. In the early 1990s, Ecuador began exporting coconut, sending most of its produce to Spain, the United States, Colombia and Argentina.

The high coconut traffic across local borders domestically explains how coconuts from Esmeraldas arrive on the plates of schoolchildren in Ecuador's cold, dry highland towns and cities; or make their way to passersby in cool-weather Quito who buy coconut juice from the street carts of Esmeraldan vendors; or even show up in the granola and yogurt that healthconscious, middle-class, *mestizo* and white urban consumers have for breakfast. Internationally, Ecuador's coconut trade now provides additives widely used in cosmetics and a grand assortment of health food supplements in the United States and Europe.



Doña Matilde Angulo taught me how to make *masato* from scratch at her home in the neighborhood of La Tolita, in Esmeraldas. (Photo by the author.)

The boost in Ecuador's coconut trade, and its corresponding toll on affordability and accessibility in Esmeraldas, explains why Esmeraldans today may substitute pasteurized commercial milk for the milk from expensive fresh grated coconuts when making their encocados. This is also why the traditional manjar de coco or pan de coco (coconut bread) is now made with plain cow's milk instead of coconut. Increased trade also helps explain why entrepreneurs making artisanal coconut oil, like Don Julio Prado, were forced out of business after the rise in coconut prices and the introduction of commercial brands of fake, coconut-scented mineral oil. In short, the boom in local and global coconut demand accounts for why Esmeraldans of today eat coconut foods only a few times a week, and in some extreme cases, only once a year.

THE RISE OF BAD MEDICAL ADVICE

The coconut trade and the higher cost of coconuts are important factors, but they are not the whole story. Coconuts still grow in people's backyards in Esmeraldas, and they are freely available to those who own and work in coconut palm plantations throughout the region. Could it be that Esmeraldans are purposefully not eating them? It turns out that medical doctors in Esmeraldas and Ecuador advise their patients *against* consuming coconuts, invoking long-discredited beliefs about the supposed adverse effects of saturated fat on heart health.² With

regard to dietary recommendations, Ecuadorian doctors get their updates from the American Heart Association and often point to saturated fat to explain the rising rates of obesity and hypertension affecting people in Ecuador.

Sadly, a public health-driven food labeling campaign based on the anti-saturated-fat dogma is underway in Ecuador. The "stop-light" food labels required on all packaged products are intended to warn consumers against eating foods high in fat, salt and sugar. Medical authorities particularly target traditional fats like butter, lard and coconut, and vilify Ecuadorian traditional dishes that contain these fats. As a result, a culture of guilt has taken hold when eating traditional foods in Ecuador. In Esmeraldas, it is common to hear doctors blame health problems on people's preferences for traditional coconut dishes. Since coconut is a key ingredient in the local cuisine, these narratives also easily acquire racist undertones-that is, "black people prefer coconut-based foods; therefore, they are to blame for their own health problems." It is hard to find the logic in this reasoning, however, given that coconut consumption is at an alltime low in Esmeraldas due in large part to the increase in prices and the medical campaigns launched against it.

RECLAIMING HEALTH AND CULTURE

People in Esmeraldas, more than anywhere else in Ecuador, have the right to know the truth

Medical authorities particularly target traditional fats like butter, lard and coconut, and vilify Ecuadorian traditional dishes that contain these fats.

It's been twenty years since Don Julio Prado, a former entrepreneur of coconut oil in the town of Atacames in Esmeraldas, made coconut oil. He demonstrated the process upon my special request for the shooting of the film *Raspando coco*. (Photos by the author.)





Millions of people across the tropical coconutgrowing regions of the world recognize coconuts as an integral part of their regional culinary traditions, everyday culture and history.

about the value of their heritage foods, including coconut. With access to knowledge, they can reclaim their cultural heritage and reap its health benefits. In 2002, I co-founded the independent education initiative "Foods that Heal" (*Comidas que curan*) to document and promote the value of traditional foods through research and film.³ Using film and ethnography, *Comidas que curan* seeks to document and teach about food traditions and transformations in Ecuador and Latin America.

Raspando coco ("Scraping Coconuts") is the latest documentary we released in 2018 based on the research findings described above, which we gathered and filmed between 2012 and 2017.4 (The film is in Spanish but available with English or Japanese subtitles.) Raspando coco, thirty-one minutes long, covers current scientific findings and revisits the history of local foods in Esmeraldas as told and remembered by the bearers of these food traditions. In 2018, I brought this award-winning film to the homes of each one of my interviewees in Esmeraldas. It was certainly empowering for them to see themselves positively represented in the film, and through their own memories to rediscover and embrace their culinary traditions with the added benefits to their health and well-being.

As in Esmeraldas, millions of people across the tropical coconut-growing regions of the world recognize coconuts as an integral part of their regional culinary traditions, everyday culture and history. *Raspando coco* tells a story that is relatable to people of color across the globe people who have been unjustifiably scared away from their own food and medicinal heritage due to obsolete beliefs about saturated fat exported decades ago from the United States.

Pilar Egüez Guevara, PhD, is the director and co-founder of Comidas que curan and the director and producer of Raspando coco. This piece was originally published (with edits and comments from Lisa Knisely) on the RENDER Feminist Food & Culture Quarterly blog and reposted on Pilar's blog (quinuaqueens.wordpress.com). Individuals interested in supporting this work can sign up for the newsletter, order the Raspando coco DVD (licensed for home/ personal viewing or education use) or request an online community or school screening and *Q&A with the director-producer at* pilareguez. wixsite.com/raspandococo. Follow Pilar and Comidas que curan on YouTube (youtube.com/ channel/UCcEFwt0cKSiMT-PvvenhFcg), Instagram (@raspando coco) or Facebook (@ comidasquecuran.com.ec).

REFERENCES

- "Lowland paca" (called guanta in Ecuador). Wikipedia. https://en.wikipedia.org/wiki/Lowland_paca.
- Taubes, G. What if it's all been a big fat lie? *The New York Times Magazine*. July 7, 2002. https://www. nytimes.com/2002/07/07/magazine/what-if-it-s-allbeen-a-big-fat-lie.html.
- http://comidasquecuran.com.ec/english-foods-thatheal/.
- 4. https://pilareguez.wixsite.com/raspandococo.



The recipes for *masato*—a traditional Esmeraldan drink made with ripe sweet plantain, coconut milk and cinnamon—and other traditional foods from Esmeraldas are shown in the documentary *Raspando coco*. (Photo by the author.)
MASATO

Recipe by Doña Matilde Angulo, Esmeraldas, Ecuador

Ingredients:

10 ripe plantains 4 to 5 pieces of cinnamon bark Coconut milk (to taste)

Instructions:

- 1. Wash and peel the plantains and cut them into pieces.
- 2. Bring water to a boil and add the cinnamon. Simmer until the water turns pink.
- 3. Add the plantain pieces and cook until soft. Let cool.
- 4. Remove the cinnamon pieces. Add the plantains with the cinnamon water to a mixer or blender. Add coconut milk to taste.
- 5. Mix well and serve cold.

FISH COCONUT STEW (ENCOCADO) Recipe by Centro Martín Pescador, Quito, Ecuador

Ingredients:

- 6 fish filets (such as tuna, tilapia, sea bass)
- 3 large, ripe coconuts
- 1 red onion, minced
- 1 green pepper, minced
- 1/2 tomato, cut in square pieces
- 1-3 garlic cloves, crushed

3 limes

Achiote powder (annatto) or paprika

Salt, pepper and cumin to taste

Long coriander (chillangua), basil leaves, big leaf oregano to taste

Instructions:

- Marinate the fish filets for 30 minutes with lime juice, salt and cumin. Clean the coconut, cut it and grate it. Extract the first juice of the coconut by mixing 3 cups of lukewarm water with the grated coconut, squeezing well with the hands through a strainer. Put aside in a bowl. Then extract the second juice of the coconut (less concentrated) using 5 cups of water to squeeze the juice out. (A mixer can also be used, and then a strainer to separate the juice from the fiber). Put aside in a different bowl.
- 2. Prepare the seasoning in a medium-sized pot, by adding the minced red onion, green pepper, crushed garlic and annatto with a little oil. Stir for 3 minutes and then add the tomato cut in square pieces. Add the second juice of the coconut to this seasoning.
- 3. Immediately add the fish and let cook for 5 minutes. Add the first juice of the coconut. Season with salt, pepper and cumin to taste. Turn filets and cook on low until fully cooked. Then add the secret of the Esmeraldan cuisine's taste which are the coastal herbs, long cilantro (chillangua), basil (chirarán), and big leaf oregano. Serve with rice.

Reading Between the Lines

By Merinda Teller

Some Solutions for the Problem of Infant Constipation

With the birth of a child, new parents embark on a steep learning curve. One of the first bodily mysteries that inexperienced parents must rapidly learn to decode involves the baby's elimination patterns. Most crucially, parents want to know whether their baby is peeing and pooping normally.

Unfortunately, it appears that constipation in the young is not only frequent but often begins in the first year of life.¹ One study estimates that up to half of all infants may experience gastrointestinal symptoms (including colic and "spitting up" as well as constipation).² Systematic reviews assessing constipation prevalence worldwide have estimated that the affliction affects from 1 to 31 percent of infants and toddlers,³ and anywhere from 0.5 to 87 percent of children and adolescents.⁴

Pediatric constipation may be common, but it is not innocuous. Researchers observe that while it can start out as a "simple complaint," constipation that is ignored can lead to fecal impaction and eventually even affect a child's growth and development.⁵

Constipation is also highly uncomfortable for children, "characterized by infrequent bowel movements, hard and/or large stools, painful defecation, sometimes in combination with fecal incontinence, and. . . often accompanied by abdominal pain."⁶ Indicators of constipation in babies include straining to pass stools, painful stools, and large, hard stools accompanied by straining or pain.⁷

The vast majority of published studies on pediatric constipation focus on the condition known as "functional" (or "idiopathic") constipation so-called due to the absence of any structural or biochemical explanation for its occurrence.⁶ Most researchers remain at a loss to say why this form of mystery constipation is so widespread in the young.

BREAST VERSUS BOTTLE: WHAT IS "NORMAL"?

In infants, researchers quite reasonably point out that understanding "abnormal defecation" and constipation requires first knowing what normal pooping looks like.⁸ Ascertaining what is "normal," in turn, requires knowing what the baby is eating, because breastfed and formulafed infants do not have the same stools or pooping patterns. In fact, as parenting websites put it, "The stool of [a] formula-fed baby is totally different from the stool of [a] breastfed baby."⁹

Thanks to the digestibility and "natural laxative" properties of breast milk,¹⁰ constipation in breastfed babies seems to be rare, at least initially. Infants who are exclusively breastfed in the first few months of life produce stools that are more frequent, softer and of a different color and smell compared to the stools of conventionally formula-fed babies (see Table 1).¹¹ A Dutch study published in 2014 found that the feeding approach (breast, formula or a mixture of the two) could explain up to 24 percent of the observed differences in how often babies defecate.⁸

The Dutch researchers also proposed that "green-coloured stools in standard formula-fed infants. . . be considered normal"; however, some medical websites flag green stools as a possible sign of slow digestion, food allergies, food intolerances or other problems.¹² This should come as no surprise to readers of *Wise Traditions*, as digestive difficulties and allergies are well-known problems associated with commercial soy formula—an "abnormal" baby food if ever there was one. Typical soy formula not only contains high levels of unhealthy soy phytoestrogens but

| | BREASTFED | FORMULA-FED |
|-----------|----------------------|---------------------------------------|
| FREQUENCY | 3+ times per day | 1+ times per day |
| TEXTURE | Soft, runny, "seedy" | Firmer, bulkier, like "peanut butter" |
| COLOR | Yellow/mustardy | Brown, orange or green |
| ODOR | Mild-smelling | Smellier (more like adult poo) |

TABLE 1. Stool characteristics of breastfed and formula-fed infants in the first few months of life

may also feature fluoride, aluminum, cadmium, glyphosate residues, hexane-extracted soybean oil and other toxic ingredients.¹³ In addition to digestive distress, researchers have linked soy formula to seizures, autistic behavior and other neurological symptoms.¹⁴

LIKE MOTHER, LIKE BABY?

A study conducted in rural Turkey, published in late 2019, found that half the number of infants whose first food was breast milk suffered from constipation compared to nonbreastfed infants (15.4 percent versus 32.1 percent).⁵ Twenty-one percent of the constipated infants defecated twice or fewer times per week, and 5 percent "had stools that were like goat droppings." Interestingly, sales of breast milk "substitutes" have skyrocketed in Turkey in recent years, growing by 72 percent between 2008 and 2013.¹⁵

In addition to a decline in breastfeeding, factors that increased the Turkish infants' risk of constipation included starting on supplementary foods before the age of six months, being mildly or fully obese (a likely proxy for a diet high in processed junk foods) and having a mother who also suffered from constipation.⁵ In fact, fully half of the constipated infants had constipated mothers, and the presence of constipation in the mother was statistically significant at the p<0.0001 level, reflecting a 4.7-fold increased risk.

Dr. Natasha Campbell-McBride, author of *Gut and Psychology Syndrome*,¹⁶ observes that constipation is "always a sign of deficient gut flora." In her estimation, the majority of babies in the modern world have an imbalanced gut microbiome. Thus the link between maternal

and infant constipation demonstrated by the Turkish study is an important warning to mothers-to-be to get their microbial house in order. Unfortunately, factors such as industrialized foods, birth control pills, antibiotics and glyphosate can make this extremely challenging. A new study from Finland (in the *Journal of Hazardous Materials*, no less) reports that 54 percent "of around 101 species of bacteria commonly found in our guts could be damaged or killed if exposed to glyphosate in high enough quantities."^{17,18}

Fully half

constipated

infants had

constipated

mothers.

of the

HOMEMADE FORMULA: TROUBLESHOOTING CONSTIPATION

When breastfeeding is not possible (for whatever reason), feeding baby one of the two types of nutrient-dense homemade formulas recommended by the Weston A. Price Foundation is by far the best option (see sidebar below). Many families report considerable success giving their young ones either the raw milk formula or the liver-based formula.¹⁹

However, some parents who turn to the raw milk formula report that their babies become constipated. For a constipated infant, the first explanation to consider is dehydration. Campbell-McBride instructs parents to carefully monitor baby's urine, making sure it is pale yellow; dark yellow (or even brown) urine is a sure sign of dehydration. In addition, the baby should be producing normal amounts of urine—as indicated by a diaper that is full of urine and requires changing after a feeding. The AskDrSears website describes the colon as the body's "fluid regulator" and points out that dehydration can cause the stools to harden and become "water-deprived."²⁰

HOMEMADE INFANT FORMULA

Breast milk from a healthy mother is usually the best food for baby. However, the quality of a mother's milk depends on her own diet. Lactating women's diets should include plentiful animal products and fats, pastured eggs, liver, bone broths, high-quality raw dairy and cod liver oil.

In situations where breastfeeding is difficult or impossible, or if baby is not gaining weight on breast milk or seems always hungry, the Weston A. Price Foundation recommends homemade rather than commercial formula. The foundation's website provides detailed recipes and instructions for making raw milk baby formula and liver-based formula (westonaprice.org/health-topics/childrens-health/formula-homemade-baby-formula/). Both recipes incorporate a variety of nutrient-dense ingredients, including whole-fat raw milk from pastured cows (for the raw milk formula) and liver and homemade broth (for the liver-based formula), along with cod liver oil, coconut oil, *Bifidobacterium infantis* and other components designed to mimic the nutrient profile of mother's milk as closely as possible.

The fact that Miralax has never been approved by the FDA for pediatric use has not stopped health care providers from promoting it as the "go-to" remedy for constipated children.

If the baby is dehydrated, Campbell-Mc-Bride recommends adding more water to the baby's milk formula. In situations where the baby is producing only small amounts of very dark urine, the formula initially can be diluted almost by half; after the urine normalizes, the parents can then experiment with different amounts of water to find the correct ratio for their baby. (She notes that every child has different requirements for water, depending on factors such as metabolism, activity level and weather.)

Sometimes, dehydration is not the triggering factor for infant constipation. Some babies on the raw milk formula find high levels of dairy protein constipating. (Formula based on raw goat milk is more likely to be constipating that formula based on raw cow's milk.) In these cases, Campbell-McBride recommends switching the infant to the liver-based formula and when the baby is old enough (no earlier than four months of age), carefully starting to introduce appropriate solid foods (see "Avoid the Rice Cereal").

Large amounts of high-protein dairy—such as whey, yogurt, kefir and cheese—can also aggravate constipation in some older children and adults.²¹ Deemphasizing these *high-protein* dairy foods and replacing them with more *highfat* dairy—butter, ghee and homemade sour cream—can help resolve the issue by lubricating the gut wall and softening the stool. Campbell-McBride also recommends increasing animal fat consumption overall as well as prioritizing gelatinous meats over muscle meats.

SOLUTIONS THAT ARE NO SOLUTION

When hydration and dietary changes do not do the trick, or fecal impaction has become a concern, it may become necessary to perform enemas (for children who will tolerate them) or more occasionally, to resort to glycerin suppositories. Disturbingly, one of mainstream medicine's top recommendations²² for disimpaction-and often, its enthusiastic recommendation for ongoing "maintenance"-is to administer an "osmotic laxative" featuring a highly problematic active ingredient called polyethylene glycol (PEG) 3350. One of the leading PEG-3350-containing products is the Bayer-owned, over-the-counter drug Miralax; the fact that Miralax has never been approved by the FDA for pediatric use has not stopped health care providers from promoting it as the "go-to" remedy for constipated children. In fact, across all age groups, Miralax is the second leading "digestive remedy" in the U.S.²³

Horror stories abound about PEG 3350's propensity to cause extreme neuropsychiatric side effects, including rage, anxiety and paranoia. Between 2007 and 2017, the FDA received reports of over fifteen hundred different adverse reactions to PEG 3350 in children, of which nearly three in five were neurological.²⁴ A parent group called Parents Against Miralax has tens of thousands of members, many of whom have joined class-action lawsuits.

There is growing evidence that PEG-3350based drugs may alter the microbiome and even increase the risk of antibiotic resistance.

C-SECTIONS AND INFANT CONSTIPATION: AN UNEXPLORED TOPIC

A growing body of research indicates that babies delivered by C-section are more likely than vaginally-delivered babies to experience chronic health problems later in life, including type 1 diabetes, obesity and asthma.³¹ The hypothesis underlying these observations is that infants born by C-section miss out on exposure to the mother's vaginal and intestinal microbiota, and that during vaginal births this exposure plays an important role in "priming" the infant's immune system.³² As one researcher describes it, "Every generation of mothers hands over its microbiome to the next, as the baby is coated with beneficial germs while being squeezed through the birth canal—but this doesn't happen for babies born through C-section."³³

In 2018, Japanese researchers conducted a first-of-its-kind study assessing the potential correlation between C-section delivery and infant constipation, expecting that infants not delivered vaginally would have higher rates of constipation (as defined by weekly frequency of bowel movements).³² Although the study's results did not bear out the researchers' assumptions—instead showing comparable rates of constipation for both modes of delivery—the investigators noted that the low overall rate of constipation in Japanese babies (1.37 percent) may have made it difficult to detect meaningful differences. Suggestively, they found that C-section babies were significantly less likely to be exclusively breastfed. One wonders what such a study might find in the U.S., where constipation and C-sections both occur at alarmingly high levels.

A 2018 study in mice showed that the laxative could cause "a long-lasting perturbation to the gut microbiota" as well as immune system alterations.²³ As the researchers concluded, "These unintended consequences of PEG treatment are particularly important in light of the increased use of osmotic laxatives in pediatric populations, where the long-term health impact of PEG-related immune response is currently unknown."²³ Suggesting that this research may explain the troublesome connection between Miralax and neuropsychological symptoms, one group of lawyers has remarked that "When the gut is 'off' per-say [*sic*], many other things in the body can, in turn, be 'off' as well."²⁵

Consumers should be aware that PEG is a common component of many other drugs and cosmetic products (as well as some of the Covid-19 messenger RNA vaccines under development). Its use is increasingly controversial due to a wide range of documented adverse PEG-related immune reactions, including lifethreatening anaphylaxis.²⁶

AVOID THE RICE CEREAL

For the infant who is ready to embark on some solid foods, Campbell-McBride points to the critical importance of introducing foods in such a way as to create healthy gut flora and a healthy digestive function. When adequate care is not taken, the transition from exclusive breastfeeding (or even formula) to solid foods can actually be the catalyst for constipation to develop.

Children under one year of age are not fully equipped to digest grains, which makes the widespread practice of feeding cereal grains to infants particularly ill-advised.27 Some mainstream nutritionists are belatedly conceding this point and are also admitting that processed cereals are a leading constipation culprit.28 According to the Dr. Sears website, the main reason that so many babies become constipated when initiating solid foods is that health care professionals tend to recommend the very foods (such as rice cereal) that they know to be constipating!7 "The truth is," Dr. Sears confesses, "there is nothing special about these foods that makes them better to start out with," and "babies don't actually even need rice cereal."

Wise Traditions parents know that babies' first solid foods should be animal foods, which the immature digestive system is best able to handle and thus far less likely to promote constipation. This can begin with a daily pastured egg yolk (starting as early as four months of age) and small amounts of grated raw liver (beginning at six months). Pureed meats and simple watery patés, easy-to-digest bone broths, vegetable purees (with plentiful animal fats), fruit purees and small amounts of kefir or yogurt can be gradually added around eight to ten months of age, with new foods introduced one at a time. Properly prepared (i.e., soaked, Children under one year of age are not fully equipped to digest grains, which makes the widespread practice of feeding cereal grains to infants particularly unfortunate.

OTHER SUGGESTIONS FOR CONSTIPATED BABIES

- 1. Try a small amount of diluted, homemade prune juice (the juice from cooking prunes) or some pureed cooked prunes.
- 2. Make a digestive tea (see *Nourishing Traditions*, page 604). To make this folk remedy used for constipation and intestinal gas in infants, bring two quarts of filtered water to a boil and pour the water over two cups of fresh anise (fennel) leaves and two cups of fresh mint leaves. Let steep until the water cools, then strain. Give the tepid tea to baby about four ounces at a time. Nursing mothers may also drink this tea and pass along the digestive benefits to colicky babies.
- 3. For babies who are constipated on the Wise Traditions raw milk formula, try eliminating the nutritional yeast and gelatin and adding more cream (one or two tablespoons). This should be a first step before switching to the liver formula.
- 4. Consider the possibility of a vitamin B_{12} deficiency. Vitamin B_{12} —found almost exclusively in animal foods such as meat, liver, fish, shellfish, milk products and eggs—is essential for healthy digestion and intestinal functioning (particularly movement of the bowels) but also requires a sound digestive tract for proper absorption. Soy is a key culprit interfering with the ability to absorb B_{12} —yet another reason to avoid giving babies soy!

Wise Traditions parents know that babies' first solid foods should be animal foods, which the immature digestive system is best able to handle and thus far less likely to promote constipation.

sprouted or fermented) grains, nuts and seeds should wait until at least one year of age. (See the Weston A. Price Foundation website for more suggestions.²⁹)

DEEPER HEALING

Dr. Campbell-McBride, Dr. Tom Cowan and other wise healers familiar to readers of this journal emphasize that in the long run the best and only solution for constipation is to heal the gut and improve digestion.³⁰ This is the case whether the sufferer is six months old or seventy years old. Eating a Wise Traditions diet—making sure to include digestible and mineral-rich bone broths, lacto-fermented beverages such as beet kvass and unrefined sea salt—is sure to make a meaningful difference.

REFERENCES

- Da Silva Souza D, Tahan S, Weber TK, Bezerra de Araujo-Filho H, Batista de Morais M. Randomized, double-blind, placebo-controlled parallel clinical trial assessing the effect of fructooligosaccharides in infants with constipation. *Nutrients*. 2018;10(11):1602.
- 2. Vandenplas Y, Alarcon P, Alliet P et al. Algorithms for managing infant constipation, colic, regurgitation and cow's milk allergy in formula-fed infants. *Acta Paediatr.* 2015;104(5):449-457.
- Ferreira-Maia AP, Matijasevich A, Wang YP. Epidemiology of functional gastrointestinal disorders in infants and toddlers: a systematic review. *World* J Gastroenterol. 2016;22(28):6547-6558.
- Boronat AC, Ferreira-Maia AP, Matijasevich A, Wang YP. Epidemiology of functional gastrointestinal disorders in children and adolescents: a systematic review. *World J Gastroenterol*. 2017;23(21):3915-3927.
- Çağlar HS, Hisar F. Identification of prevalence of constipation in infants aged 0-12 months in rural areas. *Rural Remote Health*. 2019;19(4):4870.
- Flemming G. Chronic functional constipation in infants and children. *Handb Exp Pharmacol*. 2020;261;377-396.
- 7. https://www.askdrsears.com/news/sears-familyblog/my-6-month-old-constipated-what-do.
- 8. Den Hertog J, van Leengoed E, Kolk F et al. The defecation pattern of healthy term infants up to the age of 3 months. *Arch Dis Child Fetal Neonatal Ed.* 2012;97(6):F465-F470.
- 9. https://www.newkidscenter.org/Formula-Fed-Babies-Poop.html.
- https://www.healthline.com/health/constipation-inbreastfeeding-baby.
- 11. https://milkology.org/content/breastfed-baby-poop-frequency.
- Sissons C. Baby poop color: causes and when to see a doctor. *Medical News Today*, December 4, 2019. https://www.medicalnewstoday.com/articles/32721 8?c=1592093637981.
- 13. Onusic S. The scandal of infant formula: a poor

replacement for mother's milk. *Wise Traditions*. 2015;16(3):22-53.

- 14. Teller M. Soy infant formula and autism. *Wise Traditions*. 2016;17(3):45-49.
- Dehghan SK. "Failing" food system leaves millions of children malnourished or overweight. *The Guardian*, October 15, 2019.
- Campbell-McBride N. *Gut and Psychology Syndrome* (revised and expanded edition). Cambridge: Medinform Publishing; 2010.
- 17. Albert H. Glyphosate exposure could disrupt human gut microbiome. *Forbes*, November 25, 2020.
- Leino L, Tall T, Helander M et al. Classification of the glyphosate target enzyme (5-enolpyruvylshikimate-3-phosphate synthase) for assessing sensitivity of organisms to the herbicide. *J Hazard Mater.* 2020 Nov 14;124556.
- https://www.westonaprice.org/health-topics/ childrens-health/formula-homemade-baby-formulatestimonials/.
- https://www.askdrsears.com/topics/health-concerns/ childhood-illnesses/constipation-2.
- Frequently Asked Questions: Constipation. https:// www.gaps.me/faqs.php.
- Waterham M, Kaufman J, Gibb S. Childhood constipation. Aust Fam Physician. 2017;46(12):908-912.
- Tropini C, Moss EL, Merrill BD et al. Transient osmotic perturbation causes long-term alteration to the gut microbiota. *Cell*. 2018;173(7):1742-1754.e17.
- Hussain SZ, Belkind-Gerson J, Chogle A et al. Probable neuropsychiatric toxicity of polyethylene glycol: roles of media, internet and the caregivers. *GastroHep.* 2019;1(3):118-123.
- Beasley L. How drugs like MiraLAX can affect the microbiome. November 20, 2019. https://www. drug-injury.com/drug_injury/2019/11/how-drugslike-miralax-can-affect-the-microbiome.html.
- 26. Children's Health Defense. Components of mRNA technology "could lead to significant adverse events in one or more of our clinical trials," says Moderna. August 6, 2020. https://childrenshealthdefense.org/ news/components-of-mrna-technology-could-lead-to-significant-adverse-events-in-one-or-more-of-our-clinical-trials-says-moderna/.
- 27. https://www.westonaprice.org/health-topics/childrens-health/feeding-babies/.
- https://www.healthline.com/health/constipation-inbreastfeeding-baby#causes.
- https://www.westonaprice.org/health-topics/childrens-health/nourishing-a-growing-baby/.
- Teller M. Uptight and out of sight: the global constipation epidemic. *Wise Traditions*. 2018;19(2):42-46.
- Blustein J, Liu J. Time to consider the risks of caesarean delivery for long term child health. *BMJ*. 2015;350:h2410.
- 32. Yoshida T, Matsumura K, Tsuchida A et al. Association between cesarean section and constipation in infants: the Japan Environment and Children's Study (JECS). *BMC Res Notes.* 2018;11:882.
- Rutgers University. The hidden reason children born by C-section are more likely to develop asthma. *Medical Xpress*, November 11, 2020.

The Wise Traditions Pantry THE RETURN OF THE BRIEFLY FORGOTTEN ELDER By John Moody

Every late summer into fall, it happens without fail. Text messages, social media messages, emails, phone calls. . . . "Is this an elderberry?" Sometimes it is, but many times it is a poke or a Joe Pye or some other plant.

Now you might say, why is this noteworthy? After all, plant identification isn't easy. But the elder isn't just any plant. Historically it is the plant above all others—the plant with uses so deep and wide that it earned the moniker, "the people's medicine chest." Some say it is "that plant of God that heals everything it touches." The elder is found in the works of everyone from Hippocrates to Shakespeare, in medical and pharmaceutical texts and children's fairy tales, and in a thousand other works across almost every continent and country in human history.

This plant's importance was so well known, in fact, that from Greco-Roman times to just a hundred years ago, books on plant use and identification *did not even bother to describe it*! Why? Because for two thousand years, everyone could easily identify the elder.

What happened to the elder? And why has it made such a tremendous comeback in recent

years in the United States and in other parts of the world?

A PLANT WITH MANY USES

Most Americans' experience with elderberry is as a supplement, usually with some type of "sambu" in the name. This goes back to the elder's earliest uses, when the plant was known as the Sambucus. However, the elder also provided an excellent wood for making all sorts of useful tools and musical instruments. Sambu means "wind" or "fire," and the elder was (and still is) used across the world for both.

The usefulness of the wood also extended to children's toys. Historians attest to children searching for pieces of elder thousands of years ago to engage in the time-honored tradition of harassing siblings, with references to elder-enabled spitball fights in the days of ancient Rome. In American history, many books describe useful toys made from elder wood. Some varieties of the plant also provided wood for making arrow shafts and bows for hunting, both in the U.S. and elsewhere. Some say the elder is "that plant of God that heals everything it touches."

The plant's historical usefulness extended

THE ELDER: AN OLD-FASHIONED REMEDY

The Elder-Tree.

Hold it needless to write any Description of this, fith ever Boy that plays with a Pot-gun will not millake another Tree instead of Elder. I shall therefore in this place only describe the Dwarf-Elder, called also Dand-wort, and Wall-wort.

Elderberry Catsup.—Strip ripe elderberries from their stalks and put them in a stone jar with as much good vinegar as will cover them thoroughly, then place them in the oven when the bread is baked to extract the juice, and strain off whilst hot. Now boil this liquor with sufficient cloves, mace, peppercorns and shallot to flavour it nicely, and then add to it 6 to 80z. best anchovies, for every quart of liquor, and boil only just enough to dissolve these. When cold, bottle in small bottles, and be very particular in fastening down. This by the way applies to all catsups. An Excellent Remedy for a fore Throat, which if taken in Tine, will prevent a Quinfey. A KE fave fooroful of Syrapof Elderberries, and one of Honey, and as much falt Prunel (in Powder) as will lie on a shilling: Take a Tea. fpoonful of this as often as you can.

50 PRIMITIVE PHYSIC,

240. To diffelve white or hard Swellings. 706. Take White-Rofes, Elder-flowers, leaves of Fox-Glove, and of St. John's Wort, a handful of each: mix with Hog's-Lard, and make an Ointment. 707. Or, hold them morning and evening in the fleam of Vinegar poured on red hot Flints.

is a Sort of *Elder* which has hardly any *Pith*; this makes exceeding front *Fences*, and the *Timber* very ufeful for *Coge* of *Mills*, ButchersUtts. *Skewers*, and fuch tough Employments. Old *Trees* do in Time become firm, and clofe up the *Hollownefs* to an almost invisible *Pith*. But if the *Medicinal* Properties of the *Leaves*, *Bark*, *Berries*, &c. were thoroughly known, I cannot tell what our *Country-man* could ail, for which he might not fetch a *Remedy* from every *Hedge*, either for *Sicknefs* or *Wound*: The inner *Bark* of *Elder*, applied to any *Burning*, takes out the *Fire* immediately; *That* or, in Seafon, the *Buds*

> SHOB BLACKING. Wash elderberries in a kettle of water. Set them in the shade for a day or two to ferment, then boil it half a day, adding a little water as needed. Strain the liquid and boil it down to the thickness of molasses. It will give a fine gloss with rubbing.—*Economical Housekeeper*. GOOD WRITING INK can be made the same way.

Beginning in the 1960s, the elder experienced a brief eclipse in the U.S., when the motto of "better living through chemistry" took hold of the American consciousness. far beyond its wood, however. Other parts were used to make dyes, salves and skin care products, and—similar to tobacco—the leaves, roots and other plant materials were made into an important and all-natural pesticide.

The elder was one of the earliest permaculture plants, used extensively in landscaping, land design and improvement, living

fences, screens and for many other purposes. Its shallow but extensive root system, along with its love of water, made it a perfect plant to establish on the roadsides to handle water runoff and stabilize embankments. Its dense, hedgelike growth also allowed people to keep animals in—and unwanted guests and ruffians out.

Of course, the elder also produces edible flowers and berries. In former times, people consumed both of these plant parts in

a range of ways that would be mind-boggling to modern eaters: in fritters, cordials, wines, other beverages, syrups, salads and soups. The elder was also a featured ingredient in pies, jellies, honeys and tinctures. There are even recipes for traditional ketchup (which began as a fermented fish sauce) that include the elderberry!

ELDER MEDICINE

While the elder's practical importance was deeply entrenched across all of Europe and much of the rest of the world, its medicinal properties (and alleged ability to deter vampires!) were what elevated its stature above almost all other plants in history. For three thousand years, every famous herbalist and physician talked about the elder. So numerous were the conditions that the elder could treat that the number of medicinal uses easily surpassed the number of practical applications for which the plant was justly famous around the world.

Historically, the elder's medicinal properties were found in every plant part, including the pith, buds, leaves and roots. In the

> 1300s, however, Conrad von Megenberg brought the immune-supporting properties of the berries to center stage and also wrote the first (but not the last) book completely devoted to this single plant. Indeed, these immuneboosting characteristics were so noteworthy that the famous children's author Hans Christian Anderson-who gave us the stories of the "Ugly Duckling" and the "Emperor's New Clothes"-penned an entire tale about the

elder called "The Elder Tree Mother."

Beginning in the 1960s, the elder experienced a brief eclipse in the U.S., when the motto of "better living through chemistry" took hold of the American consciousness. For a time, this paradigm saw the elder, along with so many other traditional foods and remedies, relegated to second fiddle and then forgotten. However, as the problems with pharmaceutical approaches have multiplied—and more and more studies have documented the superior solutions known to our ancestors—the elder is poised to make a tremendous comeback.

ELDERBERRY RESEARCH

The elderberry is nutrient-rich, containing

BEWARE ELDERBERRY ADULTERATION

There are least two reasons to take great care when purchasing elderberry products. First, manufacturers and many others are raising the alarm about a dramatic increase in elderberry adulteration.¹⁴ The exploding demand for elderberry products over the past decade has caused the cost of both conventional and organic elderberries to soar; in response, adulteration is becoming more widespread. A second problem is that of plant misidentification. In just the last two years, I have seen over a dozen people selling "elderberry" products made from other plants. Thus the elderberry market's rapid growth has created some risks for consumers.



Sambucus canadensis L. Honeysuckle FAMILY more antioxidants than almost any other berry and scoring higher in vitamins and minerals than most (though growing conditions and plant variety play a large part in its eventual nutritional profile). It is a good source of quercetin and various acids and anthocyanins.¹ Elder flowers are especially rich in polyphenols and other health-promoting compounds, which may explain why our ancestors so often used them in teas, salves, soaks and treatments for inflammation, injuries and illnesses.

Modern research supports many of the historical uses and amazing benefits of the elderberry. Studies point to its ability to keep travelers from coming down with respiratory illness² and its assistance in reducing the duration and severity of respiratory infections.3,4 Some of the ways in which the chemicals in elderberry better equip our bodies to defeat infections are defensive, and some are offensive in nature. On the defensive side, elderberry is both antibacterial and antiviral.5 In an Australian study of influenza, one of the lead investigators stated, "What our study has shown is that the common elderberry has a potent direct antiviral effect against the flu virus. It inhibits the early stages of an infection by blocking key viral proteins responsible for both the viral attachment and entry into the host cells."6 On the offensive side, elderberry supports and strengthens our immune system, helping it function well without wearing itself out or revving too high or low.

Although more and more Americans are taking elderberry products during cold and flu season, the benefits of elderberry go far beyond these two conditions. Historically, elderberry was also used to treat allergies, measles and dozens of other conditions that modern research fails to remedy.⁷ Studies also show that elderberry may have protective benefits against the damage caused by strokes and Alzheimer's disease.^{1,8-10} Even the U.S. military has displayed interest in elderberry because of its ability to help people adapt to and overcome stress.¹¹⁻¹³ You will encounter many other uses if you go down the elderberry rabbit hole.

AMAZING PLANT

Modern Americans are increasingly enamored with the fruit of the elder. However, as I often emphasize when I teach about the elder, this plant offers us so much more than the syrups and supplements consumed during cold and flu season. Perhaps more than any other plant, the elder embodies one of its greatest proponent's most basic dictums, "Let food be thy medicine and medicine be thy food." May we all continue to make better use of this amazing plant.

John Moody is a well-known farmer, researcher and author. His most recent books, The Elderberry Book and Winning the War Against Weeds, are available at johnwmoody.com. Weston A. Price Foundation members who wish to try John's daughter's elderberry syrup can receive \$5.00 off on the first bottle (use code WAPF5 at abbyselderberry.com). All images in this article are from The Elderberry Book or from John's research, copied from primary sources with tools such as Archive.org.

REFERENCES

- 1. Simonyi A, Chen Z, Jiang J et al. Inhibition of microglial activation by elderberry extracts and its phenolic components. *Life Sci.* 2015;128:30-38.
- Tiralongo E, Wee SS, Lea RA. Elderberry supplementation reduces cold duration and symptoms in air-travellers: a randomized, double-blind placebo-controlled clinical trial. *Nutrients*. 2016;8(4):182.
- 3. Zakey-Rones Z, Thom E, Wollan T, Wadstein J. Randomized study of the efficacy and safety of oral elderberry extract in the treatment of influenza A and B virus infections. *J Int Med Res.* 2004;32(2):132-140.
- Hawkins J, Baker C, Cherry L, Dunne E. Black elderberry (Sambucus nigra) supplementation effectively treats upper respiratory symptoms: a meta-analysis of randomized, controlled clinical trials. *Complement Ther Med.* 2019;42:361-365.
- Daniells S. Black elderberry extract shows anti-infection activity: Study. NutraIngredients, March 14, 2011. https://www.nutraingredients-usa.com/Article/2011/03/14/ Black-elderberry-extract-shows-anti-infection-activity-Study.
- Elderberry compounds could help minimize flu symptoms, study suggests. Science-Daily, April 23, 2019. https://www.sciencedaily.com/releases/2019/04/190423133644. htm.
- Sayin I, Cingi C, Oghan F, Baykal B, Ulusoy S. Complementary therapies in allergic rhinitis. *ISRN Allergy*. 2013;2013:938751.
- Daily M. Interest in Missouri elderberries on the rise. Vox, October 29, 2020. https:// www.voxmagazine.com/food/rise-of-elderberries/article_d8883948-0e8b-11eb-8ebc-3374cbd172cd.html.
- Spagnuolo C, Napolitano M, Tedesco I, Moccia S, Milito A, Russo GL. Neuroprotective role of natural polyphenols. *Curr Top Med Chem.* 2016;16(17):1943-1950.
- Neves D, Bernardo J, Valentao P et al. The bioactive compounds from elderberry to modulate mitochondrial dysfunctions underlying Alzheimer's disease: PS205. *Porto Biomed J.* 2017;2(5):202-203.
- 11. Kilham C. Elderberry enhances immune function. Fox News, March 23, 2011. https://www.foxnews.com/health/elderberry-enhances-immune-function,
- Porta S, Wurzinger S, Wintersteiger R. Determination of physiological effects of elderberry biopolyphenols in humans using ICU equipment. Berry Health Benefits Network, n.d. http://berryhealth.fst.oregonstate.edu/symposium/seppportaabstract. htm.
- 13. https://inovobiologic.com/_pdf/Elderberry%20PP%20v1.pdf.
- Schultz H. Nature's Way finds more evidence of widespread elderberry adulteration. NutraIngredients, September 23, 2020. https://www.nutraingredients-usa.com/ Article/2020/09/23/Nature-s-Way-finds-more-evidence-of-widespread-elderberryadulteration.

Homeopathy Journal NOTHING A LITTLE ARSENIC CAN'T CURE! By Anke Zimmermann, BSc, FCAH

Death by arsenic poisoning was so common in the era of Louis XIV, the glamorous French Sun King, that the period was known as the "Age of Arsenic." Arsenicum album (white arsenic) illustrates better than most homeopathic remedies that what a substance can cause in the way of symptoms it can also heal, according to the homeopathic principle of similarity, or "like cures like." This innocent-looking, white, tasteless and odorless powder has a galaxy of healings to its credit, but it also has a most sinister background of lethality.

For centuries, arsenic held a preeminent role as the preferred choice of the homicidal poisoner.¹ Symptoms of acute arsenic poisoning are similar to those of cholera, which can cause severe diarrhea, nausea and vomiting. Because cholera was common in the Middle Ages and Renaissance, poisonings often went undetected, as the victim was often assumed to have died of natural causes. Chronic arsenic poisoning can cause heart disease and cancer, among other things, so sometimes poisoners chose the slow route of death via chronic arsenic administration.

THE AGE OF ARSENIC

The ruling classes of Italy were reputed to have made particularly liberal use of this convenient method of dispatching enemies, but the French were also rather fond of arsenic. Death by arsenic poisoning was so common in the era of Louis XIV, the glamorous French Sun King, that the period was known as the "Age of Arsenic."

Of course, it was not only the nobility that made use of arsenic's lethal powers. One famous vendor of arsenic in the 17th century was La Tofania, who sold her concoction called "Aqua Tofana" to disgruntled wives all over Europe, helping them to dispose of adulterous, violent or negligent husbands. Apparently, she made a good business of it for fifty years while killing about six hundred men.² By the 19th century, arsenic had acquired the nickname "inheritance powder,"³ for obvious reasons.

Small doses of arsenic were known to have medicinal properties and were used in traditional Chinese medicine formulas two thousand four hundred years ago. In fact, modern science confirms the fact that arsenic has nutritional value as a trace mineral and that too little arsenic may also be detrimental.⁴ Animal studies suggest that arsenic is essential for fertility and reproduction and may also be important for cardiac health. Specifically, it may help to maintain normal mitochondrial cell membrane function in heart muscle cells.⁵

In 1851, the medical world learned of the practice of arsenic consumption among mountain-dwelling peasants, hunters and wood cutters in Styria (now a region of Austria). These people apparently used regular small to large doses of arsenic to help them breathe better in the high mountain altitudes and to experience greater vitality. Women reportedly used it to improve their complexion and attractiveness.

In short order, this early-1850s discovery started an arsenic-tonic craze that persisted for the next several decades. Of the various solutions of arsenic compounds that came into widespread use, the most important was "Fowler's solution," originally introduced in 1786 by the English physician Thomas Fowler. It became wildly popular in the 19th century and was especially valued for its tonic and stimulant properties.⁶

ARSENICUM ALBUM IN 2020

With this illustrious background established, let us examine the homeopathic use of arsenic, keeping in mind the perspective of the poisoned as well as the poisoner, and ultimately applying that perspective to the year 2020.

As already mentioned, acute arsenic poi-

soning most often begins with nausea, vomiting, abdominal pain and severe diarrhea; additional symptoms include restlessness, fever, chills, sneezing and watery nasal discharge, cough and difficulty breathing. Acute poisoning may also include, interestingly, a fear of being poisoned, deceived or robbed, as well as a fear of death and dying. Chronic arsenic toxicity results in multisystem disease, with heart failure, kidney failure and cancers affecting numerous organs, often accompanied by characteristic black lesions on the skin.

Arsenic exerts its toxicity by inactivating up to two hundred enzymes, especially those involved in cellular energy pathways and DNA synthesis and repair. This explains its profound effects.⁷

It is well known that those in need of homeopathic arsenic often have a fear of germs and contagion, can be obsessive about cleanliness and may feel they have offended others—but they may also like to *cause* suffering both to people and to animals. They can be elegant as well as miserly individuals who may be overly concerned with wealth and possessions.

ARSENICUM AS HOMEOPROPHYLAXIS

Homeopathically, if someone already suffers from the above-described symptoms, arsenic in potency may be extremely helpful. In addition, if an infection known to cause such symptoms is in the vicinity, homeopathic arsenic may help to prevent the development of such symptoms.

This may be why India—a country benefiting from broad government support for homeopathy—began widely distributing *Arsenicum* *album* in a 30C potency for the mitigation of Covid-19, beginning in January of this year. After all, Covid-19 is associated with cold- and flu-like symptoms.

Amazingly, as of November 16, India had only recorded about one hundred thirty thousand deaths from Covid-19 in a population of 1.385 billion people, many of them crowded into enormous cities.⁸ This translates to a death rate of ninety-four per million. Compare this to the roughly two hundred fifty-two thousand recorded deaths in the U.S. population of 380 million—a death rate of seven hundred fiftynine per million—or to Belgium's death rate of one thousand two hundred forty-two per million. Of course, we can't be sure that all these people in fact died *from* the illness or just *with* the illness.

Three other countries with very low Covid-19 death rates are the Asian nations of Pakistan (thirty-two deaths per million), Bangladesh (thirty-seven deaths per million) and Nepal (forty-two deaths per million). All three countries have, like India, embraced homeopathy.⁹ It goes without saying that many patients also may have been treated with homeopathy in those countries if they became sick.

GOVERNMENTS, HEALTH AUTHORITIES AND THE MEDIA

But there is more. The government and media responses to the pandemic are also imbued with the flavor of *Arsenicum album*.

The intense focus on cleanliness and disinfection can be seen as an *Arsenicum* symptom. *Arsenicum* patients can be obsessive about cleanliness and order and are terrified of germs.

PROFILE OF ARSENICUM ALBUM

Sneezing and runny nose Shortness of breath Fever and chills Dry cough Suffocative cough Nausea, vomiting and diarrhea Food poisoning Traveler's diarrhea Burning sensations Restlessness Worse midnight to 2-3 am Fastidiousness, cleanliness Fear of being poisoned Fear of being deceived Fear of infection Fear of germs, contagion Fear of death Fear of cancer Many types of cancer Miserliness, greediness Maliciousness Likes to cause suffering to others

It is well known that those in need of homeopathic arsenic often have a fear of germs and contagion. The media's constant focus on new "cases" is also creating fear and panic in the population at large about becoming infected and dying. People are increasingly suspicious of one another as they avoid eye contact and cover their faces with masks in stores and on public transit. Social media are rife with hatred against those questioning the use of masks, accusing them of being killers in disguise. Finally, the proposed "cure" for the virus—a novel vaccine that is meant to alter us genetically—also reeks of *Arsenicum*.

Then there is the question of whether the virus may have been deliberately manipulated and released, in essence designed as a poison. Not only that, but designed as a poison with both acute and chronic consequences and which, additionally, may enrich those pulling the strings. As mentioned, for the homicidal poisoner, arsenic offers both the choice of rapid poisoning, which mimics gastrointestinal and respiratory diseases, or the slow and steady method of chronic poisoning, which leads to death via organ failure and cancer.

I believe both of these can be applied to the current Covid-19 situation, with acute consequences being the actual disease but also fear of the disease. Chronic consequences probably include an increase in cardiovascular disease, cancers and dementia from all the masking and inhibition of free breathing as well as the fear-mongering and the constant contact with harmful disinfectants.

Miserliness and greediness can also be characteristics of the *Arsenicum* state. Isn't it interesting that the pandemic has made a handful of billionaires even richer while plunging most of humanity into deeper degrees of poverty? *Arsenicum* is well known for its dual association with a fear of robbers and with robbers themselves. Bill Gates, Mark Zuckerberg, George Soros and Jeff Bezos all spend millions of dollars a year on their security teams.

POLARITY IN HOMEOPATHY

The fascinating thing about homeopathy is that all remedies display a polarity of elements—positive and negative, light and dark, or, one could say, victim and aggressor. They are flip sides of the same coin. Like cures like.

Thus, we should keep Arsenicum album in

mind, not only to help mitigate symptoms of potential Covid-19—although there are many other remedies that may be indicated, so *Arsenicum* is not a cure-all by any means—but also to mitigate the consequences of government and media actions on people around the world. It may also be a good remedy for those who are terrified to go out for fear of "catching the virus."

That being said, don't take *Arsenicum album* regularly without professional support. A few weeks ago, one of my clients contacted me regarding concerns about her young son, who had become obsessed with washing his hands and keeping his room ultra-tidy. I was pondering the use of *Arsenicum* when she exclaimed: "Oh, we've been taking this for a while!" It turned out that she had been administering *Arsenicum album* in 30C potency to the whole family biweekly for two or three months after reading about it as potentially useful for Covid-19. Her son was sensitive to the remedy and developed a "proving" of it, meaning that he developed the symptoms the remedy is meant to help. When I explained the problem, she stopped giving him the remedy. Her son is now back to behaving like a normal boy, with a messier room and dirtier hands!

CONSEQUENCES

In the end, poisoners may be held accountable. Tofania, the woman who sold the arsenicous "Aqua Tofana" in the 17th century, was finally caught and executed at the age of seventy. After her death, apparently far fewer husbands died in Europe.

Today, the scales of justice will still balance in the end, and those pulling the strings of the Covid-19 situation may very well face the consequences of their actions one day. With more people taking *Arsenicum* around the world than ever before, this might very well be sooner rather than later, as the energetic influence of the remedy may help to heal this particular imbalance on all levels in ways that nobody could have expected. This is the mystery and magic of homeopathy.

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REFERENCES

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- 1. Gibson D. Studies of Homeopathic Remedies. Beaconsfield Publishers; 1987.
 - Retrieved Nov. 16, 2020 from https://en.wikipedia.org/wiki/Aqua_Tofana.
- 3. Whorton JG. *The Arsenic Century*. Oxford University Press; 2011.
- 4. Uthus EO, Davis C. Dietary arsenic affects dimethylhydrazine-induced aberrant crypt formation and hepatic global DNA methylation and DNA methyltransferase activity in rats. *Biol Trace Elem Res.* 2005;103(2):133-145.
- Nielsen FH. How should dietary guidance be given for mineral elements with beneficial actions or suspected of being essential? *J Nutr.* 1996;126(9 Suppl): 23778-23858.
- 6. Parascandola J. The arsenic eaters of Styria. Retrieved November 16, 2020 from http://ultimatehistoryproject.com/arsenic-eaters.html.
- Ratnaike RN. Acute and chronic arsenic toxicity. *Postgrad Med J.* 2003;79(933):391-396.
- Retrieved Nov. 15, 2020 from https://www.worldometers.info/coronavirus/ country/india/.
- 9. Retrieved Nov. 15, 2020 from https://www.worldometers.info/ coronavirus/#countries.

Technology as Servant BPA: DOES CALLING IT SAFE MAKE IT SO? By James Kirkpatrick

Bisphenol A (BPA): Other than a good if not suggestive acronym, what is it? If you're someone who has children or reheats leftovers in Tupperware, then you may be familiar with this synthetic material, as it is widely available and in common use today. For most of us, though, we are only vaguely aware of it as something having to do with plastic, and you probably have an inkling that it is harmful to us in some form or fashion, but that the science concerning this mystery acronym is still ongoing.

A TOXIC CHEMISTRY

Bisphenol A was first synthesized by the Russian chemist Alexander Dianin in Saint Petersburg one hundred thirty years ago. It is made by combining the organic hydrocarbon phenol with acetone. (See Figure 1.)

Phenol is a hexagonal-shaped ring molecule, and a close cousin of the hydrocarbon benzene. Benzene is a ring-shaped molecule, where the ring-shaped carbon structure is saturated with hydrogen. What makes phenol different from benzene is that one of the hydrogen molecules has been replaced with an -OH molecule or a hydroxyl group. The hydroxyl group is common to water (the core of acid-base chemistry), alcohol and many other compounds across the organic spectrum. Phenol is a strong acid, extremely toxic to human beings-for example, direct skin contact or exposure to phenol in excess of ten square inches is considered fatal. It is widely used as an industrial reagent and in the production of polycarbonates, epoxies, Bakelite, nylon, detergents, herbicides and a wide variety of pharmaceutical components.

There are two physical properties of phenol to keep in mind, because of the attached hydroxyl group: it is water-soluble and when mixed with other organic liquids it forms an azeotrope. (This is a fancy chemical name for a liquid mixture that boils as a liquid mixture, making it difficult to separate the mixture into individual components through boiling or distillation alone.)

Acetone, the second reagent used in producing BPA, is the binder molecule that sits in the middle and bridges the two phenol molecules together. Most of us interact with acetone on a frequent basis through its two main uses, nail polish remover and paint thinner. Acetone is produced and disposed of in the human body through standard metabolism and is present in kidney-liver functions and the urinary tract. Acetone is a by-product of fermentation and can build up in the human body due to imbalances such as prolonged fasting, alcoholism and diabetes, all of which produce excess levels of acetone. This is commonly known as ketoacidosis and in some cases results in harm to human reproductive organs.

LOTS OF IT AND PROFITABLE

Today BPA is primarily used as a building block to produce two synthetic building materials: polycarbonates (75 percent) and epoxy resins (25 percent). Total global demand for BPA is approximately 6.5 million metric tonnes annually, even though it's only 0.4 percent of the total petrochemical demand of 1,800 million metric tonnes. Capacity to produce BPA stands at roughly 9 million metric tonnes in 2020, with production facilities concentrated in the U.S. (12.5 percent), Western Europe (22.5 percent), Japan-Korea-Taiwan (25 percent) and China (30 percent). The production of BPA is concentrated in the four regions where most of the world's petrochemical production capacity is located.

From a corporate interest or engineering perspective, the reasons why we use BPA are clinically real; performance, cost and "safety." It is lightweight, durable, moldable and thermally stable, with a melt point of about 315 degrees F; it does not oxidize easily (it's biologically

Because BPA is prevalent in food packaging, it is almost inevitable that some amount of BPA will mix with food or drink and be ingested into the human body, even if the amounts are incredibly small or at the molecular level.

stable); it is affordable; and maybe most important, it is clear or transparent when used alone or in other synthetic materials. The transparency of the material is likely the key advantage over other substitutes in a visual society such as ours. This makes BPA an ideal building block for large water bottles (think water cooler at work), beverage bottles (so you can see what you are drinking), baby bottles (you need to see the milk), electronics packaging (you need to see your gadget) and as a liner to preserve food that you may find in canned goods (no metallic aftertaste).

The issue of affordability is probably understated as to why BPA is so integral to our packaging supply chain. Both phenol and acetone used to manufacture BPA are derivative chemicals, produced as by-products in the manufacture of other synthetic materials, namely the big four consumer plastics. Being a by-product has the distinct economic advantage of constant surplus production, because supply is determined by the big four basic plastics (low-density polyethylene, linear low-density polyethylene, high-density polyethylene, and polypropylene). As you produce more of the big four, the by-products are produced whether you need them or not and the situation for the last thirty to forty years has been oversupply. When you have a material in chronic oversupply, the best option is oftentimes to create new demand outlets.

If global demand is 6.5 million metric tonnes and production capacity stands at nine million metric tonnes, the inference is that the BPA industry needs only to utilize about 70 percent of its capacity to meet global demand. Further, BPA is a solid and environmentally stable material, meaning that it is cheap (in relative terms) to transport around the world, with a variety of implications for centralizing production and keeping regional price differences or arbitrages stable in terms of trade volatility.

Even though BPA is a by-product, the materials used to make BPA (acetone and phenol) are also by-products themselves and in most cases in higher oversupply than the BPA itself. The typical price spread between BPA and the phenol and acetone needed to manufacture BPA is relatively healthy and results in a profitability of two to three billion dollars per year before fixed and variable costs. A healthy business model or vested financial interest is nothing to sneeze at and leaves plenty of capital to fund scientific research, marketing, lobbying and other support industries necessary to preserve that primary source of wealth generation—the price difference between BPA and the raw materials required to manufacture BPA.

It should also be noted that the BPA production industry is fairly concentrated, with only about seven to ten true market participants globally. The big players in the BPA game are Bayer, Dow Chemical, SABIC (Saudi Arabia Basic Chemicals), Dow, Momentive-Hexion Specialty Chemicals, Sinopec (China State Petrochemicals), Mitsubishi (Japan Conglomerate), Mitsui (Japan Conglomerate) and LG Chem (Korea Chaebol). The heavy concentration of the industry and the homogeneity of the product are important in that it suggests that the main risk to industry profitability is a change in public sentiment versus direct competition from a rival company.

HOW BPA DEGRADES

Despite its engineered material stability, like many materials BPA is susceptible to the following degradation mechanisms: leaching, friability and thermal softening.

• Leaching: Put two materials in contact for a long period of time and some molecules of material A are going to pass into material B and vice versa. It may be a very small number of molecules but some leaching will occur, with time in contact being the determining vari-



able—think canned food storage and that metallic aftertaste.

- Friability: Rub a plastic bottle with a nail file for a couple of minutes; notice the light clear flecks on the nail file—those are friable particles.
- Thermal stability: Take a plastic bottle and put it in the dishwater several times; notice how the plastic bottle softens and is deformed. You have now thermally fatigued the plastic bottle.

BPA, like almost all thermal polymers, is subject to all three of these deterioration mechanisms. And because BPA is prevalent in food packaging, it is almost inevitable that some amount of BPA will mix with food or drink and be ingested into the human body, even if the amounts are incredibly small or at the molecular level.

IS IT SAFE?

So what happens when small amounts of this synthetic material, BPA, are ingested into our bodies? I will give you a hint: It accumulates. The other detail to note (and the rationale for the mini-organic chemistry lesson at the beginning of this article) is that benzene molecules (the hexagonal ring) are very stable and difficult to break down. This is one of the reasons we utilize benzene so ubiquitously in modern chemistry but also the reason why chemicals labelled as carcinogens usually contain benzene.

The second key thing to note about BPA is that the scientific and medical communities have classified it as a xenoestrogen, in that it exhibits estrogen-mimicking behavior in the human biological system. Without having a background or educational degrees in medicine, chemistry or advanced science, these are the key details I note. We interact with it; it enters our bodies in minute quantities; it is chemically stable and difficult to break down; it behaves in our bodies as if it were a hormone; and thus it interacts with our endocrine systems.

BPA has been investigated and evaluated as a synthetic hormone for at least the past eighty years. In the late 1930s, it was evaluated as a synthetic estrogen and found to be approximately 1/37,000th as effective as estradiol, the naturally produced form of estrogen, prescribed as a hormone replacement for women experiencing menopause.

This potential interaction as a synthetic hormone is a primary reason why many consumer advocacy groups have raised issues about the common usage of BPA and why it has been studied extensively for the past twenty years by the various food, health and medical safety organizations across the globe. There are many, many studies by these various organizations that, for the most part, have concluded that "BPA in low levels in the human body is safe," followed by a dozen or so caveats about the effects of low and high dosages on mice. The studies and websites typically contain statements such as the following: "Overall, the study found 'minimal effects' for the BPA-dosed groups of rodents. The report did identify some areas that may merit further research, such as the increase in occurrence of mammary gland tumors at one of the five doses, in one of the groups. But the significance of these findings will be assessed through the peer review process." Not very reassuring, to say the least.

Many of these studies are publicly available and can be found at websites such as factsaboutbpa.org, but there are a couple of key details to note about these types of informative public health advocacy websites and studies. Not all the time, but more often than not, they are funded by the very industry that produces the product in question. Factsaboutbpa is no exception, as it is funded and produced by the BPA and Polycarbonate Manufacturing Association. It would be odd (or not in their own self-interest) for the entities that profit from the manufacturing of BPA and related compounds to spend hundreds of millions of dollars evaluating their own product to determine that their own product is unsafe and has deleterious effects on humans after prolonged exposure. So odd that you can likely count the occurrences of industry doing this under their own volition on the fingers of one hand.

I am not suggesting that the scientific research done around BPA is faulty or fraudulent, as it is subject to the same rigorous peer review that all research is required to undergo to be labeled as "science." My concern is one of vested interest, conflicting priorities and the distorted reality that often occurs when science is mixed with corporations and corporate lawyers. What we are seeing in society more and more is a case where the individual is left to decide who has the best science. A natural inclination is to assume that the entity that spends the most money on their science has the best science. What is perhaps more accurate to state is the entity that has the most resources typically produces the most science (quantity) and the best-packaged science (quality) but not always the correct science (truth). I think this case is no exception.

The other underlying issue is that our society and legal system currently do not have a commonly-accepted numerical definition of safety or many other key definitional words that we use all the time to make decisions about our lives. I'm sure there is legal definition of "safe" and "unsafe," but I'm willing to wager that these definitions are so obfuscated in legalese that they might as well be written in Klingon.

Here is the challenge that we have with BPA and many other synthetic materials that we interact with regularly. We have a lot of clues or circumstantial evidence that BPA is probably not something we want to be ingesting into our bodies in large quantities—call it common sense or intuition. Yet the scientific, health and safety administrations of our respective governments label it "safe." The formal official published science deems the material as safe for human consumption in small amounts, after producing acceptable test results in laboratory rodents.

There are some important differences in the real world versus the laboratory. First of all, rodents and humans are different species, related but different. All humans are similar but also different, both in our genetics and the other materials we interact with on a daily basis. No two people have the same experiences, except in science fiction, so the other materials that we are mixing in the chemistry experiment of our bodies are going to differ in minute ways as well. No two of us are ingesting the same amount of micro-BPA particles and other things which may or may not interact with BPA.

We know that BPA affects our endocrine systems—which we know through our own experience of life to be delicate, requiring constant balancing and more sensitive early in our lives than later. So we know that the science deems BPA safe, but we also know that we are likely ingesting some amount and that it affects our very sensitive hormone regulation and balancing system.

As a hypothetical thought exercise, consider the following. What if high exposure to BPA affects only one in two hundred of us or 0.5 percent in a negative way after prolonged exposure, and the consequence of this exposure is a hormonal imbalance with knock-on effects that come with too much or too little of one or multiple hormones in our biological system? Would you determine that this material is safe or unsafe? It's a personal judgment call, right? What if someone was paying you to perform science where the only acceptable conclusion was to call that same material "safe"? Would that influence your judgment?

JUDGMENT CALLS

Fortunately, in the case of BPA, there are some options for those of us who feel that the science is undecided. We can make conscious choices to minimize the usage of BPA, particularly for domestic food storage or any container that you may put through regular thermal cycling (such as the dishwasher). There is a readily available alternative to BPA and other hardened polycarbonates: It's called glass. Unlike the larger discussion on the use of plastic versus glass that we explored in last issue's article on plastics, the substitution of BPA for glass in baby bottles and Tupperware is unlikely to materially alter the global greenhouse gas balance, but it could have an important effect on your health.

One tactic that the BPA-producing industry has developed is to create similar but slightly different compounds, namely BPF and BPS. This allows the industry to label a storage or packaging material as "BPA Free" without having to alter the business model materially. Without having looked at those alternatives in depth, I can say confidently and without further study that the science around BPA is likely to be similar for BPF and BPS.



The key thing is to know whether your plastic packaging is a polycarbonate that may contain BPA, BPF or BPS. In this case this is something that we can know with certainty. Look for the triangle symbol on any food or foodcontaining packaging that you purchase. If the package has this symbol, seek an alternative or think about how you use

that specific product and whether or not you want to risk the potential of BPA entering your or your child's body and accumulating silently. If a given risk is unknown but easily avoidable, isn't the most sensible course of action to avoid the unknown risk in its entirety?

James Kirkpatrick is a mechanical engineer and energy analyst serving as president of JKF Associates.

AVOIDING BPA

BPA makes plastic harder and tougher without losing transparency, so plastic bottles and food storage containers are the main sources. Use glass instead of plastic for food storage and avoid beverages sold in plastic bottles; minimize the use of foods in plastic-lined cans. Flexible plastic wrap does not contain BPA.

Cold temperatures reduce the migration of chemicals, so storage of soups, broth, etc. in the freezer is probably OK. Let these foods cool completely before transferring them to plastic containers.

Babies are likely to be particularly sensitive to the hormone-mimicking effects of BPA. Use glass bottles and a stainless steel sippy cup. Do not give babies baby food packaged in plastic.

Most cash register receipts are thermal paper containing BPA! It's unlikely that the chemical will transfer through your skin, but it could aerosolize if the receipt is crushed or folded. . . so handle receipts with care!

Wise Traditions Podcast Interviews INTERVIEW WITH SAYER JI HEALTH FREEDOM: WHAT'S AT STAKE

HILDA LABRADA GORE: We are all asking many questions right now. So many things don't seem to be adding up, and there is a lot of cognitive dissonance between what we're being told and what we're experiencing. Sayer Ji is here to help us cut through the clutter. Sayer is the founder of GreenMedInfo, the world's largest open-access natural health database, and the author of *Regenerate*.

Let's start with some of the simple inconsistencies. The overall Covid-19 mortality rate is much lower than originally predicted, and yet rigorous orders and all kinds of mandates are still in place. Can you help make sense of that?

SAYER JI: What's happening is that there is profound cognitive dissonance, and it's because of the health policies that have been implemented through the initial modeling projections of what we were told Covid-19 would do to the world. According to Neil Ferguson's estimates from the Imperial College of London, the expectation was that 2.2 million Americans would die if the country wasn't immediately locked down, ostensibly to "flatten the curve." We were told, "Just two weeks, we have to do this to save lives." So on March 15, the White House pivoted one hundred eighty degrees to honor Ferguson's prediction. Of course, we've all found out that, in fact, the case fatality rate is orders of magnitude lower than these projections. When I say that, I am not just coming up with these criticisms out of nowhere. Dr. Fauci, a member of the White House coronavirus task force, published an editorial in the New England Journal of Medicine that stated very clearly that the risk of being killed from Covid was about the same as the risk from severe seasonal influenza, which he said was 0.1 percent. Initially, the estimates coming out of China reported in the Lancet were as high as 25 percent case fatality. So, going down from 25 percent to 0.1 percent is two-hundred-fifty-fold lower.

HG: So, why aren't we celebrating in the streets? Why aren't we mask-free and engaging in community activities? Why isn't this good news getting out?

SJ: That's a great question. My wife Kelly [Brogan] and I are actually doing that very thing. We were part of an event to celebrate the reality that there is no threat as initially projected by the fear-mongering, priest-like scientists and the media the world over. The threat didn't materialize. The bodies did not appear. In fact, we now know that there's almost a criminal level of collusion that occurred, because in America the estimates are sixty million people lost their jobs-and that doesn't even take into account the socioeconomic and psycho-biological adverse effects of isolation, for example. We're dealing with devastation that is orders of magnitude higher from the response to Covid than from the "Covid virus."

HG: It's like that saying, "The cure is worse than the disease."

SJ: Yes, exactly, and that's such a poetic description of the geopolitical aspects of what has unfolded. Think about what allopathy really represents, and its origins in the Rockefeller model of symptom suppression that basically proposed that we need petroleum derivatives (turned into patented medications) in order not to die, when in fact, it's chemicals that are the primary reason why we get sick. What we're experiencing now has been centuries in the making; everything had already been inverted. The geopolitical dimension of this way of thinking is that current events are an unfortunate natural consequence of programming that has been underway for a very long time.

HG: I heard you mention collusion. Can you say more about what you were alluding to?



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SJ: Here's an example. If you look at the thousands of media outlets throughout this country, they are basically centralized into a pyramidal structure. Just four or five corporations own all of the smaller outlets, and that's only the tip of the iceberg. Consider Project Mockingbird-a CIA project to infiltrate every major entertainment and media outlet in the country-this is propaganda that we're dealing with. Moreover, it is propaganda of the most egregious kind, the kind that tells you that we have a threat so devastating and lethal that we have to give up all of our civil liberties, give up our ability to provide for our children, shutter our businesses, stay afraid in our homes and no longer look at one another beyond the potential biological threat we represent. In this model, your body is full of germs and, therefore you're potentially deadly just by existing and coming within six feet of even a family member. This is the psychological operation that has descended upon the planet under the auspices of saving us from a deadly virus, even though the numbers don't even come close to affirming that narrative.

HG: Who benefits from the propaganda? Who's pushing it?

SJ: That's a great question. I'm always looking for beauty in what otherwise can look like devastation, and I have argued that the most important and beautiful part of this situation is that we are finally asking that very question: Who is behind this? I am not asking as a so-called "conspiracy theorist" but as someone who is simply trying to understand cause and effect. Why would the entire socioeconomic fabric of the planet suddenly be put into paralysis, bringing about the controlled demolition of the global economy? In 2008, when we had the last financial crisis, the bailout given to the big banks was less than a trillion-something like eight hundred billion. This time, we've seen probably five or six trillion dollars of wealth transferred, in just six months. There has been a massive transfer of wealth, yet no one is talking about it. The World Bank even has "pandemic bonds" that were paid out thanks to Covid-19. What's important to understand is that there is a lot of motive financially for wrecking the economy and reconsolidating around a new global government structure, and this goes beyond party politics. We should also recognize how party politics have been weaponized. If you are profreedom or pro-parental rights or pro-informed consent, we're seeing all kinds of divisive rhetoric to make it look like you're far right, pro-Trump and racist. Finally, this is way beyond a single nation-state issue-this is a global operation. It may also be one of the first times the United States has experienced this crushing, fascist-like "boot on its neck" from powers that are transnational.

HG: If they can get us fighting among ourselves, then we're more vulnerable, aren't we? We're distracted by a false narrative.

SJ: Absolutely. Think about it. Never before has ideology or allegiance ever been worn on one's face in the form of a mask or in the form of not wearing a mask. The level of divisiveness and the sheer, crude literalness of it is unprecedented. Before, you had to guess about a person's creed or political beliefs. Now, not only might someone believe masks are their civil liberty front line, but they may view not wearing a mask

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as risking their life and the lives of their family. They've clouded human relationships with a survival-level fear that is irrational. Interestingly, research clearly shows that the amygdala is activated when you suppress normal gas exchange through mask wearing—so you're actually inducing a fear and anxiety response by wearing the mask! There are many other layers to this devastating psychological operation, but divisiveness is certainly number one on the list.

HG: Yes! Looking around the other day, I thought, "Seeing masks on people's faces, I feel like I'm seeing a bunch of hostages or victims of something." In the past, people who wore masks were being taken captive or were being limited in some way. They weren't allowed to yell, and that's why they had their mouths covered. It suddenly struck me, it's like looking at walking hostages.

SJ: Exactly. This is an unprecedented moment. People need to remember that there's a difference between quarantining the sick and forcing healthy individuals-upon whom the entire fabric and health of the country relies-to wear masks, treat themselves as though they're sick and then give up all their self-reliance and their livelihood. That's the definition of what some folks would call tyranny. These measures are being imposed against our will under the auspices of saving the lives of a relatively small number of mostly elderly individuals who happen to have pre-existing conditions. The healthy people who should be cocooning those who are most vulnerable by supporting them and showing them love are being told that they themselves have to act as though they're sick or a deadly threat to others. This is really the first time in my life that I have seen what I would call a sorcery-level effect in my waking reality. This isn't some dream.

Some people are calling masks "face diapers," which is not so far off the mark because they actually accumulate fecal matter. The masks are doing absolutely nothing but producing what are called fomites, which are carriers of biological debris that is itself a risk for transmission. This is what the World Health Organization and the

CDC had decided before the mask politics came in; then, they revised their original guidance on mask wearing. It's not about science any more, it's about obedience and submission signaling. For many, this is *not* virtue signaling or fear of a virus—this is submitting because you're afraid of what the government might do. In addition, there are those who actually are afraid of a virus; that contingent needs to be educated about the issues with germ theory, especially when it comes to viral contagion.

HG: It's hard to talk about the mask issue without emotions getting raised and people getting angry. There's a sense in which you're thought of as a sociopath if you don't wear one (because obviously "you don't care about other people"). So let's talk facts for a minute. What is the size of a virus, and is it likely that a scarf or any covering can keep it out?

SJ: Any high-gravitas conventional definition of viruses will acknowledge that viruses are not living. In fact, their very architecture-the particle within which their so-called nucleic acids live-is often taken from the host; so they're not even really "other" and they have no inner motive force. The concept that something that you need a subatomic-level electron microscope to even see can just leap from body to body across the planet and tackle a human being like a lion on the Serengeti tackles an antelope-which is what people think viruses do-is absolutely obscene. The reality is that viruses are just pieces of genetic information that travel horizontally to make information exchange possible in real time so that we can survive and adapt on a momentto-moment basis. Viruses are not evil and have never been proved to be evil. Just as we have learned that the microbiome is essential, we also now know that without viruses, we wouldn't exist. We would die in a heartbeat if we didn't have viruses in our body.

When you go down the rabbit hole, there's no evidence to show that Koch's postulates were fulfilled with Covid-19—not even the first postulate. They never even isolated the coronavirus effectively, so there is no way to prove that this narrative has any basis in reality. How Just as we have learned that the microbiome is essential, we also now know that without viruses, we wouldn't exist. The war has transmogrified from the post-9/11 war on terror to Covid-1984, only this time it is global, and the threat is the human body and the demonized virus. do I know that? Consider that when the World Health Organization (WHO) gave guidance to its member nations, the WHO removed the requirement to test for virus in order to code someone's death as a death from Covid-19. The emergency-use ICD codes launched on March 20 basically stripped the requirement to prove anything; the only thing they said you had to do was have a suspicion that someone had Covid, and you could write down that they died from Covid. That is a fact. What that means is that there is absolutely no evidence that in any way justifies the present "body count" that they're saying has now reached a million people. They never even attempted to prove that a viral particle caused any of those individuals to die. They removed the requirement.

HG: I want to go back to your earlier point about collusion, because events such as Event 201, carried out before the outbreak, seem to mirror quite uncannily what we're experiencing right now.

SJ: It wasn't just uncanny. At Event 201 (held in October 2019 in New York City), those participating in the exercise boldly and even grotesquely announced what was about to descend upon the planet, except that it wasn't a viral particle with this supposed Grim-Reaper-level lethality-it was a psychological operation and a form of psychological warfare. Event 201 was funded and orchestrated by the Gates Foundation, the Johns Hopkins Center for Health Security and the World Economic Forum. And when you look at who benefits from this, it's fairly clear that in addition to the pharmaceutical (and especially vaccine) industries, powerful individuals stand to benefit from the increased control that will be "the new normal." Their vision, promoted as ensuring our survival and "safety," is a dystopian, technocratic, gulag-like digital prison.

This is the new "war on terrorism." The war has transmogrified from the post-9/11 war on terror to Covid-1984, only this time it is global, and the threat is the human body and the demonized virus—not just this coronavirus but also every other imaginable particle that they decide to coin and bandy about as the new terror. This narrative requires that we believe in the most absurd, pseudo-scientific, non-validated view of viruses that has ever been conceived.

HG: What would you say to the person who looks around the world and says, "Everybody is on the same page because they just want to keep us safe and healthy"? I'm talking about the person who thinks you are reading way too much into all of this.

SJ: For the person who believes the government is out to help them, I wish them luck. If you review world history, you find that governments have been responsible for the most deaths. I think the latest figure is that two hundred sixtysix million people have died because of governments' "good intentions." While on some level I would love to believe that we are not facing as dark and as global a problem as I see, I think it's time for us to wake up, individualize, become adults and realize that the reason why this is all happening is we had already outsourced our power to these systems. I studied this for fifteen years before Covid-19 happened. I was already focused on issues like the globalization of the vaccine agenda and its merger with pharma and the military. This is the new way that one invades foreign soils. You say, "Oh, there's an Ebola outbreak. We're not going to observe your boundaries or sovereignty as a nation-state because-guess what-pandemics don't respect boundaries." That is their narrative and the strategy for laying waste to countries that believed they had autonomy. I've also been observing this through the World Trade Organization, for example. I was the vice-chairman of the National Health Federation, which has a seat at the Codex Alimentarius. I've been watching the effort to force countries into one global system for a long time. And in fact, this is the perfect way to do it-it's genius. I understand that some don't see it that way-because it takes a lot of time and energy to connect the dots-but I can't censor what I know to be true.

HG: The word censorship is very pertinent right now. We're seeing frontline doctors and others who have something to say that is different from the mainstream narrative getting their information pulled from social media platforms and YouTube, and we're told it's "misinformation." That seems to point to propaganda and an agenda.

SJ: It's very disturbing. Unfortunately, there are well-trodden steps to genocide, and Step Four is dehumanization and identifying minority groups as "vermin" or "disease carriers." Already before Covid, I had been looking at how those who decide that they don't want to participate in the increasingly heavy vaccine schedule are identified as dangerous to the vaccinated. A lot of us were already getting censored. I got kicked off of MailChimp (which is part of a CDC Foundation partnership group) for "anti-vaccine" content and had experienced other censorship and deplatforming attempts. There has been an elaborate attempt to shut down people's voices on these issues. Tens of thousands of families who know they have vaccine-injured children are being gaslit or portrayed as dangerous and crazy.

It is a huge concern when you can't even speak about what a published, peer-reviewed journal article says, if it happens to be critical of the dominant narrative around Covid, or vaccine safety, or lack of evidence to support effectiveness. The most important thing is that we all continue to stand up and speak the truth. One thing the planners or architects of this agenda did not really anticipate was the power of the Internet. They were not able to push this through as cleanly as they wanted, and a huge number of people have woken up. We have half the country that won't even think about getting a Covid-19 vaccine because they understand that it's a really dangerous thing to do. It's not going to be proven "safe" or "effective." They are going to push it through and test it on the public, which is what they've been doing to our children all along. But it's all being unraveled, and people are seeing this for what it is. Not everyone-but I think the majority are starting to realize that this is not about protecting us.

It is also important to remember that there is almost no post-marketing surveillance of the adverse effects of vaccines. Only one percent or fewer of vaccine injuries are ever reported, and even fewer receive compensation through the National Vaccine Injury Compensation Program established in 1986.

HG: Let's turn now toward what you were saying about how we have given away some of our agency. How can we take it back?

SJ: Great question. Kelly and I have come to a point in our lives where we realize that the most powerful form of activism is actually just being healthy and choosing to show up for ourselves and others in our community with all of our principles intact. We have not worn a mask throughout this entire experience. We have found a way to stand up for what we know is right and to communicate to others that we will not submit. We believe it is essential that we continue to exercise our right to breathe freely and not, for example, have someone penetrate us with a vaccine-because the masks are a placeholder for that. It is important that people realize that the only reason why anything has happened that has had an adverse effect is because of our complicity and consent. That's a very adult way of looking at this. If we look at it through any other lens, we're victims and that is only going to feed more of the powerlessness.

We created and we're facilitating a movement called the "Thank You Body Rally," with over one hundred ambassadors throughout the world. All seven continents stepped up to celebrate our stories around healing. Kelly, for example, healed herself of Hashimoto's. That was the beginning of her beautiful journey to where she is today. And I healed myself of asthma. Those stories are powerful because they run up against the multi-trillion-dollar medical-militaryindustrial establishment. Our stories also run up against the narrative that our bodies are broken or damaged and that our genes-or germs-are the cause of our ailments. Meanwhile, they deny things that are clearly causing harm-like the hundred thousand petrochemicals we're exposed to daily, the non-native EMFs or the psychogenic fear that they're pushing into our bodies-these are the real causes of disease.

We have half the country that won't even think about getting a Covid-19 vaccine because they understand that it's a really dangerous thing to do.

We have to be self-reliant. That's the real lesson here.

I'm also proud to be the co-founder of a nonprofit organization called Stand for Health Freedom. Its sole purpose is to take the egos and logos out of the equation (my own included), so that you can take action, using digital software, that will directly affect your local decisionmakers and elected officials. This can really have an impact. We have already seen it affect legislation that was dead set on stripping exemptions to vaccination. Stand for Health Freedom exists because of people who see that we have to take responsibility for our future. We cannot outsource it to politics, hoping that the Trumps and Bidens of the world are going to save us. We have to be self-reliant. That's the real lesson here. If we embrace this, there is such a beautiful world waiting for us around the corner, one that we can barely imagine. That is the light at the end of the tunnel that drives me and Kelly every single day.

HG: On some level, it seems like some of us are afraid of taking responsibility. Why do you think that is?

SJ: That's a great question. It helps to understand the psychology of allopathy. Allopathy's sweetest pill is the illusion that disease and the soul itself are secondary to the physical and the physicochemical aspects of life. Nihilism and chaos are embedded in the ideology around conventional medicine and the old biology, which by the way has completely been eclipsed by the new biology.

I know that the Weston A. Price Foundation has been speaking to these beautiful principles from the beginning. You have been a pillar in helping people understand that we don't have to choose the path of allopathy, which is the path of the victim. There are so many ways in which we're baited into thinking that we're victims of this or that situation. And if ever there was a moment where we were facing some epic battle against darkness, it's this one right now. But the real "ask" is, first, to be radically responsible. I'm trying to integrate my awareness around how there are no carve-outs. Either we are taking responsibility for our lives or we're not, and everything we do is connected in some way to what's happening out there. We have immense power and responsibility if we're willing to assume it for our individual health destiny as well as communally for the future of the world.

HG: In other words, we are a part of the problem and the solution. Is that what I hear you saying?

SJ: Exactly. I would add that we are not just a "part" but we are the majority interest in the outcome. I don't mean to say that we're allpowerful, but I do believe, for example, that we can heal any disease. I know that. I've witnessed thousands of examples where people have shown that they don't need allopathic medicine and can heal from diseases that were called "incurable" or "idiopathic." That's amazing. However, until someone knows that is possible, there is no way that they are even going to try. The more people who realize that something far more beautiful than what is happening now is possible, the more likely that it is going to come into being. That doesn't mean that we have to deny what the darkness is, but it's about understanding that we have a huge amount of power.

HG: That is a hopeful note to end on. I am encouraged. As we wrap things up, I want to ask you, if listeners could do just one thing to either improve their health, stand up for themselves or embrace that power, what would you recommend that they do?

SJ: First and foremost, find true compassion for yourself, because it's love that will heal the world. We spend so much time confusing service to others with actual love, or trying to make other people happy, but we don't spend time defining what we ourselves need. We all have children, responsibilities and people who depend on us, but unless we are good and whole inside, we are not going to discover the profound benefits that I believe are available to us. It's actually as simple as that. When you connect with and love yourself, things start working out, and you start contributing to changing the world in a way that feels and looks much more peaceful.

HEALTH FREEDOM REVIVAL IN THE HEARTLAND By Hilda Labrada Gore

On September 15, a revival took place in the heartland of the United States. Did you hear about it? This was not a religious revival, although it was full of fervor. It was the Health Freedom Revival in Wichita, Kansas. The event's organizers originally were going to dub the event the "Health Freedom Rally" but quickly realized that the word "rally" couldn't quite capture what was in the works.

Planning began inauspiciously, only three weeks prior to the event. Megan Lubbers, a young mom in Wichita, had been connecting with a few local health freedom fighters. All were interested in obtaining a religious exemption for their children's vaccination. As of this year, forty-six of the fifty states (with the exception of California, Maine, Mississippi and West Virginia) allow a religious exemption, and sixteen states allow for a broader philosophical or "conscience" exemption. Laws can vary from jurisdiction to jurisdiction and diocese to diocese, however. Megan's children attend a private Catholic school that allows for no exemptions.

Megan had already begun partnering with advocates for medical freedom in the heartland—for her children and for all children—when she learned about the release of Andy Wakefield's new film, *1986: The Act.* When Megan inquired about hosting a screening, Wakefield's team offered to send Andy and the film's producer, Lori Gregory, to do a live Q&A following the screening. Megan was thrilled. Meanwhile, Dr. C.J. Mackie, a local naturopath and acupuncturist, suggested that Megan contact chiropractor Dr. Devin Vrana, a "Wichita mama bear" who happened to have a connection with Bobby Kennedy. The next thing they knew, Bobby was in as well.

As the Health Freedom Revival gained steam, Del Bigtree (host of the Internet show "The Highwire") joined the lineup, as did a number of other experts eager to speak about vaccinations, health freedom, dentistry and even soil health. Speakers began cold-calling Megan, requesting to speak at the event. Megan soon realized that she would need more partners to manage the event, so she contacted the leadership of Kansans for Health Freedom, a 501c4 nonprofit. That group is led by long-time WAPF chapter leaders Connie Newcome (president) and Debbie Mize (vice president), who were both eager to collaborate on the fast-approaching event.

Though the word of the day was "freedom," it was clear from the outset that savvy and clever planning would be required to defend the event's integrity. Governor Kelly, through executive order, had a mask mandate in place in the state of Kansas. In addition, an emergency public health order was in effect for Sedgwick County, requiring all persons to wear face coverings whether indoors or outdoors. Seeking to identify a place where it would be safe to gather mask-free, without the risk of being shut down and the possibility of counter-demonstrations, the organizers settled on Newton (in neighboring Harvey County) but did not release the location of the venue until two days before the event. Below are some highlights from the event.

ROBERT F. KENNEDY, JR. offered snapshots of his involvement in the health freedom movement. As an environmental rights lawyer and the founder of Waterkeeper Alliance, Kennedy would often encounter moms sitting in the front row at his speaking engagements. Repeatedly, these mothers would tell him that if he was concerned about mercury in fish, he should look into the dangers of mercury in vaccines. He told of one particularly tenacious mother who dropped a tall stack of scientific studies about vaccination on his front porch and refused to leave until he read them. Motivated and inspired by the many mothers who have refused to keep silent about vaccine injuries, Kennedy later went on to establish Children's Health Defense and its offshoot, Millions Against Medical Mandates. Kennedy revealed from the stage that he now suspects that his dysphonia (a vocal impairment) was a side effect of flu vaccines, which he took for a number of years at his workplace. He said that dysphonia is listed as one of influenza vaccination's side effects in package inserts. At the conclusion of his talk, Kennedy noted that it remains unclear whether masks are effective in any way. He believes that mask use primes us for future relinquishment of our freedoms.

• DR. TOBY ROGERS has a PhD from the University of Sydney in Australia. He spoke on the topic of his doctoral thesis, "The Political Economy of Autism." Rogers first became interested in exploring autism when his girlfriend's son was diagnosed with it. He was shocked by what he found—a massive cover-up of information linking toxins in vaccines to autism. Rogers raised some pressing questions. Who will care for autistic children once they become adults? What economic costs arise when an entire generation cannot enter the workforce and contribute to the prosperity of the nation, let alone provide for their own families? In October, we interviewed Rogers for the Wise Traditions podcast's health freedom track.

- CHARLENE BOLLINGER got wind of the event late. (Remember, it was pulled together in less than three weeks.) Nonetheless, she and her videographer made the ten-hour drive to join in at the last minute. Charlene and her husband Ty are the authors of several books and the driving force behind summits such as "The Truth about Cancer" and "The Truth about Vaccines." From the stage, Charlene shared how she and Ty were motivated to uncover truth when they realized that conventional cancer protocols (radiation, chemotherapy and surgery) statistically offered no improvement in outcomes over no treatment at all. They began exploring options and, after sharing their knowledge about alternative health options for cancer, did the same for vaccines.
- DEL BIGTREE is the host of the online show "The Highwire" and the founder of the Informed Consent Action Network (ICAN). With parents who had an "alternative health" bent, Bigtree was not vaccinated as a child. When he became one of the producers of the Emmy-award-winning program, "The Doctors," he made sure that the show covered a variety of health topics from an alternative perspective. The network was pleased with the ratings and for the most part welcomed his different point of view—except when it came to the topic of vaccines. When Bigtree suggested producing a show that would highlight vaccine dangers, he got a hard "no" from the network. This aroused his curiosity and suspicion. which ultimately led him to join forces with Andy Wakefield to produce *Vaxxed*. Del described it as his personal mission to confront all reporters who approaches him and to challenge them about whether they have studied the science. He also reminded the crowd that this is not a time to shrink back but rather to press on and fight.

A group of courageous "warrior moms" spoke out about well-child visits gone wrong. They shared story after story about how vaccines were the catalyst for a downward spiral in their children's health. The crowd nodded and applauded in support and agreement. One of the moms who spoke began second-guessing herself the moment she left the stage, concerned that she might have jeopardized her work as a physician by speaking out. Unfortunately, her worries are well-founded. By speaking out on this controversial topic, each of us risks losing friends, family, our reputation and perhaps even our livelihood. But it comes down to this—we must speak out when we see wrong being done.

Andy Wakefield is a living example of what it looks like to speak out, despite the risks. Wakefield is the doctor who stood by the results of a study indicating a possible link between autism and the MMR vaccine. He was taken to court and lost both his reputation and his career as a physician. Nonetheless, he has remained steadfast as an advocate for children's health. He is the director of *Vaxxed* and now *1986: The Act.* He also recently launched the Andy Wakefield Podcast (on SoundCloud).

The day after the event, I spotted Andy outside the hotel before he left for the airport. He was singing "Don't Be Cruel." After a bit of chit-chat (he says he's not really a singer), I said to him, "Andy, I think we're winning. I feel like we're just on the cusp of victory. But maybe you've heard that a lot over the years." He replied "I've been in this field for over thirty years. I think you're right. We are winning."

So take heart as you fight for freedom. We are on the winning side—the side that stands for truth and health and children. Stand strong. And stand with us.



Sacred Cow: The Case for (Better) Meat: Why Well-Raised Meat Is Good for You and Good for the Planet By Diana Rodgers, RD and Robb Wolf BenBella Books, Inc.

As I set down *Sacred Cow* to take a break and ruminate on the first few chapters, I hopped onto social media. In this moment of madness, I saw that a friend had posted a clip of someone involved with this year's presidential election who was taking an audience question: "What will you do to stop Americans from eating meat?" The answer was not encouraging. To say that this book by Diana Rodgers and Robb Wolf is both timely and important is therefore an understatement.

Meat is under attack in America and in many other countries. And it isn't just bad meat—the government-subsidized, CAFOraised, corn-stuffed, antibiotic- and chemicalladen mega meat—that the anti-meat faction is after. It is meat, period. *Sacred Cow*, which tackles assorted arguments against meat, is a vital resource to help slow the spread of this novel idea that is going "viral"—the idea that meat is bad for us and our planet.

Dr. Weston A. Price realized decades ago that animal foods are crucial to human health. In his studies of nonindustrialized peoples, Dr. Price tried to find a healthy population living entirely on plant foods; he found none. Rather, traditional peoples made sure they had animal foods in their diet, even if the inclusion of animal foods required considerable effort and risk; and all the sacred foods (for having healthy babies) were animal foods.

But bad ideas are like weeds, and they tend to come back whenever conditions are ripe for their spread. So it is with the anti-meat agenda, which has gained tremendous steam and clout over the past few decades. Those in favor of abolishing meat can be quite aggressive, which makes rebutting their arguments—generally either environmental, nutritional or ethicalmuch like a game of whack-a-mole. As soon as you bat away one faulty or flawed criticism of meat, the meat critics quickly move on to another and then another, shifting between their three main lines of attack. If it isn't water or land, it is heart disease or cancer, economics or ethics, and so on.

Thus, any book that seeks to address the meat issue is necessarily going to need to cover a lot of ground. (Another book that covers some of the same territory is Lierre Keith's *The Vegetarian Myth*, published in 2009.) In *Sacred Cow*, Wolf and Rodgers go through all the major objections that the anti-meat contingent have amassed, but without unnecessary detours.

The first section focuses on the nutritional facets of eating meat. I have friends who are terrified of meat and have gone vegan because family members died from cancer or heart disease. This section is for them. Does science support vegans' approach to disease avoidance? No. What should one conclude when the World Health Organization (WHO) calls meat a Group 2A probable carcinogen (the same classification that WHO applies to air and sitting in a sunny window)? This is one of the reasons why many of my friends say WHO CARES? when it comes to WHO guidelines.

Another argument we often hear is that even if total meat avoidance isn't a good idea, we certainly ought to limit meat consumption for our health. Right? Wolf and Rodgers show that science doesn't support that notion either. Things get particularly interesting when they dig into history, describing the omnivorous mid-Victorian diet, which was built around a wide range of whole foods from all parts of the plant and animal world. It included large amounts of high-quality meats and seafoods with which even the best of the modern organic optionspastured and grass-fed-would have trouble competing. One key aspect of the mid-Victorian diet was that it led to an increase in meat consumption compared with previous generations, with immensely positive benefits on health. And



In their haste to demonize meat—a traditional, nutrient-dense food group if ever there was one—the meat attackers leave little room to make the case for better meat.

when dietary trends changed and ushered in more processed foods, there were marked and measurable declines in health. Just how apparent were these changes? The authors report that "The mid-Victorians saw a loss of half a foot in average height in approximately one generation" (page 67). In short, history and nutritional research don't actually support the idea that meat is bad for human health.

For the anti-meat crowd, poking holes in the health arguments doesn't matter, because "we know meat is bad for the environment," right? Here again, we run into an example of how a complicated issue can give cover for distortions or outright lies. Many years ago, I realized that the anti-meat agenda had no interest in factual dialogue about their whole "how much water does it take to produce a pound of beef?" type arguments. Unless someone has created cows that can turn water into other unknown substances, all the water used to raise a cow merely becomes enriched fertilizer when it leaves the animal! As Sacred Cow makes clear, the environmental arguments against beef are indeed distorted or fraudulent. What is heartbreaking, the authors argue, is that all sides of the debate ought to be able to come together and go after the real problems-industrial meat and industrial meat production, along with a broken agricultural system that prizes corn, soy and similar crops above all others to provide unnatural foodstuffs to confined animals. Unfortunately, in their haste to demonize meat-a traditional, nutrient-dense food group if ever there was one-the meat attackers leave little to no room to make the case for better meat.

Even after someone is able to concede that "maybe" properly raised meat is "possibly" good for the environment, that will not matter either, because "eating other living things to live is unethical," right? Sacred Cow handles the weak ethical case against meat well. The two authors point out the important, basic truth-often lost on denizens of the modern world-that everything that lives does so because of the death of other things. Moreover, animals under human care experience a far kinder and cleaner death than almost any other death that nature affords. Ideas like choosing actions that cause "less harm" or "less suffering" do not provide a moral "out" either, because there is no action that offers a no-harm outcome. In fact, many alternatives to meat do far more harm to the animal (and plant) kingdoms than meat-even industrial meat-comes close to matching.

If you are looking for a one-stop resource to give to someone trying to understand the mayhem around meat, or you want to better equip yourself to understand and defend why meat eating isn't just good, but vital for both environmental and human health, *Sacred Cow* is an excellent choice. Two thumbs up.

Review by John Moody

BOOK REVIEWS IN Wise Traditions

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

- First and foremost, we are looking for books that add to the WAPF message. Dietary advice should incorporate the WAPF guidelines while adding new insights, new discoveries and/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, or praise fat in your text but include recipes featuring lean meat, we are unlikely to review it.
- We do not like to give Thumbs Down reviews. If we do not agree with the major tenets expounded in a book sent to us, we will just not review it. However, we feel that we have an obligation to point out the problems in influential or bestselling books that peddle misinformation, and for these we will give a negative review. We also will give a negative review to any book that misrepresents the findings of Weston A. Price.
- If you want us to review your book, please do not send it as an email attachment. Have the courtesy to send us a hard copy book or a printout of your ebook or manuscript in a notebook or coil binding.

The History of the Peanut Allergy Epidemic By Heather Fraser CreateSpace Independent Publishing Platform

Recently, the famous *Home Alone* movie actor Macaulay Culkin posted a funny quip to social media. "Want to feel old? I turned 40 today." Like a relic from another age, Culkin's movies remind me of the America that I grew up in almost a generation ago. It was not just a time when lack of air conditioning meant that people spent more time outdoors on their porches, but also an era when seasonal allergies and asthma were the exception rather than the norm, and food allergies were uncommon.

Forty years later, food allergies are big business. On the food industry side, "allergen-free" foods are a growing, multibillion-dollar segment of the food market. On the pharmaceutical industry side, drugs, treatments, EpiPens and other interventions are likewise worth billions. In her 2010 book, The History of the Peanut Allergy Epidemic, Heather Fraser describes how we quickly moved from trying to sort out the causes of the allergy epidemic to simply managing symptoms. "At the end of the day," she says, "the questions 'how and why is this happening' remained unanswered. What emerged instead in response to the mystery was a massive Food Allergy Industry, the infrastructure of which included billions of dollars in the sale of 'freefrom' foods, web sites, blogs, magazines and parent-initiated lobby groups."

Among food allergies, peanut allergy is especially problematic because it is both widespread and deadly. Fraser cites a 1991 U.S. study which determined that nine in ten food allergy fatalities "were due to ingestion of peanut/tree nuts." Why is a food that has been consumed across the entire world for two thousand years suddenly a scourge, but only in certain countries? This is the riddle that Heather Fraser seeks to unravel, as she takes us across decades of research and science to a simple, factually sound conclusion. Fraser educates the reader about the interesting difference between sensitization to allergens (like the allergens found in peanuts) and reactions to allergens. This distinction is an important piece of the peanut allergy puzzle. Fraser's discussion of the most effective ways to elicit allergen sensitization in people is another vital clue to understanding the overall puzzle. The fact is that it is hard to become sensitized, because the body has important systems and defenses that seek to keep it from happening unless we bypass them.

Fraser does an excellent job of showing how the numerous theories and factors that have been used to explain the explosion in peanut allergies don't hold water. Can age, type of peanut, location, maternal consumption or year of birth give us any insights into why this is happening? Is it hygiene or helminths or toxins? The data show that most of these are dead ends-but not all. A few of these variables point to disturbing conclusions, such as the sudden and drastic uptick in food allergies that began around 1990, or the New Zealand study which followed over one thousand children and found that sizable proportions of the vaccinated subgroup had asthma episodes (23 percent), asthma consultations (23 percent) and consultations for other allergic illnesses (30 percent).

If the first half of the book shows why various theories cannot explain the peanut allergy epidemic, the second half seeks to make a clear case for what does explain it. In brief, as Fraser states, "Mass allergic phenomena emerged as a side effect of a late 19th century technology: vaccination." Fraser explores historical and scientific data showing how and why vaccines and their adjuvants-the metals and other compounds used to increase vaccine effectiveness-bring about a known but ignored risk and "side effect": allergic sensitization to the various things found in the vaccines. . . things like peanut oil. In fact, "The more effective a vaccine is, the greater the risks of allergies and other adverse effects." And if you want to know why peanut oil became the choice par excellence



for vaccines, she provides a detailed account of the fascinating history that led to this modern calamity.

I also appreciate the fact that Fraser takes the time to help modern people understand why vaccines came about and were so quickly accepted. In our time, we are separated from the horrors of the early-1800s illnesses caused by the sudden and massive urbanization of large populations along with incredibly poor sanitation and for some, subpar nutrition. But back then, if you were watching loved ones die as their skin "slip(s) off the body in sheets," would you not also cry out for some form of protection? Initially, many people focused on the perceived benefits of vaccination, unaware of the myriad risks. Far more was unknown than known. Also, 19th-century science was undergoing rapid and radical transformation, with the relatively new germ theory—which justified vaccination—gaining more adherents. (Read Sally Fallon Morell's and Dr. Tom Cowan's new book, *The Contagion Myth*, for more on this interesting history.)

Although this book is primarily about the peanut allergy epidemic, it is full of other interesting, albeit disturbing, information. Fraser notes, for example, that "Increasingly, the health of boys and the birth rate of boys has been impacted by environmental pollutants at a higher rate than girls. . . . [I]n a small population downriver of polluting petrochemicals, female births outnumbered male births 2:1." Indeed, Chapter Three alone was an eye-opening journey through parts of medical and Western history with which I was only partially familiar. Even the well-read among us are likely to find a lot of new information to add to our understanding of how we ended up where we are in terms of both health and medicine.

Where do things go from here? The medical community has acknowledged for quite some time that certain components of vaccines, such as gelatin, are tied to allergic outbreaks (see "Alpha-Gal Syndrome and Ticks: A False Trail?" in the Spring 2020 issue of Wise Traditions). Modern medicine also knows that the everincreasing number of vaccines on the childhood vaccine schedule means ever-increasing risks of toxic metal accumulation in young children and a greater risk of other adverse reactions and allergies. At the end of the day, however, "Vaccination [is] less about medicine than it [is] about economics." The vaccine industry and the adverse conditions its products create-which often require treatment for life-represent a revenue stream of billions and billions of dollars that are powerful incentives to continue with business as usual.

Fraser's motivation for writing a thorough *History of the Peanut Allergy Epidemic* is personal—her own child had a severe reaction to peanut butter at thirteen months of age. Thus it is a book for thinkers, driven by concern from the heart. Two thumbs up.

Review by John Moody

REAL FOOD FOR ROOKIES By Kelly Moeggenborg, AKA Kelly the Kitchen Kop

Having trouble getting started with a healthier diet? Not convinced it's worth all the trouble and expense? Then *Real Food for Rookies* is a good place to start—now revised and expanded, with more useful information and up-to-date advice. Kelly begins with her Grocery Store Cheat Sheet, to guide you through the aisles of your supermarket or health food store. Like our Shopping Guide guidelines, Kelly gives you Good, Better and Best for meats, seafood, poultry, eggs, nuts, milk and dairy products, butter, fats and oils, grain products, breakfast foods, fruits and vegetables, fermented foods, baby foods, broth and soups, beverages, sweets and condiments. A great discussion on the organic label—what it tells you and what it doesn't tell you—segues into guidelines for purchasing foods directly from farmers. She provides separate chapters on fats and oils, milk and soy.

The best comes at the end where Kelly discusses the motivations for making a change to healthy food. First and foremost: better health for the whole family, a more harmonious home life, better behavior in your kids, more energy and less suffering from aches and pains.

Can you afford a healthier diet? I love the graphic on page 158. Eating healthy, pasture-raised meats and organic produce is expensive. What's more expensive? Cancer, diabetes, inflammation, aging, gut issues, weight gain, brain fog, Parkinson's and many more (like special education for ADHD children). Don't worry about appearing weird, Kelly advises. "Many will mock you for being 'weird,' but remember that 'normal' is sick and tired!"

Then comes a great collection of recipes for newcomer moms who want to please the whole family: homemade pizza crust, chicken strips, french fries, vanilla ice cream and kefir soda pop. The thumb is UP! Review by Sally Fallon Morell

Fermentation Made Easy! Mouthwatering Sauerkraut: Master an Ancient Art of Preservation, Grow Your Own Probiotics, and Supercharge Your Gut Health By Holly Howie Library and Archives Canada

Holly Howie's goal is jars of sauerkraut happily fermenting on the counters of one hundred thousand homes. With Howie's book, *Fermentation Made Easy! Mouthwatering Sauerkraut*, anyone armed with a glass jar, a cabbage, sea salt and touch of chutzpah can begin the tantalizing adventure into the colorful, bubbly world of the friendly *Lactobacillus*.

Sally Fallon Morell's beloved *Nourishing Traditions* inspired Howie to take the fermentation plunge back in 2002. A grade-school teacher by trade, she followed Fallon's instructions for basic sauerkraut after learning that virtually all of the cultural groups Weston A. Price studied included some variety of fermented edibles in their diet. Howie wanted the health benefits that these peoples derived from their native diets, and she was willing to give the anaerobic process a try for her family's sake.

At that time, most Americans knew about fermentation solely in the context of alcohol. Research on the microbiome and the gut-brain connection was still in its infancy, and kombucha wasn't the trendy beverage *du jour* that it is today. Thanks to the ongoing work of the Weston A. Price Foundation, the publication of Sandor Katz's *The Art of Fermentation*, the launch of a bevy of blogs and YouTube videos by at-home fermentation experimenters, and other efforts, the return to ancient food traditions, though still not mainstream, is slowly gaining ground.

Howie is trying to speed that process along (although by now she knows a thing or two about patience and timing). Almost twenty years after her first humble batch of sauerkraut, Howie remains passionate about all things lacto-fermented and wants to share the miraculous microbial journey with others. In addition to writing this book, she is the founder of MakeSauerkraut. com, an online compendium of amiable kitchen wisdom where you can download step-by-step guides, recipes for everything from pickles to fizzy coconut water and recommendations on tools and equipment.

The typical reader of this journal may already be well-versed in the health perks of fermented vegetables, but it never hurts to go over this information again, especially if you need to get reluctant family members on board. Luckily, we are now at a point where plenty of scientific studies stand at the ready to back up the powerful claims of a food preservation method that has been around, largely by necessity and innate wisdom, for millennia.

As Howie explains, lacto-fermentation can dramatically increase the bioavailability of minerals and nutrients and supercharge antioxidant potential. For example, one cup of fermented red cabbage can contain as much as seven hundred milligrams of vitamin C. Food prepared in this way enhances digestion, calms our mood, lowers cholesterol, boosts immunity, neutralizes toxins and pesticides, aids in weight loss, reduces the risk of certain types of cancers and much more. Lacto-fermentation also creates an amino acid called L-glutamate that humans tend to find tasty and even borderline-addictive.

After breezing through all the reasons why you should be fermenting at home in Part One, Howie hopes you will be convinced enough to break out a knife and cutting board and get to chopping some cabbage. Part Two covers a few basic concepts, including sauerkraut's three key ingredients (bacteria, salt, cabbage) and the equipment you will want to have ready before you get started (most of it is optional, so don't be alarmed). Part Three comprises the seven fundamental steps to creating your first batch, as well as a discussion of how to troubleshoot any potential hang-ups. There are plenty of illustrative pictures, guidelines, tips and tricks to hold your hand along the way.

After following Howie's seven fundamental steps a time or two, you should feel ready to make a foray into Part Four. Here you will not



Lactofermentation enhances digestion, calms our mood, lowers cholesterol, boosts immunity, neutralizes toxins and pesticides, aids in weight loss, reduces the risk of certain types of cancers and much more.

Even if a photo just shows julienned root vegetables in a glass jar, it looks like something you want to stick a fork in and eat like now. only find classic and dill-flavored recipes, but also plenty of ways to tickle the palette with herbs like thyme, juniper berries, rosemary, caraway, cilantro, cumin and cardamom, as well as vegetables such as beets, carrots and garlic. There is even a chapter of recipes for sweeter sauerkrauts (such as the kid-friendly Cinnamon Apple Sauerkraut), and a chapter on spicy varieties, including kimchi-style and curry-inspired versions.

Part Five wraps up with more helpful tips on how to add sauerkraut to your daily meals (if you're like most people, it will soon become second nature to add a dollop to almost anything); how to select the best produce (fresh and in-season is a good rule of thumb); and tools to make things easier (such as a specific digital scale). In addition, there is a handy appendix outlining how much salt to add per ingredient weight, a glossary and general guidelines on how much sauerkraut to eat at once. (Someone brand new to fermented foods might start off by sipping on the brine.) And Howie doesn't stop there, offering readers additional helpful tips, intriguing recipes and downloadable cheat sheets on her MakingSauerkraut.com website.

Overall, *Fermentation Made Easy!* provides a totally unintimidating toe-dip into the world of

fermented foods. In this regard, one of the book's appealing features is its vibrant and enticing upclose photography. Even if a photo just shows julienned root vegetables in a glass jar, it looks like something you want to stick a fork in and eat—like *now*. Something deep inside your gut just knows it is good. Sandor Katz's tome on fermentation may be a great coffee table conversation starter, but Howie's friendly invitation into this sometimes overwhelming subject may be more likely to wind up on the kitchen counter, perhaps dusted with salt.

Fermentation Made Easy! may not be the "everything you ever needed to know" resource for fermenting, pickling and preserving; for example, Howie is up-front that the book doesn't cover how to make sauerkraut in a crock (although that information is available on her website). Nonetheless, this is probably the entry-level book that—besides Fallon's classic, of course—Howie wished she had back in 2002. Someone should tell Costco to stock up; there are well over one hundred thousand people out there who could use this easy-to-follow, easyto-flip-through book. Two thumbs up.

Review by Jennifer Grafiada

2021 MINI-CONFERENCES

| April 25 | Aquasco, MD: The Contagion Myth with Dr. Tom Cowan and Sally Fallon Morell at P.A. Bowen Farmstead. Details to follow at : westonaprice.org/events/. | |
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| April 10 | Winchester, VA: Mini Conference with Sally Fallon Morell and others. Details to follow at: westonaprice.org/events/. | |
| May 15 | Lakeland, CO: Seminar of Healthy Traditional Diets with Sally Fallon Morell at Sunrise Ranch and Retreat Center. Details: westonaprice.org/colorado. | |
| May 17 | Lincoln, NE: Evening with Sally Fallon Morell. Details to follow at: westonaprice.org/ events/. | |
| June | Aquasco, MD: Wise Traditions Basics with Sally Fallon Morell and Marc DeNola, DDS at P.A. Bowen Farmstead. Details to follow at: westonaprice.org/events/. | |
| June | Oklahoma or Missouri. Details to follow at: westonaprice.org/events/. | |
| Sept | Swoope, VA: A Healthy Future with Sally Fallon Morell, Joel Salatin and others. Details to follow at: westonaprice.org/events/. | |

1986: The Act Directed by Andy J. Wakefield 7th Chakra Films

In the last year of the Obama administration, a document was declassified that spills one of the CIA's secrets. In 1954, the CIA decided that we need a vaccination program to enhance American influence around the world and keep up American technology in bioweapons. Did you hear about that on CNN or Fox News? I don't think you did.

This might raise a few red flags for some people. It also might explain the proliferation of vaccines with a questionable record of safety and effectiveness. It might explain why we have vaccines for diseases that are not that serious. Combine this with CDC ownership of vaccine patents and a patent on an earlier version of coronavirus, and you have some interesting food for thought.

By the 1980s, lawsuits over these shoddy vaccines threatened to destroy the vaccine industry. The industry went to Congress with a bill to give them immunity from liability. The bill was not hugely popular in Congress, and President Reagan even threatened to veto it, but big pharma lobbyists were up to the challenge. In the end, the bill passed in 1986, thanks to its inclusion in other more popular legislation and a little political blackmail. The lobbyists argued that without the bill, there would be no more vaccines-and "think of all the poor children who will get sick and die." Just writing that almost makes me gag. That should not only raise flags but set off neon lights and screaming sirens. If their vaccines were so great, why were they being sued into bankruptcy?

The 1986 Act effectively gave the pharmaceutical industry immunity from liability for vaccine injuries and deaths. Although the legislation also stipulated certain conditions, these have been openly ignored, at least until recently. For example, the Department of Health and Human Services (HHS) was supposed to collect safety data and submit a report to Congress every two years. HHS has never done that. More recent attempts to obtain safety data from vaccine makers have met with stiff resistance. I've said it before, and here I go again. If they don't want me to see the safety data, then I already know everything I need to know. No sane person would want anything to do with companies behaving like that. I don't want to be their guinea pig or cash cow.

The 1986 Act also established a vaccine compensation mechanism to handle claims of vaccine injury. Note that these claims are settled with your dollars, collected as a tax on vaccines, not vaccine industry money. At first, this system worked reasonably well. Compensation was handed out for various injuries, including autism. That's right—autism was recognized by the court as a by-product of vaccines. How did we get from there to now, where the CDC strenuously denies any connection between vaccines and autism? Are more red flags going up yet?

Our health system pretends to know nothing about what really causes autism and doesn't seem to see the issue as a very high priority. There are now millions of children and young adults with autism. Who is taking care of them? In the vast majority of cases, their parents are taking care of them. Don't let the TV show "The Good Doctor" fool you. That is not what the average autistic person looks like. The majority of autistics are completely dysfunctional. I'm not the first to wonder what is going to happen when their aging parents die. If autism rates continue to increase as they have been, we won't even need to wait that long to find out what happens. If our medical system continues to unscientifically shut down any open discussion about possible causes, there is little hope of a solution.

Andy Wakefield's latest movie, *1986: The Act*, brings in a well-known example from the auto industry to illustrate what is going on. You may remember the Ford Pinto, which had the unfortunate tendency to explode when rear-ended. Ford initially decided not to fix The 1986 Act established a vaccine compensation mechanism to handle claims of vaccine injury, settled with your tax dollars, not vaccine industry money.

that minor problem (until higher powers forced the company to fix it). Why not? They did the math. They calculated that it would be cheaper to let cars blow up and pay the damages than fix it. The same thing goes on in many other industries, especially in the pharmaceutical world. We are being overtaken by a culture that loves money more than life. Obviously, if we continue this way, many will die, but hey! The good news is that some of us will be filthy rich. The thumb is UP.

The Need to Grow

Directed by Rob Herring and Ryan Wirick Executive Producer Rosario Dawson https://www.earthconsciouslife.org/theneedtogrow

We have lost a massive amount of farmable soil. Industrial farming doesn't work. For most of our readers, these statements will sound like yet another newsflash from Captain Obvious. From this starting point, *The Need to Grow* looks at a few possible solutions. One is hydroponics. I have dabbled with hydroponics a little, and I have my doubts. I'm not totally sold on the idea that hydroponics can really replace old-fashioned soil-based agriculture. But I'm not an expert.

Jeffrey Smith *is* an expert on the subject of GMOs, and he explains how World War II chemical warfare was repurposed to produce pesticides and fertilizers. He thinks that might be a bad idea. I agree.

One of the film's subplots focuses on Girl Scout cookies with GMO ingredients. Yes I am going to be a mean old man and give the Girl Scout organization a hard time. A seven-yearold collected over twenty thousand signatures in a petition to remove GMOs from the cookies. She went to their headquarters to deliver the petitions and meet with a representative as previously scheduled. The representative canceled at the last minute for very lame reasons. Now that is mean. In addition, because the girl and her mom were already there, they wanted to go see the "shop." Although the film isn't extremely clear about what the shop is, it is apparent that under ordinary circumstances, Girl Scouts are routinely granted access to it. In this case, after a lengthy runaround, the girl was not granted access. That's not just mean; that is ice cold. In fairness, a representative eventually came down briefly to take the petitions in person, but I'm willing to bet those petitions promptly hit the bottom of the nearest dumpster as soon as the girl was out of sight. The Girl Scouts eventually came out with a GMO-free cookie. I'm sure we'll never know why it took them four years to do that.

The most intriguing thing we see in this film is the Green Powerhouse. Designed and built by inventor Michael Smith, it is a unique combination of greenhouse and power generator that uses trash and very little else as input; its outputs are power for one hundred homes as well as biochar, which greatly enhances soil fertility. Inside temperatures are maintained at tropical levels sufficient to grow bananas and pineapples in the middle of Montana. Tragically, it burned to the ground in 2015 under suspicious circumstances. It has since been rebuilt.

I'm giving this film a thumbs UP, but I will probably set a new personal record for qualifications and criticisms attached to the thumb. First, though *The Need to Grow* does not explicitly promote vegetarianism, one could read that implication into some of what is said. Except for a mention of how industrial animal farming is destructive (another newsflash from Captain Obvious), there is no sign of animals anywhere in this film.

Don't get me wrong. The Green Powerhouse is very cool, and I like the potential it offers to generate energy, dispose of trash and improve soil fertility all in one neat package. It may solve a lot of problems and change a lot of things. However, I don't think it is a complete solution by itself. I like the idea of solving concerns about the power grid going down by getting rid of the grid and replacing it with lots of smaller power plants, but I would like it even better if it could be scaled down to be cheap and small enough to fit in a typical backyard. As things currently stand, the Green Powerhouse is apparently quite expensive and took a government grant to build. The filmmakers do not explain where the money came from to rebuild it after it burned down.

There is also too much fretting about carbon dioxide in the atmosphere. No doubt we are dumping bad stuff into our environment, but carbon dioxide is the least of our worries. Plants need it. We need small amounts, too. Any good greenhouse operator knows that it greatly increases plant growth and productivity when they add more of it. Any good scientist knows that historically we have had more than twice as much carbon dioxide in our atmosphere as we do now. There was no disaster back then, so why would there be now? Completely removing it from the atmosphere is a really bad idea. This film does not go that far, and it makes many good points, so it narrowly escapes the thumb of death.

Insight: Slaughtered on Suspicion Directed by Malcolm Massey and Patrick Henningsen UKColumn Productions https://www.ukcolumn.org/community/ 2016/06/30/insight-slaughtered-on-suspicion/

In 2001, there was an outbreak of foot and mouth disease (FMD) in Great Britain. This resulted in the largest slaughter of animals (including pigs, cattle and sheep) in UK history. As of 2013, the livestock industry had still not recovered.

There are a number of odd features about the details of this large-scale slaughter. First, about 79 percent of the animals that were culled were not infected. Some herds were targeted without evidence, while others were ignored. Deer are very vulnerable to FMD but were also ignored. FMD for most breeds of sheep in England is no more serious than a common cold, but the sheep were culled anyway. One person kept her perfectly healthy sheep in her living room in an attempt to protect them, but that did not stop members of the army and police from breaking down the door and killing the sheep. In short, the implementation of this culling was illegal and incompetent to the point where it can't simply be blamed on stupidity. No one could be that stupid. Something bigger must have been going on.

Why were the agencies involved checking into the wood supply in the UK in the summer of 2000? Why were they printing up large numbers of warning signs for FMD months before the first case was detected? It took large amounts of wood to burn the bodies of the slaughtered animals, but burning is believed to spread the disease even more. In many cases, it took weeks before they were able to dispose of the large piles of animals culled. I imagine that didn't smell so good—and is that really a healthy way to deal with the problem?

This overreaction was apparently triggered (or justified) by a computer model. I don't often pull rank and claim expertise, but I do have a degree and a lot of experience in computer engineering, so I'm going to get up on my hind legs and pull rank. Computers are not magic machines that always give you the right answer. Computer models are only as good as their programmers and the assumptions they are based on. Computers are powerful tools for crunching numbers really fast, but when the programming and assumptions are wrong, they just generate wrong answers really fast. Computers have no intelligence, and if the programmers don't either, the answer will always, always be wrong. Garbage in, garbage out (GIGO) is not just a theory; it is as valid as the law of gravity.

By now, we have seen numerous examples of computer models that have been wildly wrong in their predictions. The UK's FMD model was wrong; climate models have all been wrong; the Covid-19 model that triggered the current panic was wrong. Yet people are still practically ready to start a religion based on a computer model. Do we ever learn?

There is also a disturbing consistency in the destructive results of these failed models. The climate model has succeeded in generating an irrational fear of carbon dioxide, which is By now, we have seen numerous examples of computer models that have been wildly wrong in their predictions.

DANISH TRANSLATION!

Dr. Price's masterpiece, Nutrition and Physical Degeneration is now available in Danish. Visit: q-publish.dk/udgivelser/ernaering-fysisk-degeneration/ Many thanks to WAPF member Henrik Hanson for the translation!

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good for plant life and all life. The FMD model devastated English agriculture. The Covid-19 model has put a major dent in agriculture and the economy needed to produce and acquire food all over the world. Destroying the enemy's food supply is a tried-and-true war tactic. Governments everywhere seem to have perfected the use of computer models to convince us that they need to reduce our food supply for our own good. I'm not trying to start conspiracy theories, but whether this is deliberate or not, the result is equally unacceptable. The thumb is UP for this video.

bOObs: The War on Women's Breasts Written, directed and produced by Megan S. Smith WayMark Productions Distributed by Cinema Libre Studio

Our mainstream medical system is still widely trusted despite a rather pathetic track record. The basis for this trust is a lot of fake news put out by an industry that is very adept at patting itself on the back. The film *bOObs* seeks to counter the fake news with a few facts specifically on the subject of mammograms. Dr. Ben Johnson and other experts on the biological effects of radiation are interviewed and have some interesting points to make.

False positives and false negatives are so routine that the mammogram procedure is hardly better than flipping a coin.

One of the first points is that a mammogram exposes you to about the same amount of radiation as one hundred X-rays. Next point: Contrary to their reputation, mammograms do not achieve early detection. By the time a tumor is large enough to be detected by a mammogram, it has probably been growing for five years or more. Next point: False positives and false negatives are so routine that the mammogram procedure is hardly better than flipping a coin. But they have convinced middle-aged women everywhere that it is very important to flip that coin once a year or so, whether it really does any good or not. It is the "standard of care," which really means the insurance and pharmaceutical industries have decided this is the best way for them to make money. Doctors and nurses are just as trapped in the system as their patients.

When you see a conventional doctor, you are putting yourself at the mercy of industries that say they care. And they do care, very deeply—about your money. If you need to lose weight, they will help you lose weight, mostly in your wallet. They will respond to concerns about radiation by claiming that you get the same amount of radiation on an airplane. OK, maybe true—but on the plane, that radiation is evenly distributed over your whole body. A mammogram concentrates it just on the chest, which makes a big difference. I'm not sure flying on a plane is the greatest thing for your health, anyway.

According to a study published in *The Lancet*, not only does mammography not decrease breast cancer mortality but it may increase overall deaths. The stress associated with false positives could be part of that. It is also a very abusive process involving a lot of smashing of body parts that might have a tumor. Never a good idea. Apparently, Switzerland is the only country that has gotten the message and banned mammograms.

The video makes some strong recommendations for prevention and alternative methods of screening. If you must get screened, thermography (especially when combined with ultrasound) has much higher accuracy than mammography. There is no smashing, no radiation, not even any touching.

But there are also ways to reduce your risk, for example, by tossing your junk food in the garbage. Bras that are too tight will cut off blood and lymph circulation, and poor circulation absolutely can lead to cancer. This film does a good job of giving women better information and much better choices than mammography. The thumb is UP.

Vaccine Syndrome Directed by Scott W. Miller Produced by Melissa Mosich-Miller and Scott Miller www.youtube.com/watch?v=s8n-of_Y4gw

Biological weapons can be dangerous for both sides of a conflict. Using them can be like spitting into the wind—you can end up with more in your own face than in the enemy's. Such weapons can and often have escaped containment. For this and many other reasons, biological weapons have been banned worldwide. Though we are told that some governments, especially in the Middle East, still use them, this comes mostly from the high-level government and military officials who often turn out to be the biggest liars. As a result, I have very low confidence in those sources of information.

Unfortunately, that information has been used to justify forcing vaccines on our military personnel. In September 1999, President Clinton signed Executive Order 13139 mandating that all military service people receive an anthrax vaccine that was not FDA-approved (you know it's pretty bad when even the FDA doesn't approve it). Almost one hundred violations were found in the lab that produced the vaccine, and about thirty-five thousand soldiers have died from vaccine-related adverse effects. One vet describes the thirty-five thousand as casualties of friendly fire through a needle. Meanwhile, the number of soldiers who have died in Afghanistan and Iraq is just over four thousand. Testimonials from many survivors permanently injured by the vaccine fill this video. Many would rather have taken a bullet than the vaccine. They have been treated worse by their own superiors than by the enemy.

Just to make things a little worse, the anthrax vaccine consists of several shots followed by yearly boosters. Former FDA head of inspections Colonel Sam Young said he would not take this vaccine. Russian Colonel Ken Alibek, MD, PhD—the inventor of weaponized anthrax said there is no vaccine that works against weaponized anthrax. He also said there is no safe vaccine at all. I'm surprised this video has survived to this point on YouTube.

It is bad enough that we subject so many of our young people to the obscenities of wars of dubious value on the other side of the planet. And it is bad enough that one in three comes back with post-traumatic stress disorder (PTSD). But it is beyond disgusting when they are abused and treated like slaves who have no right to decide what is injected into their bodies. They are told they must obey this "lawful order" to get vaccinated, which puts them in the position of having to choose between what is lawful and what is right-which are sometimes two different things. Unfortunately, many older adults still have trouble grappling with the distinction; the concept is especially difficult to contend with in a rigid, authoritarian system like the military. To their credit, many young Americans made the right choice in the face of stiff pressure to follow orders, even though the price of choosing what was right was jail time and a felony on their record. They didn't all do it for selfish motives but rather in the hopes of helping their fellow soldiers. These individuals showed admirable courage, integrity and character, and I salute them. The thumb is UP.



Vaccination Updates PERTUSSIS VACCINES: A HISTORICAL AND PRESENT-DAY PERSPECTIVE By Kendall Nelson, Director, *The Greater Good*

As far back as 1933, reports began surfacing that the wholecell pertussis vaccine could kill infants without warning. When my team and I set out to make our movie about the vaccine controversy in America, *The Greater Good*, we knew we had to tell the story of vaccine safety and informed consent champion Barbara Loe Fisher. Forty years ago, Fisher watched her precocious, bright, happy two-and-a-half-year-old son suffer a convulsion and collapse into shock and a state of unconsciousness within hours of his fourth diphtheria, whole-cell pertussis and tetanus (DPT) vaccine. As a consequence, her son—who had said his first words at seven months and spoke in full sentences by age two—regressed physically, mentally and emotionally. Fisher says, he had "become a totally different child."¹

In 1982, the Emmy-award-winning television documentary *DPT: Vaccine Roulette* profiled the damaging effects of the highly reactive DPT vaccine, but for Fisher and her family, this crucial information, broadcast to millions of parents, came too late. For them, life had changed forever eighteen months previously. She would spend years helping her son cope with illnesses and multiple learning disabilities, including dyslexia, fine and gross motor skill delays, auditory processing and attention deficit challenges and short-term memory delays so severe that officials "confined him to a special [education] classroom throughout his public school education."²

After the release of the television documentary, Fisher and other parents of DPT-vaccineinjured children in the Washington, DC area came together to found Dissatisfied Parents Together, which would later become the National Vaccine Information Center (NVIC). Their aim was to prevent vaccine injuries and deaths through public education. In 1985, Fisher was vice president of Dissatisfied Parents Together and co-authored her book, *DPT: A Shot in the Dark*, with Harris L. Coulter (published by Harcourt Brace Jovanovich).³ It was the first major well-documented critique of America's mass vaccination program and called for safety reforms and the human right to informed consent to vaccination.

For the past four decades, as Fisher has continued to research, analyze and publicly articulate the science, policy, law, ethics and politics of vaccination, she has become one of the world's leading non-medical consumer advocacy experts on vaccination and human rights. President of NVIC since 1993, she served as a consumer representative on federal vaccine advisory committees and public engagement projects at the Department of Health and Human Services (HHS) and Institute of Medicine for more than twenty years.⁴

WHOLE-CELL PERTUSSIS VACCINES

The DPT vaccine that Fisher's son received included a crude whole-cell pertussis component. Although the whole-cell pertussis vaccine was licensed in 1914, it was not routinely administered until after 1949, when vaccine scientists combined it with diphtheria and tetanus vaccines to make the three-in-one DPT shot.⁵ By that time, the death rate from the once devastating pertussis disease (which peaked in the 1800s) had already declined by more than 99 percent.⁶

As far back as 1933, reports began surfacing that the whole-cell pertussis vaccine could kill infants without warning⁷ and, by the 1960s, evidence published in the medical literature confirmed that the three-in-one DPT vaccine could cause convulsions and brain damage in children.⁶ Concerns continued to grow in the 1970s, and by the early 1980s there was little doubt that the whole-cell pertussis vaccine was, as Fisher describes it, "the most reactive vaccine ever given to infants and children, second only to smallpox vaccine."⁸

Fisher and NVIC have published informa-
tion summarizing what most babies who receive vaccines with a wholecell pertussis component are likely to experience. Short-term reactions that affect 50 to 80 percent of infants include fever, pain and redness at the injection site, as well as irritability and loss of appetite. More severe reactions include high-pitched screaming, hypotonic-hyporesponsive episodes (HHEs), seizures and brain swelling (encephalitis, encephalomyelitis or encephalopathy). Fisher further explains, "Between 25 and 60 percent of children who develop acute encephalitis or encephalopathy or have convulsions, including febrile convulsions. . . are left with. . . personality changes, developmental delays and learning disabilities, ADHD [attention-deficit/hyperactivity disorder], seizure disorders, lower IQ, speech, motor and behavior disorders and other disabilities."⁸

For over a decade after her son's injury, Fisher and other parents worked tirelessly to get the purified, less reactive diphtheria, tetanus and acellular pertussis (DTaP) vaccine licensed in the United States. The U.S. Food and Drug Administration (FDA) approved the first DTaP vaccines in 1991—but only for use in children fifteen months to six years of age and only following the administration of three earlier doses of the whole-cell DPT vaccine! It was not until 1996 that the agency approved the acellular vaccine for use in infants and children for all five of the recommended doses of diphtheria, tetanus and pertussis vaccination, and it was not until 1997 that the Centers for Disease Control and Prevention's (CDC's) Advisory Committee on Immunization Practices (ACIP) recommended DTaP instead of the whole-cell versions.⁹ It had taken fourteen years of consumer advocacy by parents of DPT-vaccine-injured children to secure a less reactive vaccine for America's babies.

Today, most African countries and many other developing countries as well as one European country (Poland) still use whole-cell DTP vaccines,¹⁰ in part because they are much cheaper to manufacture. In contrast, Japan began using acellular DTaP vaccines in 1981 and immediately began observing far fewer serious reactions.¹¹

THE END OF LIABILITY

Case histories of DPT vaccine injury and death had appeared in prestigious medical journals for more than fifty years prior to Fisher's family tragedy, but it was not until the mid-1970s that people began to sue U.S. vaccine manufacturers for injuries and deaths caused by the extremely reactogenic whole-cell pertussis vaccine. Most often, the DPT vaccine seemed to affect young children like Fisher's son, causing permanent brain damage or even death. As the number of lawsuits brought against vaccine makers increased dramatically through the 1970s and 1980s, vaccine manufacturers paid out millions of dollars to victims and their families, primarily in financial settlements reached outside the courtroom, settlements that required all case documents to be sealed from public view as a condition of the settlement.

In this environment of litigation, pharmaceutical companies manufacturing vaccines threatened to exit the childhood vaccine business and effectively blackmailed Congress into providing them with liability protection, alleging that if the federal government licenses and recommends—and state governments mandate—vaccines, manufacturers should be protected from vaccine injury lawsuits. As a result, the Ninety-Ninth Congress passed the National Childhood Vaccine Injury Act (NCVIA), signed into law by President Ronald Reagan in 1986.^{12,13} The goal of the NCVIA was to restrict lawsuits against vaccine manufacturers by creating a no-fault alternative to the traditional tort system.

Fisher and NVIC's co-founders worked to secure vaccine safety and research provisions in the historic law, which included a number of regulations related to informed consent and adverse event reporting. As a result of their efforts, for the first time "Congress acknowledged the reality of vaccine injuries and deaths, that safety reforms [were] needed, and that those who are harmed by vaccines should be financially compensated."¹⁴

Within a year of the 1986 Act's passage, in December 1987, medical trade association lobbyists persuaded Congress to quietly add an amendment to the Act, which gave civil liability protection to doctors and other vaccine administrators.¹⁵ In 1988, HHS began to implement the National Vaccine Injury Compensation Program (NVICP) that was established under the 1986 Act. The program is funded by a tax of seventy-five cents collected per dose of vaccine administered.

Although Congress promised that the NVICP would be a "non-adversarial, expedited, less traumatic and less expensive administrative alternative" to lawsuits against vaccine manufacturers, this has not turned out to be the case.16 According to Fisher, by 1995 the NVICP instead not only additionally shielded doctors from liability for vaccine injuries and deaths but was moving toward becoming an "exclusive legal remedy that prohibited all product liability against vaccine manufacturers."16 In fact, then-HHS Secretary Donna Shalala, along with officials at the CDC and attorneys in the U.S. Department of Justice (DOJ), actively worked to weaken the NVICP's compensation and safety provisions.14

After these parties pushed through amendments to the NVICP in 1995, the only events considered to be associated with DPT vaccination were anaphylaxis (a serious and potentially fatal allergic reaction) occurring within four "The federal government has systematically betrayed the public's trust by failing to keep the promise made to parents in the 1986 Act." hours and encephalopathy or encephalitis (brain damage) occurring within seventy-two hours of a DPT shot.¹⁴ By adjusting the government's vaccine injury compensation table, any child who suffered classic reactions to DPT vaccination (generally due to the pertussis portion of the vaccine)—such as collapse, shock, high-pitched screaming, a bulging fontanelle, or seizures—was no longer presumed to have suffered a vaccine injury, even if the reaction occurred within seventy-two hours of vaccination and even if the child was left with permanent neurological damage and seizures.¹⁴ This left the children ineligible for uncontested, expedited compensation in the federal program.

The 1995 rule changes meant that whenever HHS and DOJ refused to award compensation for classic DPT reactions leading to permanent damage, attorneys were faced with the tall order of having to prove causation in the U.S. Court of Federal Claims. In the intervening years, Fisher explains, "it has become extremely rare for any vaccine-injured child to qualify for uncontested compensation."¹⁴ Most children (or adults) who file a claim come up against a DOJ with the resources to fight against them; as a result, vaccine injury claims typically take years to adjudicate and are often unsuccessful.¹⁴ Despite these barriers, the NVICP has paid out over four billion dollars to date to those injured and killed by vaccines.¹⁷

Fisher says, "The reality today is that nobody developing, manufacturing, selling, licensing, recommending, mandating or giving vaccines in the U.S. has real incentive to prevent vaccine injuries and deaths. The federal government has systematically betrayed the public's trust by failing to keep the promise made to parents in the 1986 Act."¹⁸

The liability shield given to vaccine manufacturers and doctors administering vaccines unleashed by the 1986 Act has had a profound

DIPHTHERIA, PERTUSSIS AND TETANUS TODAY

The various DPT, DTP, DTaP and Tdap vaccines are meant to provide protection against three potentially serious conditions: diphtheria, pertussis and tetanus. Diphtheria, associated with strains of bacteria called *Corynebacterium diphtheriae*, most commonly affects the upper-respiratory system, potentially causing weakness, sore throat, mild fever and swollen glands. In more severe cases, this form of diphtheria (as opposed to a rarer form called cutaneous diphtheria) can lead to difficulty breathing, heart failure, paralysis and sometimes death. Diphtheria is associated with poverty, poor sanitation and hygiene, crowded living conditions and chronic health conditions such as alcoholism.⁶³ In the late nineteenth and early twentieth centuries, the respiratory version of diphtheria was the leading cause of childhood death around the world, including in the U.S.,⁶⁴ but nowadays it is virtually non-existent in America, with an average of one to two cases per year.⁶⁵ The World Health Organization (WHO) reported under nine thousand cases of diphtheria worldwide in 2017.⁶⁶

Pertussis, commonly referred to as "whooping cough," is a respiratory disease associated with the bacterium *Bordetella pertussis* and thought to be highly contagious. Initial symptoms are usually similar to those of the common cold, including hoarseness, watery eyes, runny nose, dry cough and fever; these can be followed by severe coughing fits that can make it hard to breathe. Following a coughing fit, a high-pitched "whoop" or gasp may occur as the person breathes in. The coughing phase can last for ten or more weeks (hence the other nickname, the "hundred-day cough"). Pertussis can affect people of all ages but is worse in those who are undernourished, lack clean water and proper sanitation or have chronic conditions such as asthma.^{67,68} Pertussis can be serious and sometimes fatal for babies less than one year old.⁶⁹ The WHO estimates that about one hundred sixty thousand children under age five die from pertussis complications annually, mostly in Africa.⁷⁰ In 2019, the CDC reported nine deaths and roughly fifteen thousand cases of pertussis in the U.S.⁷¹

Tetanus, commonly referred to as "lockjaw," is a condition associated with a bacterium called *Clostridium tetani*. Spores of the tetanus bacteria are usually found in soil, dust and manure. The spores on contaminated objects enter the body through broken skin, usually through injuries sustained from a deep cut or even a burn. However, tetanus bacteria do not survive in the presence of oxygen, so puncture wounds which bleed do not provide a suitable environment for the disease. Symptoms of tetanus can include jaw cramping, sudden involuntary muscle tightening, painful muscle stiffness, trouble swallowing, seizures, headache, fever and changes in blood pressure and heart rate. More serious complications include involuntary tightening of the vocal cords, lung problems and death. An estimated one out of ten cases is fatal.⁷² Like diphtheria, tetanus is uncommon in the U.S., with only about thirty cases reported each year.⁷²

effect. Whereas yearly U.S. vaccine sales amounted to only about one hundred seventy million dollars in the early 1980s,¹⁹ the current value of North America's vaccine market is estimated at twenty-five billion²⁰—a nearly one-hundred-fifty-fold increase. Analysts estimate that the global vaccine market now brings in close to sixty billion dollars annually.²¹

SUPREME COURT BETRAYAL

The government swindle did not end in 1995. The final blow came in 2011, when the U.S. Supreme Court chose to misinterpret the legislative history of NCVIA. The original 1986 Act had left claimants with the option to sue in civil court if denied federal compensation. The Supreme Court's 2011 decision in *Bruesewitz v. Wyeth* removed this option, fully eliminating vaccine-injured Americans' right to sue vaccine makers—even if there was evidence that the manufacturer could have made a vaccine less reactive.²² The six-to-two split decision, with Justices Sonia Sotomayor and Ruth Bader Ginsberg dissenting, completely shielded pharmaceutical companies from all liability from harm caused by a vaccine.¹⁴

Together, the 1986 Act and the 2011 U.S. Supreme Court decision freed vaccine manufacturers, doctors and other vaccine administrators from any legal accountability or financial liability in civil court for permanent injuries or deaths resulting from government-recommended or mandated vaccines. Moreover, 9/11 gave the government an excuse to take one further step. In the name of national security, a December 2005 act passed by Congress and signed by President George W. Bush (the Public Readiness and Emergency Preparedness or PREP Act) grants drug companies and vaccine program administrators full absolution from legal responsibility for vaccine injuries and deaths that occur under the umbrella of a HHS-declared public health "emergency."²³ The 2005 Act, which covers experimental vaccines and other medical countermeasures deployed during declared emergencies, is especially significant as our nation prepares to roll out fast-tracked Covid-19 vaccines.²⁴

CURRENT RECOMMENDATIONS

Vital statistics show that the threat from infectious diseases had fallen significantly long before there was a national vaccine program. This has not stopped the CDC from recommending that infants and children continue to receive five doses of acellular DTaP vaccine by age six. The vaccines are routinely given at two, four and six months; between fifteen and eighteen months; and between four and six years. The public health agency then recommends a follow-up booster dose of Tdap vaccine (tetanus, diphtheria and acellular pertussis) between the ages of twelve and thirteen and another Tdap booster between nineteen and twenty-six years of age, as well as further Tdap shots every ten years thereafter.²⁵

The CDC recommends Tdap vaccines (or tetanus and diphtheria [Td] vaccines) for *all* adults, including pregnant women. For the latter, the recommendation is that the Tdap vaccine be administered between twenty-seven and thirty-six weeks gestation during *each* pregnancy, regardless of whether the woman has already received a recent dose.²⁶ This recommendation comes despite the fact that product inserts for Adacel and

Boostrix (the two U.S.-licensed Tdap vaccines for adolescents and adults) both state that the safety and effectiveness of their products have *not* been established in pregnant women.^{27,28} In fact, no vaccine administered to pregnant women has been tested for safety or efficacy before licensure. The Boostrix insert ambiguously states that the vaccine should be given to pregnant women "only if clearly needed."²⁸

COMBINATION VACCINES WORSE

The pertussis vaccine is a routine component of combination vaccines that include additional components against hepatitis B, poliomyelitis and invasive *Haemophilus influenzae* type b (Hib). For example, Vaxelis is a combination six-in-one vaccine manufactured through a partnership between Sanofi Pasteur and Merck. A pertussis-containing pentavalent combination shot of DTaP, inactivated polio (IPV) and Hib is also available, as are four-component vaccines with DTaP plus IPV.

Although the CDC claims that these combination vaccines are safe, research indicates that the risk of adverse events such as febrile seizures is greater for combination vaccines than for single vaccines.²⁹ For example, a Danish study found that in some cases, the incidence of febrile seizures increased as much as six-fold for children receiving a pentavalent vaccine.³⁰ Febrile seizures can later develop into epilepsy, and some types of febrile seizures are associated with an increased risk of developmental delays and subsequent neurological disorders.³¹ Children experiencing seizures can also fall or choke on food or saliva.

Worse yet, combination vaccines are associated with a significantly increased risk of sudden and unexpected deaths in young children. An Italian study published in 2011 showed a statistically significant two-fold increased risk of sudden infant death within fourteen days of the first dose of a hexavalent vaccine.³² Another study from 2006 confirmed during autopsies that children who died soon after receiving six-inone vaccines had abnormal brain pathologies.³³

ACELLULAR PERTUSSIS VACCINES: NOT OFF THE HOOK

The well-documented dangers of the origi-

Clinical trial results and postmarketing data listed in vaccine inserts reveal a wide variety of possible acute and chronic DTaP and Tdap reactions. nal whole-cell DTP vaccines call into question how much safer the acellular DTaP and Tdap vaccines are when given to children and adults. According to Fisher, NVIC continues to receive reports of serious reactions and injuries from today's acellular versions—reactions consistent with those reported following receipt of whole-cell vaccines—including high-pitched screaming, fever over 103 degrees F, collapse or shock, convulsions and brain inflammation.³⁴

Although studies have reported that DTaP and Tdap vaccines are far less reactive than whole-cell vaccines, acellular vaccines contain chemically inactivated pertussis toxin (ten to twenty-five micrograms per dose), which still retain varying levels of bioactivity.³⁵ This may induce brain inflammation in some individuals, although it is thought to occur less often than brain inflammation induced by the old wholecell pertussis vaccine. In addition, clinical trial results and post-marketing data listed in vaccine inserts reveal a wide variety of possible acute and chronic DTaP and Tdap reactions—both localized and systemic—which include anaphylaxis, urticaria (hives), Guillain-Barré syndrome (GBS), insulin-dependent diabetes mellitus, idiopathic thrombocytopenic purpura (ITP), myelitis and sudden infant death syndrome (SIDS), among many others (see Table 1).³⁶

Fisher's 1985 book details more than one hundred cases of brain inflammation and immune system dysfunction induced by whole-cell DPT vaccination, including in children who developed regressive autism after suffering post-vaccination encephalopathy.³ Of note, the CDC and other government entities continue to deny any link between vaccines and autism, even though federal compensation has been quietly awarded to children who developed brain inflammation after both the old and new DTP vaccines, whose permanent disabilities include autistic behaviors.^{37,38}

Using the MedAlerts search engine, NVIC found that as of March 31, 2020, the Vaccine Adverse Event Reporting System (VAERS) had received nearly one hundred ninety thousand

TABLE 1. Adverse Reactions Reported in DTaP and Tdap Vaccine Inserts

Abscess Allergic reactions, anaphylaxis Angioedema Anorexia Apnea Arthralgia Aspiration Asthenia Asthma, bronchospasm Back pain Bronchitis, bronchiolitis **Bulging fontanelle** Cellulitis Cerebrovascular accident Constipation Cough Cyanosis Death Dehydration Diabetes mellitus (insulin-dependent) Diarrhea, nausea, vomiting Drowsiness, lethargy, somnolence Earache Encephalitis, encephalopathy

Erythema Extremity pain Facial palsy/paralysis Fever Fretfulness, fussiness, irritability Gastroenteritis Headache, migraine Henoch-Schönlein purpura Hypernatremia Hypoesthesia Hypotonia Hypotonic-hyporesponsive episode Hypoxia Inconsolable/persistent crying Increased arm or thigh circumference Infantile spasms Insomnia Invasive Hib disease Loss of appetite Lymphadenopathy Malaise Meningitis Muscle weakness, pain **Myelitis**

Myocarditis Myositis Nervousness, restlessness Neuritis, nerve compression Neutropenia Pallor Paresthesia Pertussis Petechiae Pneumonia Pruritus Rash Respiratory tract/viral infection Rhinitis Screaming Seizures, convulsions Sepsis Shortness of breath Sudden infant death syndrome Swelling Syncope Thrombocytopenic purpura Unresponsiveness Urticaria

SOURCE: https://childrenshealthdefense.org/news/read-the-fine-print-parttwo-nearly-400-adverse-reactions-listed-in-vaccine-package-inserts/ reports of serious adverse events in connection with diphtheria, tetanus and pertussis vaccines since 1990, including over three thousand two hundred deaths.³⁹ Nearly 90 percent of the deaths occurred in children under three years of age. Moreover, experts estimate that the vaccine injuries and deaths reported to VAERS represent less than one percent of all vaccine-related injuries and deaths.⁴⁰ Not only do parents not know enough about what constitutes a serious vaccine reaction to report them, but vaccine providers often fail to report serious health problems following vaccination, even though the NCVIA legally requires them to do so.

PERTUSSIS TOXIN

Whole-cell DPT/DTP vaccines contain whole *Bordetella pertussis* (*B. pertussis*) bacteria (heated and washed with formaldehyde) as well as neurotoxic aluminum and mercury, shock-inducing endotoxin and brain-damaging bioactive pertussis toxin. Pertussis toxin is believed to be the main component of *B. pertussis* "responsible for stimulating the production of protective antibodies during natural whooping cough infection and after pertussis vaccination," as well as the main component responsible for causing brain inflammation.⁴¹

NVIC reminds us that pertussis toxin is "one of the most lethal toxins in nature," capable of inducing lymphocytosis (abnormal lymphocyte count) and leukocytosis (abnormal white blood cell count), as well as stimulating insulin secretion and sensitizing histamine (another element of the immune system's inflammatory response).⁴¹ Pertussis toxin is so lethal that researchers deliberately use it to induce autoimmunity and brain inflammation in lab animals.⁴¹ Pertussis toxin is also known to cross the blood-brain barrier "when conditions are right"—offering a logical explanation for vaccine-induced brain inflammation and permanent brain damage.⁴¹

Depending on the brand and manufacturer, acellular DTaP and Tdap vaccines may additionally contain varying amounts of diphtheria toxoid, tetanus toxoid, filamentous hemagglutinin, pertactin, fimbriae, formaldehyde, polysorbate 80, gluteraldehyde, 2-phenoxoyethanol, aluminum and thimerosal (mercury).^{42,43} For children who receive four-in-one, five-in-one or sixin-one combination vaccines, the list of toxic ingredients will be even longer. The toxicity of vaccine ingredients has never been properly studied, either individually or synergistically, for their impacts on human health, with no studies of their carcinogenic and mutagenic potential or their effects on fertility.

BOMBARDED WITH ALUMINUM

In addition to the damage caused by the pertussis portion of DTaP and Tdap vaccines, many health experts have issued warnings about the role that aluminum adjuvants play in vaccine injuries, including autism and autoimmune disorders.44,45 Manufacturers add aluminum to vaccines to help stimulate "a stronger immune response and increase efficacy." However, aluminum is neurotoxic-capable of destroying neurons needed for proper cognitive and motor functioning, and capable of making the blood-brain barrier more permeable. Whereas only 0.2 to 1.5 percent of the aluminum a baby ingests orally (for example, in breast milk) will be absorbed by the body, 100 percent of injected aluminum will be absorbed. The claims by provaccine advocates that injected aluminum is rapidly excreted are false. Rabbit studies show that 78 to 94 percent is retained twenty-eight days after intramuscular injection; human autopsies reveal that aluminum accumulates and stays in the kidneys, spleen, liver, heart, lymph nodes, bones and brain.45

Babies who receive every vaccine on the CDC-recommended early childhood vaccine schedule end up getting injected with a total of 4,925 micrograms (mcg) of neurotoxic aluminum within the first eighteen months of life, and an additional 170 to 625 mcg by age six.^{35,44} Depending on the brand, each dose of DTaP and Tdap vaccine can contain up to 1,500 mcg of aluminum. In total, American children and adolescents may receive as much as 6,150 mcg of aluminum by age eighteen.³⁵

Studies show that injected aluminum significantly increases the risk for autoimmune disease and neurological disorders in children and adults. Conditions associated with injected aluminum include macrophagic myofasciitis (MMF), chronic fatigue, muscle weakness, Pertussis toxin is so lethal that researchers deliberately use it to induce autoimmunity and brain inflammation in lab animals. cognitive deficits (such as memory loss and sleep disturbances) and demyelinating central nervous system disorders like multiple sclerosis. Aluminum adjuvants also contribute to autoimmune and inflammatory diseases such as arthritis, type 1 diabetes, inflammatory bowel disease, lupus and autism spectrum disorder. Neil Miller's excellent book, *Miller's Review of Critical Vaccine Studies*, provides a summary of twenty-seven studies revealing the damaging effects of aluminum, as well as many studies showing the dangers of vaccines against diphtheria, tetanus and pertussis.⁴⁶

WANING IMMUNITY

When a person recovers from pertussis infection, natural immunity is thought to last between seven and twenty years. Conversely, estimates suggest that artificial vaccine-induced immunity wanes as soon as two years after getting vaccinated with either whole-cell or acellular pertussis-containing vaccines.⁸ This rapid waning of pertussis vaccine immunity is the reason that the CDC tells children and adolescents to undergo six rounds of vaccination; in reality, however, even half a dozen pertussis vaccinations are not providing protection against the disease.

The fact is that fully vaccinated children, adolescents and adults remain susceptible to pertussis, with cases of whooping cough rising steadily throughout the world since the 1980s, despite high vaccination rates. A 2013 study, titled "Waning immunity to pertussis following five doses of DTaP," summarized the state of affairs, finding that the risk of pertussis doubled just two years after Minnesota children received their fifth dose of DTaP and increased nine-fold within six years of full vaccination.⁴⁷ Another study from 2015, titled "Tdap vaccine effectiveness in adolescents during the 2012 Washington State pertussis epidemic," found that within two to four years of receiving a sixth dose of acellular pertussis vaccine, the shot's effectiveness in adolescents declined to 34 percent.⁴⁸

Experts commonly quote the efficacy of whole-cell pertussis vaccines as being between 30 and 85 percent, and that of acellular pertussis vaccines as somewhere between 40 and 89 percent. However, an analysis of a California whooping cough outbreak that occurred in 2010 revealed that more than 80 percent of those affected were fully vaccinated, and another 11 percent were partially vaccinated.⁴⁹ A study of a 2007 U.S. Virgin Islands pertussis outbreak found that Tdap boosters were ineffective in providing temporary immunity for at least a third of vaccinated teenagers and adults.⁵⁰

Furthermore, the vaccines may be even less effective than we think. There is evidence that millions of U.S. children and adults asymptomati-

ACUTE AND CHRONIC DAMAGE FROM WHOLE-CELL PERTUSSIS VACCINES

By the early 1980s, multiple studies had confirmed the outsized risks of vaccines containing a whole-cell pertussis component.⁸ In 1981, for example, British researchers published the largest case-control study ever conducted—the British National Childhood Encephalopathy Study (NCES)—to investigate causes of brain damage in children.⁷³ The researchers concluded that the pertussis portion of the three-in-one DTP vaccine could cause acute brain inflammation and permanent brain damage and identified long-term brain dysfunction affecting physical, social, behavioral and educational outcomes in vaccine-injured children. The NCES researchers estimated that the risk of a previously healthy child developing a serious neurological problem or chronic brain dysfunction within seven days of DTP vaccination was one per one hundred ten thousand shots and one per three hundred ten thousand shots, respectively. A University of California-Los Angeles (UCLA) study conducted that same year (1981) in the U.S. found that an astounding one in eight hundred seventy-five DTP shots was followed by either convulsion or shock within forty-eight hours of vaccination.⁷⁴ Another early 1980s study from West Africa's Guinea-Bissau found that all-cause infant mortality after three months of age increased by 212 percent after introduction of whole-cell DTP and oral polio vaccines.⁷⁵

In the U.S., the British study conclusions were confirmed by two congressionally mandated reviews by the Institute of Medicine (IOM).⁸ IOM reports from 1991⁷⁶ and 1994⁷⁷ concluded that "evidence is consistent with a causal relation" between DTP vaccine and acute brain inflammation and "unusual shock-like state"; and that "evidence indicates a causal relationship between DTP vaccine and shock (anaphylaxis) and protracted, inconsolable crying." The IOM also confirmed the possibility that some children without underlying brain or metabolic abnormalities might experience serious acute neurological illness within seven days of receiving a DTP vaccine.

Nor has neurological damage been the only type of outcome to worry about. In one of the very few U.S. studies ever to explicitly compare vaccinated to unvaccinated children, UCLA School of Public Health researchers reported in the year 2000 that DTP (or tetanus) vaccination was associated with a lifetime history of asthma or other allergy-related symptoms.⁷⁸ Shockingly, they estimated that 50 percent of diagnosed asthma cases (2.93 million) in U.S. children and adolescents could be prevented if the DTP or tetanus vaccines were not administered.

cally develop pertussis each year without being diagnosed or having those cases reflected in government statistics.⁵¹ Whether vaccinated or unvaccinated, a person may be infected with pertussis and not even know it.

COUNTERPRODUCTIVE

Transmission of pertussis by recently vaccinated persons is one plausible explanation for the worldwide resurgence in pertussis infections. In a study involving infant baboons, researchers found that acellular pertussis vaccines prevented clinical symptoms but failed to prevent colonization or transmission.^{52,53} After vaccinating a group of baboons at two, four and six months of age and exposing them one month later to pertussis, the researchers found that the baboons were not protected from *B. pertussis* colonization and had high levels of bacteria in their respiratory systems. Moreover, when the investigators placed unvaccinated baboons in the same cages twenty-four hours after the vaccinated animals' exposure to pertussis, the unvaccinated group became infected even though the first group had no overt symptoms. The researchers suggested that the vaccinated group remained contagious for several weeks.

The baboon study and others like it provide evidence that people who have received whole-cell or acellular pertussis vaccines may become "silent reservoirs" of subclinical pertussis infection and may transmit the disease without even knowing it.⁵⁴ This may be the reason why "cocoon-ing"—the recommended strategy to vaccinate close contacts of infants and other vulnerable people to protect them from pertussis—is increasingly ineffective but also possibly counterproductive.^{55,56}

Another explanation for the resurgence in pertussis over the past three decades has to do with changes in the pertussis organism away from targets of the vaccines, a phenomenon called "antigenic drift."⁵⁷ Pertussis outbreaks occur naturally in three- to five-year cycles—despite vaccination—but pertussis bacteria also mutate. In many regions of the world (including Europe, the U.S. and Australia), new strains of pertussis have replaced the common strains targeted by pertussis vaccines, not unlike the way indiscriminate use of antibiotics has led to antibiotic-resistant strains of bacteria. In fact, *B. pertussis* began evolving to become vaccineresistant soon after public health authorities began recommending that children get multiple doses of whole-cell DTP vaccine.

In a 2014 study, researchers who analyzed a worldwide collection of three hundred forty-three strains of *B. pertussis*—isolated between 1920 and 2010—to assess the influence of pertussis vaccines on the emergence of new strains concluded that while antigenic divergence initially involved relatively few mutations, vaccination against whooping cough is now the "major force" inducing adaptive behavior in *B. pertussis* populations.⁵⁸ These shifts are leading to reduced vaccine efficacy.

Vaccine-induced adaptation has also led to higher levels of virulence and new and increasingly dominant strains of pertussis toxins. A highly virulent strain of pertussis toxin called ptxP3, for example, did not exist in the pre-vaccination era but has emerged from within pertussis-vaccinated populations. It produces 1.62 times more lethal toxin than the former ptxP1 strain, and no vaccines are designed to protect against it. Researchers have observed a statistically significant increase in hospitalizations and deaths associated with ptxP3 when compared to ptxP1.⁵⁹ Today none of the whole-cell or acellular pertussis vaccines administered to children or adults (including pregnant women) address any of the widely circulating, mutated *B. pertussis* strains associated with whooping cough in human populations.⁸

Studies have also found that DTaP vaccination, intended to protect children from *B. pertussis*, may increase their risk of whooping cough from another organism called *B. parapertussis*. One study found that by 2010, *B. parapertussis*—for which vaccines offer little or no protection—was associated with 16.5 percent of whooping cough cases.⁶⁰

An earlier study by German researchers published in 2003, titled "Clinical and epidemiological picture of *B pertussis* and *B parapertussis* infections after introduction of acellular pertussis vaccine," found a similarly significant effect of vaccination.⁶¹ The German study showed that less than five years after widespread acellular pertussis vaccine use, the proportion of whooping cough cases accounted for by *B. parapertussis* had increased from 20 to 36 percent. Eighty-one percent of the *B. parapertussis* cases were fully vaccinated.⁶¹

THE VACCINE INJURY EPIDEMIC

Fisher often points out that her son was one of the more fortunate victims of vaccine injury. Although his health deteriorated because he received a crude, highly reactive pertussis vaccine without her informed consent, her son's reactions, while life-changing, did not leave him with severe and profound brain and immune dysfunction. As an adult, he works hard to compensate for his learning disabilities but lives independently as a productive member of society, in contrast to more severely vaccine-injured adults who require assisted care throughout life. Fisher describes her son as one of the "walking wounded" in what has become "an unprecedented and still unexplained chronic disease and disability epidemic now plaguing millions of children and young adults in America."2

Nor is it only pertussis-containing DPT, DTP, DTaP and Tdap vaccines that can cause harm. All vaccines carry a risk of injury and death, a risk that can be greater for some people who have genetic, epigenetic and other biological and environmental susceptibility to vaccine reactions.⁶² Due to large gaps in vaccine science and research, doctors cannot reliably predict ahead of time which individuals will suffer an adverse response to vaccination that leads to chronic illness and disability.

Fisher asserts that we can no longer ignore "the epidemic of learning disabilities, ADHD, asthma, seizures, autism, diabetes, depression, and other types of brain and immune system dysfunction marked by chronic inflammation in the body that has perfectly coincided with the tripling of the numbers of vaccines given to children—from 23 doses of seven vaccines starting at two months through age six in the early 1980s—to the current 69 doses of 16 vaccines starting on the day of birth with 50 doses given before age six."²

We know that we are not all the same and do not respond the same way to pharmaceutical products like vaccines, and we know that all vaccines are not the same either. That means vaccines are not "safe and effective" for everyone, despite what we are told by public health officials and doctors.

We also know that historically vaccines are not responsible for low disease rates in the U.S. Vaccine-induced herd immunity is largely a myth and, at least in developed nations, most childhood infectious diseases are rarely associated with injury and death. What is more, as the case of pertussis vaccination clearly highlights, we are messing with Mother Nature and creating new and more harmful forms of disease. Finally, we must remember that vaccines are far from the only disease prevention option available. Simply following a Wise Traditions diet could do wonders for a person.

The question that remains is this: What will you choose to do the next time a doctor tells you it is time for you or your child to receive a pertussis vaccination—or any vaccine, for that matter? Will the "rewards" be worth the risks in your mind's eye?

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REFERENCES

- Barbara Loe Fisher. Life University, May 9, 2019. https://www.youtube.com/ watch?v=WMysEPeRjt4.
- 2. Fisher BL. From Nuremberg to California: Why informed consent matters in the 21st century. NVIC, October 24, 2017. https://www.nvic.org/nvic-vaccine-news/october-2017/why-informed-consent-matters-in-21st-century.aspx.
- Fisher BL, Coulter HL. DPT: A Shot in the Dark: Why the P in the DPT Vaccination May Be Hazardous to Your Child's Health. Garden City Park, NY: Avery Publishing Group; 1985.
- 4. https://www.nvic.org/about/barbaraloefisher.aspx.
- Mitchell VS, Philipose NM, Sanford JP (eds.). Institute of Medicine (US) Committee on the Children's Vaccine Initiative: Planning Alternative Strategies. "Table H-1: Vaccine product license holders in the United States." Washington, DC: National Academies Press; 1993. https://www.ncbi.nlm.nih.gov/books/NBK236434/.
- 6. Humphries S, Bystrianyk R. *Dissolving Illusions: Disease, Vaccines, and the Forgotten History.* CreateSpace Independent Publishing Platform; 2013.
- 7. Madsen T. Vaccination against whooping cough. JAMA. 1933;101(3):187-188.
- Fisher BL. The pertussis vaccine blame game. NVIC, September 12, 2018. https:// www.nvic.org/nvic-vaccine-news/september-2018/the-pertussis-vaccine-blame-game. aspx#_edn31.
- CDC. Pertussis vaccination: use of acellular pertussis vaccines among infants and young children. Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR Recomm Rep. 1997;46(RR-7):1-25.
- Sato Y, Kimura M, Fukumi H. Development of a pertussis component vaccine in Japan. Lancet. 1984;32398369):122-126.
- Muloiwa R, Wolter N, Mupere E et al. Pertussis in Africa: findings and recommendations of the Global Pertussis Initiative (GPI). Vaccine. 2018;36(18):2385-2393.
- 12. The National Childhood Vaccine Injury Act of 1986. https://www.nvic.org/injury-compensation/origihanlaw.aspx.
- 13. Federal law. https://www.nvic.org/Vaccine-Laws/Federal-Law.aspx.
- 14. What is the history of pertussis vaccine use in America? https://www.nvic.org/vaccinesand-diseases/whooping-cough/vaccine-history.aspx.
- U.S. Congress. Omnibus Budget Reconciliation Act of 1987 (Public Law 100-203). Subtitle D: Vaccine Components. Sec. 4306. Vaccine Administrators. December 22, 1987, p. 224. https://archive.org/stream/omnibusbudgetrec00unit_16#mode/2up.
- Fisher BL. Vaccine injury compensation: government's broken social contract with parents. NVIC, November 2, 2015. https://www.nvic.org/NVIC-Vaccine-News/ November-2015/vic-governments-broken-contract-with-parents.aspx.
- 17. Loftus P, Pulliam S. People harmed by coronavirus vaccines will have little recourse. *The Wall Street Journal*, October 11, 2020.
- NVIC Position Statement: National Childhood Vaccine Injury Act of 1986. May 2018. https://www.nvic.org/injury-compensation/nvic-Position-on-1986-childhood-vaccineinjury-act.aspx.
- Institute of Medicine and National Research Council. "Economic aspects of vaccine innovation and manufacturing." Chapter Four in *Vaccine Supply and Innovation*, pp. 45-64. Washington, DC: National Academies Press; 1985. https://doi.org/10.17226/599.
- 20. https://www.fortunebusinessinsights.com/industry-reports/vaccines-market-101769.
- https://www.pharmaceuticalprocessingworld.com/global-vaccine-market-revenue-toreach-59-2-billion-by-2020/.
- 22. Bruesewitz v. Wyeth. https://www.supremecourt.gov/opinions/10pdf/09-152.pdf.
- 23. https://www.phe.gov/Preparedness/legal/prepact/Pages/default.aspx.
- 24. Children's Health Defense. A timeline—pandemic and erosion of freedoms have been decades in the making. May 21, 2020. https://childrenshealthdefense.org/news/a-timelinepandemic-and-erosion-of-freedoms-have-been-decades-in-the-making/.
- 25. https://www.cdc.gov/vaccines/schedules/hcp/imz/adult.html.
- $26. \ https://www.cdc.gov/pertussis/pregnant/mom/get-vaccinated.html.$
- 27. Adacel. https://www.fda.gov/media/119862/download.
- 28. Boostrix. https://www.fda.gov/media/76633/download.
- 29. Marino SA. Combination vaccines and febrile seizures: Should parents be concerned? *The Vaccine Reaction*, March 21, 2019. https://thevaccinereaction.org/2019/03/combination-vaccines-and-febrile-seizures-should-parents-be-concerned/.
- Sun Y, Christensen J, Hviid A et al. Risk of febrile seizures and epilepsy after vaccination with diphtheria, tetanus, acellular pertussis, inactivated poliovirus, and Haemophilus influenzae type B. JAMA. 2012;307(8):823-831.

- Children's Health Defense. Vaccines as a trigger for early-childhood febrile seizures. March 14, 2018. https://childrenshealthdefense.org/news/vaccines-as-a-trigger-for-earlychildhood-febrile-seizures/.
- Traversa G, Spila-Alegiani S, Bianchi C et al. Sudden unexpected deaths and vaccinations during the first two years of life in Italy: a case series study. *PLoS One*. 2011;6(1):e16363.
- Zinka B, Rauch E, Buettner A, Ruëff F, Penning R. Unexplained cases of sudden infant death shortly after hexavalent vaccination. *Vaccine*. 2006;24(31-32):5779-5780.
- 34. FAQs about vaccines & infectious disease. https://www.nvic.org/faqs/vaccines-infectious-disease.aspx.
- 35. https://www.cdc.gov/vaccines/vpd/dtap-tdap-td/hcp/about-vaccine.html.
- Children's Health Defense. Read the fine print, part two—nearly 400 adverse reactions listed in vaccine package inserts. August 14, 2020. https://childrenshealthdefense.org/ news/read-the-fine-print-part-two-nearly-400-adverse-reactions-listed-in-vaccinepackage-inserts/.
- 37. Autism. https://www.nvic.org/vaccines-and-diseases/Autism.aspx.
- SafeMinds. 83 cases of autism associated with childhood vaccine injury compensated in federal vaccine court [News Release]. May 10, 2011. https://www.prnewswire.com/newsreleases/83-cases-of-autism-associated-with-childhood-vaccine-injury-compensated-infederal-vaccine-court-121570673.html.
- 39. Diphtheria. https://www.nvic.org/vaccines-and-diseases/Diphtheria.aspx.
- Harvard Pilgrim Health Care, Inc. (Ross L and Klompas M). *Electronic Support for Public Health–Vaccine Adverse Event Reporting System (ESP:VAERS)*. Rockville, MD: Agency for Healthcare Research and Quality; 2010. https://healthit.ahrq.gov/sites/default/ files/docs/publication/r18hs017045-lazarus-final-report-2011.pdf.
- 41. Can pertussis vaccine cause injury and death? https://www.nvic.org/vaccines-and-diseases/whooping-cough/vaccine-injury.aspx.
- 42. What is pertussis vaccine? https://www.nvic.org/vaccines-and-diseases/whoopingcough/vaccine.aspx.
- 43. https://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2. pdf.
- 44. Miller NZ. Aluminum in childhood vaccines is unsafe. *Journal of American Physicians* and Surgeons. 2016;20(4):109-117.
- Mercola J. How aluminum in vaccines affects your health. *The Vaccine Reaction*, June 21, 2016. https://thevaccinereaction.org/2016/06/how-aluminum-in-vaccines-affects-your-health/.
- Miller N. Miller's Review of Critical Vaccine Studies. Santa Fe: New Atlantean Press; 2016, pp. 44-63.
- 47. Tartof SY, Lewis M, Kenyon C et al. Waning immunity to pertussis following 5 doses of DTap. *Pediatrics*. 2013;131(4):e1047-e1052.
- Acosta AM, DeBolt C, Tasslimi A et al. Tdap vaccine effectiveness in adolescents during the 2012 Washington state pertussis epidemic. *Pediatrics*. 2015;135(6):981-989.
- Witt MA, Katz PH, Witt DJ. Unexpectedly limited durability of immunity following acellular pertussis vaccination in preadolescents in a North American outbreak. *Clin Infect Dis.* 2012;54(12):1730-1735.
- Wei SC, Tetti K, Cushing K et al. Effectiveness of adolescent and adult tetanus, reduceddose diphtheria, and acellular pertussis vaccine against pertussis. *Clin Infect Dis.* 2010;53(3):315-321.
- 51. Bamberger ES, Srugo I. What is new in pertussis? Eur J Pediatr. 2008;167(2):133-139.
- Warfel JM, Zimmerman LI, Merkel TJ. Acellular pertussis vaccines protect against disease but fail to prevent infection and transmission in a nonhuman primate model. *Proc Natl Acad Sci U S A*. 2014;111(2):787-792.
- 53. Tavernise S. Whooping cough study may offer clue on surge. *The New York Times*, November 25, 2013.
- Althouse BM, Scarpino SV. Asymptomatic transmission and the resurgence of Bordetella pertussis. BMC Med. 2015;13:146.
- 55. Healy CM, Rench MA, Wootton SH, Castagnini LA. Evaluation of the impact of a pertussis cocooning program on infant pertussis infection. *Pediatr Infect Dis J.* 2015;34(1):22-26.
- 56. Carcione D, Regan AK, Tracey L et al. The impact of parental postpartum pertussis vaccination on infection in infants: a population-based study of cocooning in Western Australia. *Vaccine*. 2015;33(42):5654-5661.
- 57. Mooi FR, van Oirschot H, Heuvelman K et al. Polymorphism in the *Bordetella pertussis* virulence factors P. 69/pertactin and pertussis toxin in the Netherlands: temporal trends and evidence for vaccine-driven evolution. *Infect Immun.* 1998;66(2):670-675.
- Bart MJ, Harris SR, Advani A et al. Global population structure and evolution of Bordetella pertussis and their relationship with vaccination. *Mbio*. 2014;5(2):e01074-14.
- Mooi FR, van Loo IHM, van Gent M et al. *Bordetella pertussis* strains with increased toxin production associated with pertussis resurgence. *Emerg Infect Dis.* 2009;15(8):1206-1213.
- 60. Cherry JD, Seaton BL. Patterns of Bordetella parapertussis respiratory illnesses: 2008-

2010. Clin Infect Dis. 2012;54(4):534-537.

- Liese JG, Renner C, Stojanov S, Belohradsky BH, the Munich Vaccine Study Group. Clinical and epidemiological picture of *B pertussis* and *B parapertussis* infections after introduction of acellular pertussis vaccines. *Arch Dis Child*. 2003;88(8):684-687.
- 62. Institute of Medicine Committee to Review Adverse Effects of Vaccines. "Evaluating biological mechanisms of adverse effects." Chapter 3 in Adverse Effects of Vaccines: Evidence and Causality. Washington, D.C.: National Academies Press; 2012, p. 82. https://www. nap.edu/read/13164/chapter/5#82.
- Quick ML, Sutter RW, Kobaidze K et al. Risk factors for diphtheria: a prospective case-control study in the Republic of Georgia, 1995-1996. J Infect Dis. 2000;181(Suppl 1):S121-S129.
- https://www2.census.gov/library/publications/ decennial/1880/vol-11-12-mortality/1880v12-07.pdf.
- 65. https://www.cdc.gov/vaccines/pubs/pinkbook/dip.html.
- 66. Clarke KEN, MacNeil A, Hadler S et al. Global epidemiology of diphtheria, 2000-2017. *Emerg Infect Dis.* 2019;25(10):1834-1842.
- Gaayeb L, Pinçon C, Cames C et al. Immune response to Bordetella pertussis is associated with season and undernutrition in Senegalese children. *Vaccine*. 2014;32(27):3431-3437.
- Capili CR, Hettinger A, Rigelman-Hedberg N et al. Increased risk of pertussis in patients with asthma. J Allergy Clin Immunol. 2012;129(4):957-963.
- Chuk LMR, Lambert SB, May ML et al. Pertussis in infants: how to protect the vulnerable? *Commun Dis Intell Q Rep.* 2008;32(4):449-456.
- Pertussis. https://www.who.int/immunization/ monitoring_surveillance/burden/vpd/WHO_ SurveillanceVaccinePreventable_16_Pertussis_ R1.pdf?ua=1.
- 71. https://www.cdc.gov/pertussis/downloads/pertuss-survreport-2019-508.pdf.
- 72. https://www.cdc.gov/vaccines/pubs/pinkbook/tetanus. html.
- Miller DL, Ross EM, Alderslade R, Bellman MH, Rawson NS. Pertussis immunisation and serious acute neurological illness in children. *Br Med J (Clin Res Ed)*. 1981;282(6276):1595-1599.
- Cody CL, Baraff LJ, Cherry JD, Marcy SM, Manclark CR. Nature and rates of adverse reactions associated with DTP and DT immunizations in infants and children. *Pediatrics.* 1981;68(5):650-660.
- 75. Mogensen SW, Andersen A, Rodrigues A, Benn CS, Aaby P. The introduction of diphtheria-tetanuspertussis and oral polio vaccine among young infants in an urban African community: a natural experiment. *EBioMedicine*. 2017;17:192-198.
- Institute of Medicine Vaccine Safety Committee. *Adverse Effects of Pertussis and Rubella Vaccines*. Washington, DC: The National Academies Press; 1991, pp. 86-88.
- Institute of Medicine Committee to Study New Research on Vaccines. DPT Vaccine and Chronic Nervous System Dysfunction: A New Analysis. Washington, DC: The National Academies Press; 1994, pp. 1-2.
- Hurwitz EL, Morgenstern H. Effects of diphtheriatetanus-pertussis or tetanus vaccination on allergies and allergy-related respiratory symptoms among children and adolescents in the United States. *J Manipulative Physiol Ther.* 2000;23(2):81-90.

Farm and Ranch FOOD FOR ALL: FROM JOHN BOYD ORR TO THE COLD WAR By Anneliese Abbott

We were told that it was the responsibility of American scientists and farmers to figure out how to feed the world.

"How are we going to feed nine billion people by 2050?"

That was what everyone was talking about when I entered agricultural college in 2013. It was everywhere—on posters, in lectures, in journal articles. It was my generation's job to increase production, I was told, since we would be the ones in power in 2050. It was up to us to make sure there was enough food to go around.

Implicit in much of the "feeding the world" discourse were several main assumptions. One was that global food production needed to be increased at a faster rate than population growth to wipe out hunger. Another was that science and technology were the keys to increasing production worldwide—and that organic production or traditional agricultural practices just weren't productive enough to do the trick. Most importantly, we were told that it was the responsibility of American scientists and farmers to figure out how to feed the world.

As I have looked into the origins of the "feeding the world" rhetoric, it seems that it was influenced by two major ideas. One was the Malthusian concern that population would

Portrait of Sir John Boyd Orr. Original caption reads: "Portrait of Sir John Boyd Orr, famed Scottish nutritionist, first director-general of the Food and Agriculture Organization of the United Nations from 1945-1948. FAO headquarters, Rome, Italy."



outstrip food supply, which I discussed in my last *Wise Traditions* article.¹ However classic Malthusianism didn't try to help feed people, because it was based on the assumption that there could never be enough food to go around. At the same time, a humanitarian goal of eliminating hunger and poverty worldwide was gaining ground. The idea that the world could become a better place if everyone got enough food to eat was promoted by many people, but its most passionate advocate was a Scottish nutritionist named John Boyd Orr.

JOHN BOYD ORR

"Sir John Boyd Orr, the craggy Scotsman who heads the Food and Agriculture Organization, is a man you would look at twice in any crowd," wrote Henry Jarrett in a 1947 article for the magazine *The Land*. "The gaunt dignity and the banked-up fire in the man remind you somehow of an elemental force of nature, like the wind and tide. He acts like one when his ideas for food and human welfare are at stake."

Born in Scotland in 1880, Boyd Orr got his first look at hunger and poverty after he graduated from Glasgow University in 1902 and started teaching school in a Glasgow slum. When he showed up on the first day of class, he was shocked to see that his students were clothed in rags and covered with lice. They were unable to concentrate on their lessons because they were weak and malnourished.

"I went home the first night feeling physically sick and very depressed," he wrote in his 1966 autobiography *As I Recall*.² "I had another look at the school the next day, and came to the conclusion that there was nothing I could do to relieve the misery of the poor children, so I sat down and sent in my resignation."

Although he worked as a doctor for a brief period and served in World War I, Boyd Orr's real passion was nutrition—one of the most exciting areas of research in the 1920s. Nutritionists had just discovered that vitamins were essential to human health, and that animals or people who didn't eat enough vitamins would develop "deficiency diseases" like scurvy, beriberi, rickets and night blindness.

One of the leading vitamin researchers, biochemist Elmer McCollum, led the movement for a healthy diet based on the "newer knowledge of nutrition." The best way to prevent vitamin deficiencies, he argued, was to include vitamin-rich "protective foods" in the diet. These included leafy green and orange-yellow vegetables, whole grains, whole milk and animal organ meats such as liver.

Boyd Orr followed this research on vitamins with much interest, but he suspected that mineral nutrients, also essential to health, were being overlooked in all the emphasis on vitamins. He helped found the Rowett Research Institute in Animal Health in Aberdeen, Scotland, to study the importance of trace mineral elements in animal nutrition. His book, *Minerals in Pastures*, published in 1929, was one of the first to consider the role minerals played in animal health.³

Always remembering those poor malnourished children in Glasgow, Boyd Orr began investigating the possibility of improving the health of the poor in Scotland with better nutrition. In 1931, he launched a dietary survey, which discovered that a third of Scotland's population was unable "to purchase sufficient of the more expensive health foods to give them an adequate diet." The results of this survey, published in 1936 under the title Food, Health, and Income, showed that the diets of the poor were lacking in minerals, vitamins and sometimes even protein and calories.4 "These diets may be sufficient to maintain life and a certain degree of activity, and yet be inadequate for the maintenance of the fullest degree of health which a perfectly adequate diet would make possible," he concluded.

Boyd Orr believed that the health of these people could be greatly improved if they were only able to get enough milk and other protective foods. And the results of his survey were fresh on his mind when he made the dangerous wartime crossing of the Atlantic to attend a historic conference in the United States—the first-ever United Nations Conference on Food and Agriculture.

FOUNDING OF THE FAO

Held at Hot Springs, Virginia in May and June 1943, the Conference on Food and Agriculture was the first concerted international attempt to address the problem of world hunger. As those at the conference saw it, the world was faced with two major problems. One was the problem of malnutrition among the poorer classes of people, like Boyd Orr had seen in Scotland. The other problem, ironically enough, was that farmers were producing too much food and suffering economically because they could not make a living selling it.

Instead of curtailing production by destroying crops, as the Agricultural Adjustment Administration had done in the early days of the New Deal, the delegates at the Hot Springs conference envisioned a world where increased food production could eliminate malnutrition. They recommended that agricultural production be greatly increased, based on modern scientific knowledge, and that the world economy be expanded "to provide the purchasing power sufficient to maintain an adequate diet for all."

"These recommendations are revolutionary," Boyd Orr wrote in his 1943 book *Food and the People*.⁵ If they could be implemented, he foresaw a world where "the power of money over the primary necessity of life will be broken," where everyone could be "strong and vigorous, both physically and mentally," with "a feeling of assurance and independence."

At the 1943 conference in Hot Springs, an interim commission was formed to hammer out the details and write a constitution for a new branch of the United Nations—the Food and Agriculture Organization (FAO). The FAO was officially inaugurated at a conference in Quebec in October 1945, just after World War II ended. John Boyd Orr was selected to be the first director-general of the infant organization.

Boyd Orr had grand visions of ending world hunger and poverty through better food distribution and increased production. He believed that the only way to accomplish this was to set up a "World Food Board," which would provide loans to "food-deficient" countries to "enable Boyd Orr foresaw a world where everyone could be "strong and vigorous, both physically and mentally," with "a feeling of assurance and independence." The United States didn't like the idea of giving up its newfound position as the most powerful nation in the world for purely humanitarian motives. them to purchase surplus foods from food-exporting countries and industrial products needed to modernize their agriculture to increase food production." These loans would not have to be repaid "until hunger and abysmal poverty had been eliminated." The World Food Board would also be able to buy and hold surplus food during good years for distribution during lean years. Ideally, he hoped that the World Food Board would eventually lead to a world government, "without which there is little hope of permanent world peace."

To Boyd Orr and many others, there seemed to be only two choices in the atomic age-"one world or none." "If nations cannot learn to cooperate on a broad humanitarian basis, such as that found in the F.A.O., they will never be able to co-operate on contentious problems like boundary lines, types of democracy, or atomic bombs," warned the nutritionist L.B. Pett in the January 1946 issue of the Canadian Journal of Public Health.⁶ But the most important country in Boyd Orr's plan, the United States, didn't like the idea of giving up its newfound position as the most powerful nation in the world for purely humanitarian motives. Sure, Americans would help feed the world-but on their terms, not Boyd Orr's.

Without the support of the United States or Britain, the World Food Board never materialized. The primary function of the FAO became the gathering and distributing of statistics and other educational information, a very valuable service but one which fell short of Boyd Orr's original dreams. Disillusioned with the greed and selfishness of the United States, Boyd Orr returned to Scotland, symbolically wiping the dust of America off his feet after boarding the ship. To the end of his days, he believed that if his proposal for the World Food Board had been implemented, it would have brought an age of lasting world peace and prosperity.

Boyd Orr's proposals for the FAO were not completely ignored. Many of the ideas that went into the original proposal for the World Food Board—loans to developing countries, assistance with agricultural development, channeling of surplus commodity crops to hungry nations—actually did come to pass. What differed from Boyd Orr's plan, however, was that all of these policies took on strategic significance in the Cold War. Food became not a right, as Boyd Orr had envisioned, but a weapon.

FOOD AND NATIONAL SECURITY

Initially, the FAO's stated motives for feeding the world were strictly humanitarian. The hope was to bring world peace through mutual cooperation, resulting in a better standard of living for everyone. The United States and other wealthy nations should feed the world, the organization's experts argued, because it was a noble and compassionate thing to do.

As the Cold War began and the United States began to fear the rise of communism, however, the motives for helping feed the world became much more selfish. The United States was free and prosperous, many argued, only because there was plenty of food for everyone. Some, like Frank Pearson and Floyd Harper in their book *The World's Hunger*, even claimed that democracy was only possible on a diet rich in milk and meat, like that consumed in the United States.⁷ They calculated that the world could support only one billion people at the American standard of living.

Overpopulation, hunger and communism were linked in a direct causative sequence, argued Guy Irving Burch and Elmer Pendall in their 1945 book Population Roads to Peace and War.8 Ollie Fink, executive secretary of the conservation organization Friends of the Land, explained this progression in a 1952 speech entitled "Democracy and Human Freedom are Products of Fertile Soil." Fink argued, "If a nation is to be made up of mentally alert and physically capable people, the first prerequisite is the equivalent of food from 2 or more acres of arable land." (See my previous article on Malthus for a discussion of where this statistic came from and why it was flawed.)1 With less than two acres per person, he asserted, "hunger and malnutrition occur with their chain of unfavorable events. . . war, pestilence, disease, poverty."

In Fink's view, "Freedom has its roots in the soil." He explained, "As acres become too few and people too many, the government steps in and regulates the distribution of food. We recognize the type of government as socialist fascist—or communist." From this perspective, the only way to prevent this from happening was to increase food production per acre—although Fink had doubts that this could be done quickly enough to preserve freedom.

Overpopulation, Fink and others argued, caused hunger, political instability, communist insurrection, danger to American interests and finally, war. In his 1997 book Geopolitics and the Green Revolution: Wheat, Genes, and the Cold War, historian John Perkins calls this sequence of events "population-national security theory."9 According to this theory, if world hunger wasn't addressed, developing countries would turn communist just to get enough to eat, possibly leading to a nuclear war and the end of modern civilization. "Food for everyone might not insure peace," wrote the soil scientist Charles Kellogg in a 1949 article for the Journal of Farm Economics. "But we can be reasonably sure of the opposite: Without sufficient food for the population of the world peace is uncertain, indeed unlikely."10

By 1948, two schools of thought about feeding the world had emerged. One was that it was already too late to do anything and that famine and war were inevitable. The other believed that it was possible for food production to keep up with population growth—but only through the application of science and technology to agriculture. John Boyd Orr's dreams of feeding the world fell into this second category.

Some soil conservationists, like Hugh Bennett, believed that soil conservation and working with nature were the keys to increasing agricultural production. Others proposed radical technological solutions like growing algae and yeast for human consumption. The idea that eventually prevailed, however, was that capitalintensive industrial agriculture was the only way to feed the world.

The official American response to the "feeding the world" dilemma was the Agricultural Trade Development and Assistance Act of 1954, commonly known as PL-480. This program had several functions. It helped get rid of surplus American crops without overwhelming the world market and it provided humanitarian aid for malnourished people. But as historian John Perkins has observed, it also served "as a major instrument for feeding the world's hungry and for limiting communist expansion in the developing world."

From 1945-1965, the United States played a similar role to the one that Boyd Orr had envisioned for the World Food Board. American food aid under PL-480 and other programs provided a stabilizing influence on the world food market for twenty years. However, the U.S. made no secret of the fact that it was also using food aid strategically to keep countries in the Western sphere of influence so that they would not turn communist. Far from solving the problem of world food insecurity food aid sometimes made it worse. Often the American surplus crops would depress food prices so significantly in recipient countries that indigenous farmers couldn't compete. Governments receiving food aid below market cost had no incentive to improve agriculture in their own countries. Additionally, the commodity crops that were surplus in the United States weren't necessarily what people were used to eating in their traditional diets, such as when wheat was sent to a country that traditionally ate rice. In some cases, people preferred the American grains to their native crops and became dependent on foods that they couldn't grow themselves.

Despite these flaws, it seemed that the world food problem had been solved—for a while. But fears about overpopulation leading to hunger and unrest would continue to influence American thought and policy for the remainder of the 20th century—and even today. When I and other college students were told that it was our job to feed nine billion people by 2050, no one even mentioned Boyd Orr, Malthus or the Cold War. Whether my instructors realized it or not, however, their idea was a direct legacy of the hopes and fears about world hunger that started in the 1940s.

(This article first appeared in Acres USA.)

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REFERENCES

- Abbott, A. Feeding the world: Malthusian ideas in American agriculture. *Wise Traditions*. 2020;21(3):82-86.
- 2. Boyd Orr, J. As I Recall: The 1880's to the 1960's. Macgibbon & Kee, 1966.
- Boyd Orr, J. Minerals in Pastures and their Relation to Animal Nutrition. London: Lewis, 1929.
- 4. Boyd Orr, J. Food Health and Income: Report on a Survey of Adequacy of Diet in Relation to Income. London: Macmillan, 1937.
- 5. Boyd Orr, J. Food and the People. London: The Pilot Press, 1943.
- 6. Pett, LB. The Food and Agriculture Organization of the United Nations. *Can J Public Health*. 1946;37(1):12-16.
- 7. Pearson FA, Harper FA. The World's Hunger. Cornell University Press, 1945.
- 8. Burch GI, Pendell E. *Population Roads to Peace or War*. Penguin Books, Population Reference Bureau, 1947.
- 9. Perkins JH. *Geopolitics and the Green Revolution: Wheat, Genes, and the Cold War*. Oxford University Press, 1997.
- Kellogg CE. Food production potentialities and problems. *Journal of Farm Economics*. 1949;31(1 Pt 2):251-262.

Legislative Vpdates LOOKING AHEAD TO 2021 By Judith McGeary, Esq.

Given the general gridlock in the federal government, *Wise Traditions* readers are probably not surprised to hear that Congress hasn't done much on food and agricultural bills in the last few months and is unlikely to do anything until after the inauguration in 2021. Our work continues, though, laying the groundwork for 2021 actions while we assess the lay of the land.

Representatives Pingree and Massie have committed to bring back the PRIME Act in the new Congress, to allow small farmers to use custom processors to sell meat within the state. At the recent Farm & Food Leadership Conference, Massie dubbed a revised version of the bill, which would allow direct-to-consumer sales only (no restaurants or retailers), the "sub-PRIME Act." After giving the pun a welldeserved chuckle, it's important to remember that those direct-to-consumer sales have been at the heart of the movement for this bill all along. While it's disappointing that the PRIME Act did not move forward this year, the explosion in the number of sponsors provides momentum as we move forward to 2021. We need to ensure that Congress remembers the problems at the meatpacking plants during the pandemic (for more thoughts on how to do that, see the sidebar).

U.S. Representative Colin Peterson lost his seat in the November elections, so there will be a new chair of the House Agriculture Committee. The Democratic caucus has elected Rep. David Scott of Georgia, the first African American to chair the Committee.¹ Rep. Scott hasn't been a strong voice either for or against reforms such as the PRIME Act, so it's unclear where he stands.

MORE ON ANIMAL ID

As dicussed in the last *Wise Traditions*, the USDA is yet again trying to mandate electronic ID for cattle. In August, the agency announced that it would stop approving any non-electronic forms of "official identification" at the end of

this year.

Just how expensive is it to use electronic ID? The tags themselves typically cost two to three dollars, which may not sound like a lot until you compare it to the cost of the current metal tags (ten cents each). And the tags are just part of the real cost. There is also the cost of the readers and other infrastructure needed to move to an electronic system. It's not as simple as bar code readers in a grocery store. . . think about how close you have to get the cereal box to the reader, and then think about trying to do that with thousand-pound animals, possibly with long sharp horns!

The USDA has refused to provide any cost analysis of its plans. So let's look at a real-world example. One state, Michigan, already has mandatory electronic cattle ID. Michigan instituted the requirement under its tuberculosis program back in 2007. The Farm and Ranch Freedom Alliance (FARFA) filed a Freedom of Information Act request with the Michigan ag department to find out how much their program costs—not just costs to the state, but farmers, sale barns, veterinarians, all of whom are affected by it.

You would think that they'd know this, right? The agency mandates the electronic IDs; surely they must have assessed the costs at some point. Or perhaps not. After stalling for several weeks, the agency responded that it would produce the documents, but only if FARFA paid over seventeen hundred dollars! Supposedly, the documents are so complicated and difficult to find that it takes high-level employees many hours to identify and copy them.

Without the documents, we can indirectly assess the costs based on the impact of the program. Every five years, the USDA does an agricultural census. As it happens, 2007 was a census year. Here is what happened with Michigan cattle farms between 2007 and 2012, as compared with the rest of the country:

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Judith McGeary

- Michigan saw a 3 percent decrease in the number of very small cattle operations (fewer than ten head), even though nationally the number of such farms increased by 4 percent;
- Michigan and the U.S. as a whole both saw decreases in the number of small to mid-size cattle farms (ten to five hundred head);
- Michigan saw a 35 percent increase in the number of very large cattle farms (over one thousand head), even though the number of those operations decreased nationally. Even more, while the number of cattle in large operations basically stayed steady nationally, Michigan saw a 50 percent increase in the number of cattle on large farms.

In other words, while both USDA and Michigan are hiding whatever internal analyses they have of the costs, it's clear that the electronic ID program hurts small farms and helps big ones, just as we predicted. We need to stop the rest of the country from going down the same road as Michigan.

While USDA will stop approving non-electronic forms of "official identification" at the end of this year, the mandate to use RFID tags will not go into effect for two more years, providing a window of opportunity for producers to continue using the tags that have already been approved—and to continue working to roll back this decision.

UPDATE ON USDA ADVISORY COMMITTEE ON MEAT

In the last *Wise Traditions*, we reported that the USDA had appointed two Big Meat reps to its National Advisory Committee on Meat and Poultry Inspection: one from JBS and one from Pilgrim's Pride.

After an outcry about these appointments, USDA did add two smallscale meat processors to the committee: Greg Gunthorp and Dr. Denise Perry of Lorentz Meats. Both are excellent additions.

Yet even with the addition of these small-scale processors, USDA has ensured that the discussions are heavily slanted away from the interests of small and sustainable meat production. At the same time, the agency added a third large meatpacker, Butterball, which is owned by Seaboard

MAKING A DIFFERENCE

What does it take to make a difference? At a recent conference, I asked Congressman Thomas Massie, the champion of the PRIME Act, how people can best make a difference. His response was that meetings and phone calls from constituents are powerful. Often, people believe that it takes huge numbers to make a difference. After all, on high-profile issues such as tax reform, gun rights and abortion, we hear of elected officials' phone lines being overloaded. But what about more run-of-the-mill issues, which make up the vast majority of the work of any elected official? Congressman Massie noted that his office receives ten or fewer calls on many days, and on some days only gets a couple of phone calls! He noted that the calls on those slow days typically come from "frequent flyers"—the people who call almost every day. While encouraging people not to become frequent flyers, he pointed out that calling once a month, and getting a few friends to do the same, can have a huge impact.

This matches what I have heard from every elected official and legislative staffer I have spoken with over the last fifteen years. Elected officials represent large numbers of people (in the case of a U.S. Representative, about 750,000 people), and vote on an incredibly wide range of issues. On most of those issues, they simply don't know anything about the topic because no one can be an expert or even reasonably track every issue with education, taxes, the budget, foreign affairs, agriculture, homeland security, food access, food safety, health care, transportation, oil and gas, veterans affairs, and so much more.² By necessity, they rely on their colleagues (who each focus on a few issues), lobbyists and their constituents to educate them. You truly can have a major impact by taking on that role. So make those calls and start getting to know your legislators' staff!

Corporation and sells over a billion pounds of turkey a year.

Two large-scale industrial meat trade associations, the North American Meat Institute and the Southwest Meat Association, also got seats on the committee. U.S. Foods, one of the largest food service distributors, got a seat.

Three non-industry associations got seats. The Consumer Federation of America and Center for Science in the Public Interest both opposed exemptions for small farmers in the Food Safety Modernization Act and now oppose the PRIME Act. A member of the Center for Foodborne Illness Research and Prevention also got a seat. While we're not familiar with that organization's work, it appears to be focused on high-tech solutions to deal with the problems created by the conventional meat supply, rather than addressing the underlying reasons for the problems. And the remaining members are a large catfish producer, academics and state government officials.

While the addition of two small-scale processors to the committee is a good step, we still have a long way to go to change the get-big-orget-out mindset at USDA.

REFERENCES

- https://apnews.com/article/david-scott-atlanta-georgiaarchive-collin-peterson-b53d676b442d48593dab034c4 82c2285
- It's worth taking time one day to look at all the committees in the House of Representatives, at https://www.house. gov/committees. Spend a few minutes clicking on each one and see all the bills that are assigned to each one.



A Campaign for Real Milk

ANTIBIOTIC-RESISTANT GENES IN RAW MILK: WHAT DO THE DATA REALLY MEAN? By Mark McAfee and Sarah Smith

Government-Funded Study Finds ZERO Pathogens in Raw Milk Samples! That's what the headline should have read. Instead, the study was titled, "Reservoirs of antimicrobial resistance genes in retail raw milk."¹ The study, funded by the National Institutes of Health (NIH) and the United States Department of Agriculture (USDA), was not able to find any pathogens in raw milk. So instead they focused on trying to create fear of antibiotic-resistant genes, which were found to proliferate when raw milk was allowed to sit at room temperature for hours.

ANTIBIOTIC-RESISTANT GENES ARE UBIQUITOUS

Antibiotic-resistant genes are everywhere. They've been found in every environment, including pristine habitats such as Antarctica that have been virtually untouched by humans.^{2,3} They're even found in the dust of buildings.⁴

In a 2007 paper, Gerard Wright noted that "Antibiotics are ancient, dating back hundreds of millions of years."³ As Wright added, "Resistance is therefore equally ancient, and the number of genes in the resistome is a reflection of the continuous co-evolution of small molecules in natural environments and microbial genomes."

Given that they are ubiquitous in the environment, it is no surprise that there are antibioticresistant genes in many foods.⁵ Breast milk, too, contains antibiotic-resistant genes carried on bacteria found in the raw breast milk.⁶ However researchers in Helsinki found that, even though breast milk contains antibiotic-resistant genes, breastfed babies actually have fewer antibioticresistant genes in their guts than babies who weren't breastfed or who terminated breastfeeding early.⁷ Researchers attribute this benefit to the fact that breast milk promotes the growth of beneficial bacteria such as bifidobacteria, which can then outcompete the bacteria carrying antibiotic-resistant genes. Like breast milk, cow's milk has also been shown to support the growth of bifidobacteria.⁸

POTENTIAL DANGERS OF ANTIBIOTIC-RESISTANT GENES

Antibiotic-resistant genes can pose potential health threats in specific circumstances. When we take antibiotics, the intestinal microbiome is disrupted as both beneficial and harmful bacteria are killed off. This weakens our immune system overall.⁹ If there are antibiotic-resistant bacteria present in the gut, taking antibiotics actually allows these bacteria to proliferate in the absence of competing bacteria. There can then be infection or illness that does not respond to antibiotics. Antibiotic resistance is responsible for the deaths of tens of thousands of people every year in the U.S. alone.¹⁰

For example, *Clostridium difficile* colitis (*C. diff.* colitis) is an infection of the colon that results from disruption of the healthy bacteria in the gut, usually as a result of taking antibiotics. *C. diff.* can cause diarrhea, abdominal pain, fever, bloody stools, kidney failure and even death. One of the best treatment options for severe *C. diff.* infections is fecal transplant. Severely ill *C. diff.* patients have a 92 percent cure rate from fecal transplants, which provide a healthy flush of poop from a healthy human donor into the colon.¹¹ The fecal transplant recolonizes the gut with healthy bacteria.

ZERO PATHOGENS IN RAW MILK SAMPLES

Coming back to the study funded by the NIH and USDA,¹ researchers found that antibiotic-resistant genes proliferated in raw milk that was allowed to sit at room temperature for hours. Their research also showed that raw milk that was kept refrigerated had low levels of antibiotic-resistant genes. What this actually demonstrates is that raw milk from around the

Antibioticresistant genes are everywhere. They've been found in every environment, including pristine habitats such as Antarctica that have been virtually untouched by humans.

country is being produced very cleanly, resulting in low bacteria counts.

Most of the potential beneficial bacteria to be found in milk is from either fecal or soil origin. Yes. . . dirt is very good for you, and a little poop does not hurt either.¹² It has long been understood that living in a farm environment has substantial health benefits over living in urban environments.13 However in our modern world with immune-compromised consumers, the raw milk standards have had to change. For raw milk to be legal for sale and safe for the general public (including immune-compromised people), it must be very hygienic. It can no longer have dirt or poop in it. So all that is left is clean, delicious, safe raw milk from deep inside the cow's or goat's udder. The government-funded study tested retail raw milk samples and found zero pathogens! The researchers stated, "[Raw] milk samples in the present study were screened for Listeria spp., Salmonella enterica, and E. coli O157:H7. None were detected."1 This should be celebrated as true progress toward farm cleanliness and testing.

FERMENTING RAW MILK

For thousands of years, people have known how to ferment or "clabber" raw milk by simply leaving it at room temperature. In the absence of refrigeration, people from traditional cultures often consumed raw milk in fermented form.¹⁴ Such milk would have contained ample beneficial lactic-acid bacteria from the small amounts of dirt or manure present on the udders and teats of the milk animals, and would therefore have quickly fermented at room temperature.

In modern times, raw milk consumers have largely lost their taste for spontaneously fermented, sour raw milk. Instead raw milk farmers and consumers aim to maintain the sweet flavor of fresh milk as long as possible. The farmers do this by thoroughly cleaning the udders and milking equipment to ensure the milk will have low bacteria counts,¹⁵ as well as by rapidly chilling the milk and keeping it cold. Consumers, too, work to make sure their raw milk is kept cold and does not ferment. Keeping raw milk cold allows it to retain its sweet taste and gives it a longer shelf life.

One useful point of information from the government-funded study was the finding that "spontaneous fermentation does not grow beneficial lactic acid bacteria."¹ This means that the very clean, low-bacteria-count raw milk that is currently available in the U.S. may not ferment very well in the traditional way. Generally, raw milk consumers who intentionally ferment their milk will do so by adding beneficial bacteria such as a yogurt starter or kefir grains. Kefir in particular is associated with a wide number of health benefits, including lower blood pressure, decreased insulin resistance, tumor suppression and prevention and improved composition of the gut microbiota.¹⁶⁻¹⁹

THE BOTTOM LINE

The NIH- and USDA-funded study found no pathogens in raw milk.¹ This is further confirmation of the findings published in the January 2020 *Journal of Epidemiology and Infection*, which concluded that "raw milk can be produced with a high level of hygiene and safety."²⁰

The government-funded study focused on antibiotic-resistant genes, which can proliferate in raw milk that is left at room temperature for hours. However it is no surprise that raw milk, like breast milk and many other foods, contains antibiotic-resistant genes. The presence of antibiotic-resistant genes is not an issue unless the balance of good bacteria in the gut gets disrupted. Moreover both breast milk and raw milk are known to promote the growth of beneficial bacteria such as bifidobacteria. The study completely ignored the growing body of evidence showing that children who drink raw milk have decreased rates of asthma, allergies, eczema, ear infections, fever and respiratory infections.21-23

INFORMATION RESOURCE FOR WAPF MEMBERS

Consult with Pete Kennedy on state laws, regulations and policies including food freedom legislation and issues regarding consumer access to raw milk, cottage foods and on-farm meat and poultry processing. (Pete cannot give individual legal advice or recommend support for or opposition to pending legislation.) Contact Pete at pete@realmilk.com.

The NIH- and USDA-funded study found no pathogens in raw milk. The best way to beat antibiotic-resistant bacteria is to protect and nourish the biodiverse bacteria in the gut. You can do this by avoiding antibiotics and processed foods, which damage the gut and immune system.^{24,25} Instead, eat plenty of whole foods such as raw milk, milk kefir, grass-fed beef, eggs and fresh or fermented vegetables and fruits to feed the beneficial bacteria in the gut and allow them to thrive.²⁶

Mark McAfee is co-founder of Organic Pastures, the world's largest organic raw milk dairy. Mark founded the Raw Milk Institute (RAWMI) in 2011 to assist farmers in producing very lowrisk raw milk through farmer training, raw milk Risk Analysis & Management Plans ("RAMP"), test standards for raw milk and ongoing testing.

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REFERENCES

- Liu J, Zhu Y, Jay-Russell M, Lemay DG, Mills DA. Reservoirs of antimicrobial resistance genes in retail raw milk. *Microbiome*. 2020;8:99.
- Durso LM, Miller DN, Wienhold BJ. Distribution and quantification of antibiotic resistant genes and bacteria across agricultural and non-agricultural metagenomes. *PLoS One*. 2012;7(11):e48325.
- 3. Wright GD. The antibiotic resistome: the nexus of chemical and genetic diversity. *Nat Rev Microbiol.* 2007;5:175-186.
- Ben Maamar S, Glawe AJ, Brown TK et al. Mobilizable antibiotic resistance genes are present in dust microbial communities. *PLoS Pathog.* 2020;16(1):e1008211.
- 5. Fogler K, Guron GKP, Wind LL et al. Microbiota and

antibiotic resistome of lettuce leaves and radishes grown in soils receiving manure-based amendments derived from antibiotic-treated cows. *Front Sustain Food Syst.* 2019;3:22.

- Pärnänen K, Karkman A, Hultman J et al. Maternal gut and breast milk microbiota affect infant gut antibiotic resistome and mobile genetic elements. *Nat Commun.* 2018;9:3891.
- Ravindran S. Breastfeeding may help protect babies from antibiotic-resistant bacteria. SPLASH! milk science update, January 2019. https://milkgenomics.org/article/breastfeeding-may-helpprotect-babies-from-antibiotic-resistant-bacteria/.
- 8. Rockova S, Rada V, Marsik P et al. Growth of bifidobacteria and clostridia on human and cow milk saccharides. *Anaerobe*. 2011;17(5):223-225.
- McAfee M, Smith S. Immunity, the immune system, and raw milk. Raw Milk Institute, 2020. https://www.rawmilkinstitute.org/updates/immunity-the-immune-system-and-raw-milk.
- Centers for Disease Control and Prevention. More people in the United States dying from antibiotic-resistant infections than previously estimated [Press Release]. November 13, 2019. https://www.cdc.gov/media/releases/2019/p1113-antibiotic-resistant.html.
- 11. Brandt LJ. Fecal transplantation for the treatment of Clostridium difficile infection. *Gastroenterol Hepatol (N Y).* 2012;8(3):191-194.
- Akst J. The influence of soil on immune health. *The Scientist*, January 8, 2020. https://www. the-scientist.com/news-opinion/the-influence-of-soil-on-human-health-66885.
- Wells AD, Poole JA, Romberger DJ. Influence of farming exposure on the development of asthma and asthma-like symptoms. *Int Immunopharmacol.* 2014;23(1):356-363.
- 14. Levi J. The Smoke-cured fermented milk of the Samburu. Presentation at Wise Traditions London 2014, February 8-9. https://westonaprice.london/videos/samburu/.
- 15. Smith S. Udder preparation for raw milk. Raw Milk Institute, August 6, 2020. https://www.rawmilkinstitute.org/updates/udder-preparation-for-raw-milk.
- Bourrie BCT, Willing BP, Cotter PD. The microbiota and health promoting characteristics of the fermented beverage kefir. *Front Microbiol*. 2016;7:647.
- Bellikci-Koyu E, Sarer-Yurekli BP, Akyon Y et al. Effects of regular kefir consumption on gut microbiota in patients with metabolic syndrome: a parallel-group, randomized, controlled study. *Nutrients*. 2019;11(9):2089.
- Guzel-Seydim ZB, Kok-Tas T, Greene AK, Seydim AC. Review: functional properties of kefir. Crit Rev Food Sci Nutr. 2011;51(3):261-268.
- De Oliveira Leite AM, Miguel MA, Peixoto RS, Rosado AS, Silva JT, Paschoalin VM. Microbiological, technological and therapeutic properties of kefir: a natural probiotic beverage. *Braz J Microbiol.* 2013;44(2):341-349.
- Berge AC, Baars T. Raw milk producers with high levels of hygiene and safety. *Epidemiol Infect*. 2020;148:e14.
- Loss G, Apprich S, Waser M et al. The protective effect of farm milk consumption on childhood asthma and atopy: the GABRIELA study. J Allergy Clin Immunol. 2011;128(4):766-773.
- Perkin MR, Strachan DP. Which aspects of the farming lifestyle explain the inverse association with childhood allergy? J Allergy Clin Immunol. 2006;117(6):1374-1381.
- Loss G, Depner M, Ulfman LH et al. Consumption of unprocessed cow's milk protects infants from common respiratory infections. J Allergy Clin Immunol. 2015;135(1):56-62.
- Watanabe K, Gilchrist CA, Uddin J et al. Microbiome-mediated neutrophil recruitment via CXCR2 and protection from amebic colitis. *PLoS Pathog.* 2017;13(8):e1006513.
- Paula Neto HA, Ausina P, Gomez LS, Leandro JGB, Zancan P, Sola-Penna M. Effects of food additives on immune cells as contributors to body weight gain and immune-mediated metabolic dysregulation. *Front Immunol.* 2017;8:1478.
- McAfee M. Build immune system strength with whole foods: Drink raw milk! Raw Milk Institute, April 10, 2020. https://www.rawmilkinstitute.org/updates/whole-foods-buildimmune-system-strength.



BACK ISSUES OF Wise Traditions AND OTHER INFORMATIVE LITERATURE

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RAW MILK UPDATES by Pete Kennedy, Esq.

CANADA - Ontario Charter Challenge to Raw Milk Ban

From November 16-20, Judge Shaun O'Brien heard arguments in the Ontario Superior Court of Justice on an application (petition) filed by two farmers (one of the farmers is Elisa Vander Hoot whose husband, Michael Schmidt, has done more to promote raw milk and increase access to it than anyone in Canada) and nineteen consumers to overturn national and provincial bans on the sale and distribution of raw milk. The applicants mainly claimed the bans violate a provision in the Canadian Charter of Rights and Freedoms (the equivalent of the U.S. Constitution) guaranteeing freedom of conscience and religion. (See *Wise Traditions* Summer 2020 for background.)

Opposing the petition at the hearing were attorneys for the attorney general of Ontario, the attorney general of Canada, the Regional Municipality of York, the Regional Municipality of Peel, the Simcoe Muskoka District Health Unit, the Dairy Farmers of Ontario and Dairy Farmers of Canada. Arguments before the court mainly focused on whether distributing and consuming raw milk are activities protected under the freedom of conscience clause in the charter and on whether the risks raw milk poses to human health justify the ban.

Canada and Scotland are the only countries in the industrialized world that have completely banned the sale or distribution of raw milk. Much evidence has appeared in recent years showing that raw milk is a safe product; during the hearing the opposition attorneys tried to have that evidence stricken from the record, Joseph Cheng, the lawyer representing the attorney general of Canada, moved to disqualify three of the applicants' experts on the science and the law claiming that the experts' testimony was biased and, in the case of the two experts on the science, was outside their area of training. Cheng asked the court to give no weight to a 2018 study finding that "the rate of unpasteurized milk associated outbreaks has been declining since 2010, despite increasing legal distribution. Controlling for growth in population and consumption, the outbreak rate has effectively decreased by 74% since 2005." (The study looked at outbreaks from 2005 to 2016.)¹

The irony is that Cheng brought up the name of John Sheehan, the most anti-raw milk regulator in the United States, in justifying his request. Sheehan was once the chief of FDA's dairy division and is currently a senior advisor for compliance and enforcement at the agency. He has said that drinking raw milk is like playing Russian roulette with your health. Both the FDA and CDC asked the publisher of the 2018 study to retract it—unsurprising since the study totally contradicts the anti-raw milk narrative both agencies like to peddle. Applicants' attorney Jonathan Nemetallah noted during the hearing that no one had come up with a different interpretation of the data the study used.

Despite the best efforts of Cheng and the other government and industry attorneys to scrub the record as much as possible, Nemetallah brought up two facts the opposition did not challenge: first, that over a quarter million people drink raw milk in Ontario and second, that there hasn't been a single case of foodborne illness in the province attributed to raw milk consumption in ten years.

You're Invited!

WISE CONVERSATIONS: A NEW REASON TO BE A MEMBER

We have another membership perk! We are having monthly meetings online for members in order to answer your questions. Each month we pick a specific topic and have a guest who works closely with the Foundation. As members, you can submit your questions in advance by email and we will answer as many as possible during the hour. We send an email notice announcing the meetings which occur in the last week of the month. We have room for up to 500 at each meeting, but if you cannot attend live, you can view the recordings afterwards either on our website or on our members-only Facebook group.

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If you have suggestions for topics or have not been getting our email about these events, please let us know. info@westonaprice.org As if in a time warp, the opposition attorneys' arguments ignored the improvements that have occurred in farm hygiene, milking technology, refrigeration, and farm management safety practices; despite all of these improvements in raw milk safety, the attorneys took up the long-held position of holding raw milk to a standard of perfection, a double standard applied to no other food. In his appearance before the court representing the attorney general of Ontario, Padraic Ryan argued that allowing raw milk would increase illness in the non-raw milk drinking population through secondary transmission, ignoring the fact that this could be true with any food. Ryan mentioned one case in England where there was a secondary transmission of illness through people ill from raw milk consumption but did not bring up any Canadian cases.

The court filings and arguments before Justice O'Brien only strengthen the belief that the real intent of the ban is to protect the dairy industry. In an exchange with the Justice, Ryan indicated there was no prohibition against Ontario residents crossing the border into the U.S. to purchase raw milk; the provincial ban covers only the sale or distribution within Ontario. Likewise, the national ban covers only the sale or distribution of raw milk within Canada's borders, not the acquisition of the product within the U.S. If raw milk was an actual threat to public health then there would be a ban on the possession and consumption of it; there is no ban. The national and provincial laws give business to American dairies that Canadian dairy farmers should have.

Canadian dairy farmers could have used a lifting of the ban a long time ago. In 1960, there were around one hundred forty thousand dairies in the country; today, there are eleven thousand.² The only market that dairy farmers in Ontario have for their milk is the Dairy Farmers of Ontario Cooperative, shackling the farmer to a commodity system that is a race to the bottom with the rapidly increasing consolidation of the industry.

Interestingly, when Cheng was wrapping up his argument before the court, he requested that if the justice ruled for the applicants, the federal parliament be given two years to develop a regulatory scheme for raw milk sales and distribution—better late than never. Michael Schmidt first tried to convince the government to pass legislation over twenty years ago. If the justice does rule for the applicants, its effect would be to end the current raw milk ban in place in the remaining provinces. If the justice rules against the applicants, Canada will continue to be an outlier at the expense of consumer choice and dairy farm viability. It's time to acknowledge the raw milk ban is way out of proportion to the risks of the product. Michael Schmidt started fighting for legal raw milk sales in 1994; since that time, while Canada has remained committed to the dairy monopoly, seventeen states in the U.S. have either legalized or expanded access to raw milk though legislation, rulemaking, court decision or policy.

- 1. Whitehead J, Lake B. Recent trends in unpasteurized fluid milk outbreaks, legalization, and consumption in the United States. *PLOS Currents Outbreaks*. 2018 Sep 13. Edition 1. doi: 10.1371/currents.outbreaks.bae5a0fd685616839c9cf857792730d
- 2. McKenna, Barrie. Canada's Dairy Industry Is a Rich Closed Club. *The Globe and Mail*. 25 June 2015 (updated 15 May 2018). Accessed at https://www.theglobeandmail.com/news/politics/canadas-dairy-industry-is-a-rich-closed-club/article25124114/

2000 Raw milk available in 27 states **2020** Raw milk available in 43 states (thanks to the efforts of A Campaign for Real Milk)

Our Goal: Raw milk available in all 50 states! Help us make raw milk sales legal in the remaining 7 states.





Healthy Baby Gallery

Meet Pearl: an active, alert, confident, curious, vocal, happy eight-month-old! Pearl's mom and dad had tried unsuccessfully for years to conceive; that changed after Pearl's mom, Arianna, was one month into the Weston Price preconception diet. Though considered a "high-risk, geriatric" patient (simply for being thirty-five years old), Arianna ignored mainstream doctors' fears and had a wonderful, healthy pregnancy with zero complications. She maintained a diet of cod liver oil, pastured butter, whole milk, healthy fats, grass-fed organic meats and fruit and veggies throughout her pregnancy and walked five miles a day up until the day she went into labor. Pearl arrived right on time at seven pounds, seven ounces. Pearl was born wide-eyed, already turning her head on her own. She was rolling over by six weeks, eating



solid foods by four months, crawling by six months and standing by seven months. At eight months, her height and head circumference are still in the eighty-fifth percentile, and she is close to taking her first steps. Strangers often comment on how alert and aware Pearl is. Even the pediatricians have been stunned by her physical and cognitive development. Pearl is a voracious eater and—along with breastfeeding—will consume anything put in front of her, often feeding herself. She loves music, water and playing outdoors, no matter the weather. Most importantly, Pearl is one loved baby!



Hello from Tennessee! I just had to share a picture of my third-born eating the liver pâté from the *Nourishing Traditions Book of Baby & Child Care*. She loves it! My other three aren't so sure, but she has been devouring it! We have been looking for nutrient-dense foods to help her gain more weight so that she can regulate her temperature better (she has a hard time staying warm). She often eats butter from grass-fed cows a spoonful (or fingersful) at a time. I am so excited about our new journey with real whole foods! I wish I had discovered this method of eating when I was trying to conceive my first child seven years ago. . . but better late than never!

I would just like to say thank you. The Nourishing Our Children community is spectacular! I have coveted every bit of support and information I have received from each of you. I feel supported knowing that there is a place I can come to ask questions and seek advice from other parents trying to raise their children in a way most of society doesn't seem to understand—but you understand. You've been a blessing as I tried to navigate getting my preteen son healthy when I became his step-mom and, most recently, during pregnancy and now, nursing this precious little chunk (in his three-month picture). What *peace* there is in knowing that your children are healthy, strong and safe because their perfectly-designed immune systems are nourished! I am so grateful for all of the ideas that are exchanged here and I *thank you* for sharing them!



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LOCAL CHAPTER BASIC REQUIREMENTS

- 1. Create a food resource list of organic or biodynamic produce, milk products from pasture-fed livestock (preferably raw), pasture-fed eggs and livestock and properly produced whole foods in your area.
- 2. Provide a contact phone number to be listed on the website and in our quarterly magazine.
- 3. Provide Weston A. Price Foundation materials to inquirers, and make available as appropriate in local health food stores, libraries and service organizations and to health care practitioners.
- 4. Provide a yearly report of your local chapter activities.
- 5. Be a member in good standing of the Weston A. Price Foundation.
- 6. Sign a contract on the use of the Weston A. Price Foundation name and trademark.

OPTIONAL ACTIVITIES

- 1. Maintain a list of local health care practitioners who support the Foundation's teachings regarding diet and health.
 - Represent the Foundation at local conferences and fairs.
- 3. Organize social gatherings, such as support groups and pot luck dinners, to present the Weston A. Price Foundation philosophy and materials.
- 4. Present seminars, workshops and/or cooking classes featuring speakers from the Weston A. Price Foundation, or local speakers who support the Foundation's goals and philosophy.
- 5. Represent the Weston A. Price Foundation philosophy and goals to local media, governments and lawmakers.
- 6. Lobby for the elimination of laws that restrict access to locally produced and processed food (such as pasteurization laws) or that limit health freedoms in any way.
- 7. Publish a simple newsletter containing information and announcements for local chapter members.
- 8. Work with schools to provide curriculum materials and training for classes in physical education, human development and home economics.
- 9. Help the Foundation find outlets for the sale of its quarterly magazine.

2.

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CHAPTER RESOURCES

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

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LOCAL CHAPTER CHAT GROUP

While Yahoo groups have been disbanded, our chapter leaders have a wonderful new secure platform to carry on our many beneficial discussions, developed by the husband of one of our leaders, Jay Hamilton-Roth. We encourage all of our chapter leaders, and co-leaders, to join if interested in learning and growing as chapters, and individuals as well. To join, please contact Maureen Diaz at: outreach@westonaprice.org

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Muskoka: Alli Manzella (705) 684-9331, connect@allimanzella.com
Oakville: Rachael Thiessen (416) 605-4377, thiessen.rachael@gmail.com
Prince Edward County: Karen Selick (613) 242-0369, & Angela Bakker pec.wapf@gmail.com

SK

SW Saskatchewan: Pamela Wolanski (306) 560-3258 pjg59@hotmail.com

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CO

Meadow Maid Foods, 100% grass-fed, grass-finished beef. On pasture year-round at the family ranch in WY. Production practices detailed on our website. Custom beef, Farmers markets, and food co-op in Fort Collins. meadowmaidfoods.com, (307) 534-2289.

Rafter W Ranch, Simla, CO. A family-owned ranch, practicing regenerative agriculture, bringing you nutrient-dense food. Our animals are **100% certified American Grass-fed**. Our beef is 30-day dry-aged. We also offer pasture-raised lamb and broiler chickens. Bones, offal (liver, tongue, oxtail, kidney, cheek, heart) and other choice cuts available. Bulk and piece orders. Pickup locations along the Front Range and **NOW shipping** in CO. (719) 541-1002, rafterwranch.net

IA

Washington, Iowa. Harmony Farm SOY FREE WHEAT FREE chicken and duck eggs. Pastured on 40 acres. Fed Organic grains from local mill. \$4.00/dozen chicken eggs and \$7.00/ dozen duck eggs. Farm pickup and delivery from Iowa City to Fairfield. (319) 653-9109 harmony4healthiskey@gmail.com.

IN

Now accepting reservations for 2021 Dairy Goat Herd Shares. Raw Goat Milk Pet Treat available now. Herd raised on certified organic pasture and hay. Hamilton County, Cicero, Indiana. Amy Jo Farmer. (317) 250-0963. farmersgoldhoney@comcast.net.

MA

Health Hero Farm on the agricultural island of South Hero, VT, delivers high-quality 100% grass-fed beef to the Boston area. Our farm is certified humane and our pastures are certified organic. See our video at https:// HealthHeroFarm.com/video

Many Hands Organic Farm in Barre, MA. All products certified organic and free range. Lard, pork, chicken and turkey stocks, pork, chicken, turkey and 26 weeks of CSA. No till, nutrient dense. mhof.net; (978) 355-2853; farm@mhof.net.

MD

100% soy-free chicken, eggs, pork and beef. Chicken livers, chicken feet and heads. Bacon and sausage. Raw pet milk. Raw milk blue and cheddar cheese by cheesemaker Sally Fallon Morell. **Will ship** whole cheese wheels. Southern Maryland, within 1 hour of downtown Annapolis and Washington, DC. Saturday farm tours. Store open Thursday to Saturday 10-6 or by appointment. P. A. Bowen Farmstead, 15701 Doctor Bowen Road, Brandywine, MD. (301) 579-2727, pabowenfarmstead.com.

MN

Farm On Wheels offers animals raised green grass-fed & 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.

NY

Grass fed Farm Fresh food to help you achieve vibrant health by enjoying high quality, nutritious, 100% grass fed raw dairy from sheep and Jersey cows. 100% grass fed/ finished beef and lamb, Soy Free pasture raised pork, turkey and chicken, and lots more. Order online and utilize our convenient home delivery or pick up locations. Shop farmmatch.com/pleasantpastures or call (717) 768-3437.

Dutch Meadows brings you the finest in highquality grass-fed meats and organic dairy products, raised in harmony with the land. Order online and choose from hundreds of farm products, **WE SHIP.** Convenient pick-up locations in NYC. (717) 442-9208 info@dutchmeadowsfarm.com – DutchMeadowsFarm.com.

OH

COPIA FARM, Dan & Caitlin, Short drive from Columbus, Johnstown Ohio (614) 915-9269, CopiaOhio.com. Farm store open daily, 9 am-7 pm. Raw milk herdshares, grass-fed meats, pasture-raised eggs, organic produce, organic sourdough bread & more! Regenerative, GMO-free, organic, paleo.

Devon beef, 100% grass fed, no antibiotics, no growth hormones. Full cow, ½ cow or individual cuts from my ranch in St. Leon, Indiana or at "Lettuce Eat Well Farmers Market" in Cheviot, Ohio (lewfm.org) first Friday of every month. Pastured pork, 100% antibiotic free, fed minimum amount of organic corn, 100% outdoors on pasture and woods. All meat USDA inspected. Information on how we raise our beef and pork plus important health links at abundantgreenpastures.com or Mike at (812) 637-3090.

Sugartree Ridge Grassfed Herdshare/PMA, located 60 miles east of Cincinnati in Highland County. We deliver 100% grassfed milk, optional A2-A2 milk and many other products to sixteen delivery sites in Cincinnati. Farm and contact address is: Scott Richardson, STRG Herdshare 6851 Fair Ridge Road, Hillsboro, OH 45133-9548.

OR

Grass-based biodynamic raw milk dairy offering Jersey Hi-creamline milk, cream, golden butter, cottage cheese and aged cheeses. Soy-free veal and pork seasonally. On farm sales and membership club. **Can ship.** Sherry and Walt (541) 267-0699.

Windy Acres is a raw milk dairy. It provides families with raw cheeses, Gouda, Jack, Jalapeno Jack, Tri Colored Peppercorn Jack, White Cheddar, Swiss (Jarisberg style), Feta, Camembert, etc. We make hand-pressed butter, cream, yogurt, kefir, lamb, pork and beef. Grass-fed, raised without GMO or soy. (541) 613-5239 Windyacres26@gmail.com

PA

Dutch Meadows brings you the finest in high-quality grass-fed meats and organic dairy products, raised in harmony with the land. Order online and choose from hundreds of farm products, **WE SHIP**. Visit our farm store. 694 Country Lane Paradise, PA. (717) 442-9208 info@dutchmeadows farm.com – DutchMeadowsFarm.com.

GAP VIEW FARM MARKET Raw milk, raw milk cheese, cream butter, eggs, including duck eggs and fresh vegetables from our chemical free farm. Call (484) 667-1382 or visit our farm market in the heart of Lancaster County, PA at 5230 Newport Rd, Gap, PA 17527.

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Raw milk cheese from our grass-fed Jerseys, made on our family farm with Celtic sea salt. No grain feed. Also grass-fed beef and pastured chickens, turkeys and eggs. All soy-free, no hormones or synthetics. On-farm sales, **will ship cheese**. Wil-Ar Farm, Newville, PA (717) 776-6552.

VA

Salatin family's Polyface Farm has salad bar beef, pigaerator pork, pastured chickens, turkeys and eggs, and foragebased rabbits. Near Staunton. Nationwide delivery available. Call (540) 885-3590, polyfacefarms.com.

Grass fed Farm Fresh food to help you achieve vibrant health by enjoying high quality, nutritious, 100% grass fed raw dairy from sheep and Jersey cows. 100% grass fed/ finished beef and lamb, Soy Free pasture raised pork, turkey and chicken, and lots more. Order online and utilize our convenient home delivery or pick up locations. Shop farmmatch.com/pleasantpastures or call (717) 768-3437.

VT

Health Hero Farm delivers high-quality 100% grass-fed beef within a wide radius of Burlington, VT. Our farm is certified humane and our pastures are certified organic. Our cattle breeds finish well on only grass. See our video at https://HealthHeroFarm.com/video

WY

Meadow Maid Foods, 100% grass-fed, grassfinished beef. On pasture year-round at the family ranch in Goshen County. Production practices detailed on our website. Custom beef, Cheyenne farmers markets and local delivery. (307) 534-2289, meadowmaidfoods.com!!

HEALTH PRACTITIONER

Have you been eating an ancestral diet for years without the expected results? Do you still suffer from fatigue, anxiety, anger, poor sleep, and digestive issues? Nutritional balancing could make the difference. Contact Moneca Dunham RN, BSN, RCPC mountainthrive@yahoo.com.

HEALTHY PRODUCTS

FLUORIDE FREE AMERICA Mission: Enhancing communication between individuals and organizations to exchange information and create strategies to end water fluoridation. facebook.com/waterliberty * Twitter.com/ FluorideFreeAmerica/waterliberty * 70% of Americans are fluoridated. JOIN IN THE EFFORT TO END FLUORIDATION - You have the right to safe drinking water.

TRADITIONAL HEALTH FIRST. Offering all Green Pasture's products including Blue Ice Fermented Cod Liver - Fermented Skate Liver Oil - X Factor Gold High Vitamin Butter Oil both in liquid and capsules, Infused (with FCLO) Coconut Oil and Pure Indian Foods Ghee. Prescript Assist Probiotics, **free shipping**. Email or call for information about shipping, referrals, auto resupply, and any general questions or information about these superfood products. Visit THF on Facebook. To order: email John@TraditionalHealthFirst. com or call John Delmolino, Amherst, MA. (413) 210-4445.

CRAFTS & CLOTHING

Beautiful crafts by local artists. Keep your gift-giving dollars in the USA. Alpaca blankets, socks and yarn; hand painted decorations, paintings by award-winning artist David Zippi; handmade quilts. Exclusive source of Nourishing Traditions posters. Saturday farm tours. Store open Thurs-Sat 10-6 or by appointment. P. A. Bowen Farmstead, 15701 Doctor Bowen Road, Brandywine, MD. (301) 579-2727, pabowenfarmstead.com.

DVDS/ON-LINE VIDEOS

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**!

View all UK & Irish WAPF conference videos, many European speakers never seen in the USA, in our large and growing video library that will host and fund future events. Subscribe for just £2 a month. (about \$2.50). https://westonaprice.london.

EMPLOYMENT OPPORTUNITIES

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Oregon Cascades 100-ac. forested/9-ac. pastured organic beef main operation. Very established customer base. Seek mature, responsible, teachable person with desire/ willingness to learn. Basic Ag/Husbandry is necessary but the willingness to learn is most important. Ongoing projects in construction, soil/pasture management, agronomy, large composting, husbandry, agriculture, irrigation, gardening, forest management, heavy equipment, mechanics, welding, etc. We try to do it all here. Looking for a longterm potential partnership. Opportunity of a lifetime. inforoc@wildblue.net.

Film

Diana Rodgers is a real food nutritionist living on a working farm making a documentary called Kale vs. Cow that will defend the nutritional, environmental and ethical case for better meat. Endorsed by WAPF, Savory Institute, Animal Welfare Approved. Contributions are tax-deductible. Sustainabledish.com/film.

Homes & Land Sale

Business and farm in Oregon looking for a buyer. The farm is a turn key operation. It has a 30 cow 30+ heifer herdshare dairy, with over 100 members. Includes cheese room operation, underground fodder container and green room, smaller greenhouse, and orchard that haven't been completely developed for revenue. On one side of the parlor is for cows and one for sheep or goats. A large walk-in freezer and milk equipment for milking sheep and cows. Deliveries to Portland, Medford, Ashland, Dalles, Bend, Redmond, and on-farm sales. See pictures windyacresdairy.com. Call (541) 613-5239.

BEAUTIFUL PREPPER RESOURCE RETREAT, upstate South Carolina 15 minutes west of Lake Keowee. Secluded 4,400sf. luxury energy efficient home: 4br, 6 full bath, walk in level has easy conversion to 2 separate apts. Designed for self sufficiency during adverse times. 50 acre historic farmstead includes 10 acres bottomland and pasture, 3 stall horse barn, 2 streams, spring fed stocked pond, **\$699,500**. (864-292-5001) website: **SCCherokeePathRetreat.com**.

PRESERVED FARM FOR SALE. Salem County, NJ. 38 acres. Continuously farmed
since 1882. Well-maintained house (1939). Rural location, yet near Philadelphia, PA. (856) 692-9533; devorahhelig@gmail.com.

NETWORKING

I work as a private chef who cooks traditional foods recipes for people in their homes. I use high quality ingredients like pasture raised meats and cooking fats, raw milk, bone broths, and seasonal produce. I am interested in networking with other real foods private chefs so we can help support each other and share tips for how to run a private chef business. I am located in Canada; I look forward to chatting with you! Jana Kutarna Jkutarna@gmail.com.

RESEARCH

THE AUSTRALIAN WITH DAIRY INDUSTRY STRUGGLING, farmers walking off the land and suicides at dismal highsit's time for urgent action. Our biggest project this year will road test the 2009 risk assessment by Food Standards Australia New Zealand (FSANZ). Please DONATE here www.ausrawmilk.org/ donate.

Johanna Keefe, PhD, MSN, GAPS/P, has completed her doctoral research through the California Institute of Integral Studies (CIIS) revealing, through in-depth interviews, the lived experience of mothers as they described their lifestyle following a real food diet based on WAPF principles. Please consider sharing a part of your own story with her by email or phone, to see if yours may contribute to one of her forthcoming projects: a photo-essay accompanying an uplifting mini-series or documentary with the working title, "Grass-FedBabies", to inform and inspire our next generation of parents. Johanna looks forward to hearing from you at johanna8@comcast. net or by phone/text at (978) 290-0266 or DM her on IG @grassfedbabies to set up a time to talk!

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SEEKING ROOM FOR RENT/ROOM EXCHANGE - Connecticut based mature, responsible woman looking to live with likeminded individuals. A follower of the Nourishing Tradition's philosophy and a member of WAPF. Non-smoker, quiet and clean. Chef, instructor and nutritionist for 30 years; teaching the relationship between food, healing and Chinese dietary therapy,

as well as Feng Shui. Friendly companion. Open to options, including an exchange of room and board for rent and services. Willing to contribute light cooking, shopping, help with errands and light cleaning. Will relocate. Contact Melanie moongodess888@ gmail.com or (718)-986-0686.

SOUTHERN MARYLAND - Farm stay at P A Bowen Farmstead. Living room with kitchenette, 1 bedroom, plus cots, to sleep 4, even 6 total. Barbeque, pool, private entrance. Tree house for children. Walks, farm activities. 1 hour from downtown Washington, DC and Annapolis. Listed at AirBNB or contact Lindsay at farmstay@ pabowenfarmstead.com. 15701 Doctor Bowen Rd, Brandywine, MD.

Long-time WAPFer, honest, on disability, with severe mold, EMF sensitivities (wireless and dirty electricity) in need of safe housing in a location with low ambient RF and clean air. Prefer within 3 hours of DC, but not necessary. Contact lmschnoor@ juno.com.



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WINTER 2020

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Resettling of America means putting enough people on the land to take proper care of it and pay them decently for doing it. The fact that we know the history of people having to leave the country because they couldn't make a living there, is the history of rural America. But that they left because they couldn't make a living is an indictment of our land policies. The idea that you have to go somewhere else, that you have to leave a fertile country in order to make a living is preposterous and it's a result of the wrong idea of what we mean by making a living in the first place. To make a living is not to make a killing, it's to have enough.

Wendell Berry

HEALTHY PRODUCTS / INFORMATION





Registration opens October 12, 2020

Earlybird registrants will be entered to win 1 of 10 signed copies of Dr. Natasha's new book "Gut and Physiology Syndrome"

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INFORMATION / TRAINING

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PRINCIPLE 3

Choose foods with high levels of vitamins A, D and K2.

11 WISE TRADITIONS PRINCIPLES • BITE-SIZE

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A new blog



Iqaluich Niginaqtuat Fish That We Eat

I highly recommend that anyone interested in eating fish, amazing wild fermented food, indigenous food preparation or becoming a wild human in general check out this INCREDIBLE book: Iqaluich Niginaqtuat, The Fish that we Eat. The author, Anore Jones, like a modern day Weston Price spent decades among the Inupiat of Northwest Alaska learning their INCREDIBLE food traditions. This book is almost too good to be true - recipes include fermented salmon heads, cod livers with black berries, how to dry salmon eggs, pretty much everything! Much more than a recipe book, this offers a complete picture of how the Inupiat live with the fish in a beautiful way, giving us ideas and methods that may apply to many other bioregions. Absolutely amazing!

Download it for free here: http://alaska.fws.gov/asm/fisreportdetail. cfm?fisrep=21

(Scroll down the page to the Northwest Arctic section, you'll find the link there.)



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INFORMATION / TRAINING







foods.

WINTER 2020





ANNOUNCING THE RELEASE OF SALLY FALLON MORELL'S SECOND COOKING VIDEO Comfort Foods: Cooking for Skeptical Family Members

\$25 for DVD or USB flash drive Includes 4 parts, 3.5 hours total, showing the preparation of 3 meals:

PART 1: Cutting Up a Chicken and Marinating Chicken including Livers for Frying; Meat Loaf and Rissoles

PART 2: Mashed Potatoes, He-Man Sauce, Steamed Spinach with Butter, Almond Spice Cookies and Potassium Broth

PART 3: Pork Hock Enchiladas with Homemade Sauce and Fried Bananas in Honey Orange Sauce

PART 4: Southern Fried Chicken, Tomato Salad, Sautéed Corn and Peach Ice-Cream



Unless we put medical freedom into the Constitution, the time will come when medicine will organize into an undercover dictatorship to restrict the art of healing to one class of men and deny equal privileges to others; the Constitution of the Republic should make a special privilege for medical freedoms as well as religious freedom.

> Benjamin Rush, MD, (1746-1813) America's "Father of Medicine," Signer of the Declaration of Independence.

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PRINCIPLE 6

Prepare grains, nuts and seeds by soaking and sour leavening.

11 WISE TRADITIONS PRINCIPLES • BITE-SIZE





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Vpcoming Events

2021 MINI-CONFERENCES

| April 25 | Aquasco, MD: The Contagion Myth with Dr. Tom Cowan and Sally Fallon Morell at P.A. Bowen Farmstead. Details to follow at : westonaprice.org/events/. |
|----------|--|
| April 10 | Winchester, VA: Mini Conference with Sally Fallon Morell and others. Details to follow at: westonaprice.org/events/. |
| May 15 | Lakeland, CO: Seminar of Healthy Traditional Diets with Sally Fallon Morell at Sunrise Ranch and Retreat Center. Details: westonaprice.org/colorado. |
| May 17 | Lincoln, NE: Evening with Sally Fallon Morell. Details to follow at: westonaprice. org/events/. |
| June | Aquasco, MD: Wise Traditions Basics with Sally Fallon Morell and Marc DeNola, DDS at P.A. Bowen Farmstead. Details to follow at: westonaprice.org/events/. |
| June | Oklahoma or Missouri. Details to follow at: westonaprice.org/events/. |
| Sept | Swoope, VA: A Healthy Future with Sally Fallon Morell, Joel Salatin and others. Details to follow at: westonaprice.org/events/. |

Wise Traditions 2021

21st Annual Conference of the Weston A. Price Foundation November 12-14, 2021 Details to be Announced

THE WESTON A. PRICE FOUNDATION®



for **Wise Traditions** IN FOOD, FARMING AND THE HEALING ARTS Education • Research • Activism

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LACTO-FERMENTATION TRUTH IN LABELING LIFE-GIVING WATER NURTURING THERAPIES

You teach, you teach, you teach!

Last words of Dr. Weston A. Price, January 23, 1948

