







WiseTraditions

in Food, Farming and the Healing Arts Volume 20 Number 1 Spring 2019

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THE WESTON A. PRICE FOUNDATION®

Education • Research • Activism

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

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

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

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

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

Wise Traditions IN FOOD, FARMING AND THE HEALING ARTS

THE WESTON A. PRICE FOUNDATION®

Volume 20 Number 1

FEATURES

Spring 2019

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President's Message

The first few months of the year are a busy time for us at the Weston A. Price Foundation. This is when we must deal with proposed legislation, especially vaccine legislation—and this year we are faced with dozens of bills in various states that aim to take away our right to opt out of vaccines for ourselves and our children.

We have a wonderful team watching all the bills, researching their progress and crafting action alerts for us to send. In addition, we keep an eye on any state bills that may affect your ability to obtain raw milk and other farm products. These are services that your membership fees allow us to provide—keeping you up to date on state legislation that may have an impact on your health and wellbeing. See the letters of appreciation on page 3.

This issue provides an important reason to "just say no" to vaccinations: aluminum. The pioneering research of Christopher Exley (page 18) has found that children with autism have abnormally high levels of aluminum in the brain. There is only one way that so much aluminum can get into the brain of a small child—through the numerous vaccinations mandated in the vaccination schedule. On page 68, Forrest Maready explains the mechanism that carries most of that aluminum directly to the brain stem, and why boys are more likely to develop autism than girls.

Children have no one but their parents to protect them from harm, and wise parents make sure to educate themselves about diet, vaccines and other health issues in order to make the right decisions for them. At WAPF, we are proud to provide the accurate information that parents need to ensure their children grow up healthy and

This issue also provides a reason to "say no" to cannabis—which is toxic to the brain and nervous system. Here at WAPF, we promote non-toxic remedies.

The other thing that keeps us busy early in the year is planning our conference—and this year marks the 20th year for Wise Traditions! We are delighted to announce the location is Allen, Texas, just north of Dallas, in a beautiful new hotel whose chef was the sous-chef when we were last in Dallas, and so he understands the Wise Traditions diet thoroughly! We will have a packed schedule for you with great speakers and food, reasonable hotel and registration rates, opportunities for financial aid and interesting exhibitors, all in a lovely hotel that is easy to access.

We will be sharing details on speakers and schedule as they become finalized, but meanwhile, mark your calendars for November 15-17. We look forward to seeing you there!



I live in Maine, a state that is currently trying to do away with our religious and philosophical vaccine exemptions. I am a mom of two young boys and a firm believer in parental choice.

WAPF recently sent out an action alert to Maine members about the situation, and I just wanted to say thank you for that, and please keep it up! I think you are reaching people and getting them inspired to reach others. That's what we need, strength in numbers!

Amanda B. Cote Scarborough, Maine

WAPF has engaged Kendall Nelson to follow all the vaccination bills and write action alerts for us, along with the capable help of Judith McGeary. Likewise, Pete Kennedy keeps track of bills affecting raw milk and direct farm sales so that we can send action alerts to members in various states as needed. Their services represent your membership fees at work!

BAD VACCINE BILL

I just received your action alert on a bad vaccine bill in the State of Washington. This was wonderfully worded and contained well-researched information. I called my representative and left a message. Thank you for your support. I usually feel so alone in my beliefs. It is wonderful to know you see the world the same way I do and that you too are trying to make the world a better place with more freedom for all.

Molly Davis Snohomish, Washington

ANTI-CHOICE LOGIC

I consider myself politically liberal or progressive, but I notice that many people who are on my side of the political spectrum haven't thought through their anti-choice logic when it comes to vaccinations. These are their arguments: women have a fundamental right to control their reproductive healthcare decisions, but parents do not have the fundamental right to control

healthcare decisions for their babies and children; genetically modified food and ingredients are bad for the environment and bad for our health, but it's okay to inject them directly into a baby's bloodstream; mercury is a neurotoxin and we should ban it from commercially sold products for safety, but it's okay to inject it directly into baby's bloodstream; aluminum is a toxin and can cause Alzheimer's, so switch to natural deodorant that doesn't contain it, but it's okay to inject it directly into a baby's bloodstream; big Pharma is evil and only cares about making a profit, except when it comes to vaccines, and then they should be completely trusted and never questioned; vaccines work, yet I'm still afraid of catching diseases I'm vaccinated against from an unvaccinated person.

And I've noticed that those on the other side of the political spectrum from me haven't thought through this argument: Abortion is wrong, but it's okay to inject aborted fetal tissue into



NEW! Vaccination Dangers Trifold from WAPF

Includes:

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

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a baby's bloodstream. Will people ever stop the hysteria and step back and see where their philosophical arguments are conflicting or hypocritical?

> Anonymous Mom New Jersey

AUTISM VERSUS MEASLES?

We need to work harder to get the word out about vaccination dangers. We've reached the point where parents do not fear having a child with autism—despite a rate of over nine thousand cases diagnosed per month in the U.S, roughly 3 percent of all children.

Autism is a lifelong, debilitating disorder, rendering the victim dependent on others for an entire lifetime. Instead, parents fear a benign and beneficial case of measles, which involves a low fever and mild rash for a few days. How has this disconnect with reality occurred? Lots of pharma-sponsored propaganda, that's how.

If only parents-to-be could experience a week in the lives of those of us who have young adults with "autism"—vaccine-induced catastrophic brain injury, paired with immune and nervous system destruction, often with GI problems, seizures and a laundry list of other ailments, not to mention unwanted behaviors. Believe me, what we are living is not the dream.

Also, it is an important time for everyone to ask, "Why is this legal?" with regard to every single aspect of vaccines, including mandates.

Until people wake up to this vaccine holocaust and rebel against it full throttle, we will continue to bear witness to the elimination of our parental rights and medical choice freedom. Vaccine mandates cannot exist in a free and ethical society. Exemptions are not an acceptable alternative. Informed consent, the hallmark of ethical medicine, requires a formal opting in, never a formal opting out.

And to top it off: Not one vaccine has ever been tested or approved properly or ethically. Think about that!

Take a firm stand and fight for your rights and freedoms. . . *today*!

Laura Hayes Granite Bay, California

Laura's presentation, "Why Is This Legal?" given in Utah in November 2018, can be accessed at ageofautism. com/2018/11/why-is-this-legal-presentation-on-vaccines-by-laura-hayes. html.

PROTECTIVE FOODS

A minor note of correction: the poster "Protective Foods" (Winter 2018, page 51) was not "put out by the U.S. Government in the 1940s" but rather by the Australian Victorian Railways (see the circular logo in the bottom right).

The poster shows a group of foods that are all good to eat, but Elmer Mc-Collum—who first coined the term "protective foods"—specifically named just milk and the leafy greens as the "protective foods" because these two foods "made good the deficiencies" of most of our other foods, by providing especially calcium but also the crucially important vitamin A, both of which are insufficiently supplied in the typical meat and potatoes diet. McCollum did not regard the potato as protective or even as a food containing much nutri-

tive value; rather it was just the kind of food that needed nutrient protection, in this case by the addition of butter (remember it was butter that led to McCollum's discovery of vitamin A).

According to McCollum: "The potato is nearly without flavor, and lends itself to consumption with other things such as butter, cream or milk, salt and pepper or with fat. The appetite of man calls for fat and there are certain foods which are eaten principally as a vehicle for carrying fat. The potato stands first in importance among these" (McCollum, EV. The American Home Diet; An Answer to the Ever Present Question What Shall We Have for Dinner. Detroit; F.C. Mathews Co., 1920; p54). William Kubara

Thank you for this interesting tidbit. Of course, we at WAPF say that the purpose of almost all vegetables and fruits is to serve as a vehicle for butter or cream!

Tucson, AZ

RAW MILK HEALS!

This is a true story from one of our farm customers, a woman in her fifties who had been ill. Her son decided to intercede when her health took a sharp turn in the wrong direction.

She'd had severe migraines all her life and chronic digestive issues. She had lost a lot of weight and wasn't overweight to begin with. She was eating what she considered a "healthy" diet, basically whole grains and vegetables. She was a pill popper as well (Ibuprofen, aspirin, etc.) Her family didn't realize how sick she was because she never complained.

One morning she had a seizure—it was just after having some dental work done. The doctors gave her penicillin, a steroid, an anti-inflammatory and a painkiller to take. She took them and developed what she thought was a stomach ulcer. She then basically stopped eating. She called the doctors, and they told her to drink cranberry juice and eat licorice for her ulcer. They also told her to avoid meat, dairy and eggs.

When she finally called her son, he threw all her meds out. He found that talking to her was strange, she was slower than normal. She told him she felt like she had a chronic lump in her throat. He learned that she was taking Sumatriptan, a migraine drug which, unlike acetaminophen, actually acts on the blood vessels in your brain stem, constricting them to inhibit blood flow—and this was prescribed to a

chronic fainter! Basically she was way overmedicated and undernourished.

Out went the meds and in came one quart of raw milk kefir and two gallons of raw milk. Her son told her to take two to four tablespoons of the kefir per day, and raw milk whenever she got hungry, with no solid food at all. The next day she experienced a massive headache, which is common when getting off meds and inundating the body

THE POWER OF ADVERTISING

from Eileen Dannaman of Vaccine Liberation Army

Please consider ordering our large car decals for educating people about the dangers of vaccines. It takes only one car in one community parked at Walmart or riding down the highway to create "doubt." It is that little crack of doubt that lets the light in. After all, my car has had an influence on the 50 percent unvaccinated rate in our local elementary school. And it's fun, too! Nothing to do but go about your day.

The Mobile Fleet Package comes with two large seventeen-inch stickers in English or Spanish, vinyl letters for the rear window and two rolls of stickers. When people honk with their thumbs passing on a highway or take photos of your car when you are parked in a shopping center, you hand off a sticker or the new Weston A. Price Foundation vaccination brochure or both! Put stickers on your outgoing mail, bills and packages. Put stickers with the backing left on in the mother, pregnancy, parenting section of your local booksellers. Leave the WAPF brochure in restroom stalls or on the shelves of your grocery store.

Some people are concerned that they would be attacked or their car damaged. So far in upwards of four hundred packages we have on the road and myself having the same stickers on for ten years (they are very high quality), there has been no attack, no injuries to the car, no problems at all—perhaps some intense conversations from time to time with provaxxers, but the bliss of attracting a conversation with anti-vaxxers replete with eternal gratitude wholly outweighs the few pro-vaxxer challenges. And the decals come off your car when you want to sell it.



All the information is here: vaccineliberationarmy.com/sticker-strategy/infantry/.

There is increasing censorship of vaccine sites like Mike Adams (Natural News), National Vaccine Information Center and Alex Jones. Even Pinterest has banned anti-vaccine sites. But they can't censor your car.

Consider these statistics compiled by the Outdoor Advertising Association of America:

- More than 95 percent of Americans are reached by media targeting vehicle drivers and passengers.
- One vehicle can generate between thirty thousand and seventy thousand impressions daily.
- Fleet vehicle advertising boosts name recognition fifteen times greater than any other form of advertising.
- Thirty percent of mobile outdoor viewers indicate they would base a buying decision on the ad they see.

with healthy bacteria. The following day, still on milk, she felt strong again. She could stand up without fainting, and had no more stomach pain. The day after she announced that she never felt better and that even her tooth pain had subsided—all with no meds! Her skin was better, her digestion felt good, her brain "just felt better," and she was craving milk! This is a woman who was "lactose intolerant." She hadn't had milk in decades. She also started eating our farm meat and cheese. She's now healthy, joking around with her husband and traveling. Crazy!

But actually not so crazy when you know a bit about what makes the body truly healthy. Instead, it makes sense. Unfortunately, her husband is on fifteen meds a day and won't drink milk. His doctors won't allow it!

Vince Hundt

DAIRY CRISIS

I thank you for your work and keeping us updated on the latest in healthy living. I have received your emails about the Ohio dairy crisis and have some comments to make about it. I am an organic dairy farmer in Ohio.



We are finding it increasingly difficult to continue our herdshare program. The environment for it is being whittled away by the dairy industry.

Because of the federal milk

marketing order, we are forced to be members of Dairy Farmers of America. The contracts they have state that they own 100 percent of the milk in the tank. They do not allow herdshares. If they find out we are doing it, they will cancel the contract. We became certified organic in 2011. At that time our buyer, Horizon, was okay with us doing herdshares. Since that time Danone has purchased Horizon, and they do not allow herdshares. I was informed by another former Horizon producer that Danone has people employed trying to uncover any farmer continuing herdshares.

Therefore, we feel we cannot publicize the fact that we do herdshares. I continue the program despite the fact it's breaking the contract because I believe in raw milk. As a Christian, it's something I wrestle with because we should be obeying the law of the land. If we get caught and they sever the contract, we'll be in big trouble.

I would love to tell Horizon goodbye and go to all herdshares but we are

SAVE OUR FARMS - DRINK RAW MILK!

The first line of national defense for any nation is its ability to be self-sufficient in food production—high-quality food production. Regions and communities need to be producing as much of the food their people consume as possible. For that to happen, we need small family farms dotting the countryside.

Mandatory pasteurization laws have been a significant factor in emptying rural America. Now developments are coming full circle with the accelerating consolidation of the conventional dairy industry—family dairy farms producing milk for pasteurization are rapidly going out of business.

The way to keep family dairy farms in business is for those farms to produce raw milk for directly consumption. The farms of the future will be diversified farms producing raw milk, meat, poultry, eggs and produce for direct sale to the consumer. To ensure that future, an effort needs to be made now to help small dairies, especially organic ones, transition to producing raw milk for direct consumption.

Consumers are a crucial part of the effort, increasing their purchase of raw milk and other foods direct from the farm, as well as recruiting local dairies to produce raw milk and getting other consumers also to purchase directly from farms. The convenience of buying at the store is an enemy of small-farm prosperity.

Please join us in our Save-Small-Farms campaign by drinking raw milk and encouraging family and friends to do the same! See our great Rosie the Riveter and Uncle Sam memes on this and the next page!

a long way from having enough herdshare owners to pull this off. I think the consumer is going to find it increasingly difficult to find raw dairy because of the environment being created by the dairy industry.

> David Bair, Bair-Trax Dairy Troy, Ohio

WAPF has launched a "Save Family Farms" campaign by urging more people to drink raw milk. See below.

RAW MILK BATTLE IN CANADA

Here in Alberta, Canada, we are fighting a legal battle to allow herdshare agreements. Please visit Farm Fresh Milk Facebook site at https://m. facebook.com/profile.php?id=2173628 12483137&ref=content filter

Please feel free to "like" and "share" and post anywhere and everywhere so that we can gather the strong online presence needed to educate and gather support. We will be posting content to the page regularly. Our goal is to gain ten thousand followers. This will enable us to show that there is strong support for making farm fresh milk available in Alberta and will give weight to our proposed policy that will be presented shortly to the various political parties participating in the upcoming provincial election in Alberta.

We know that a "like" and "share" from WAPF will contribute a lot to the overall goal of our campaign to make farm fresh milk available to all who wish to drink it!

Dave Rand Alberta, Canada

RAW MILK FORMULA

I am writing to tell you thank you, thank you, thank you. I have a threemonth-old baby. She fussed for the first



two-and-one-half months of her life and slept very little. I was exhausted and felt like something was wrong, but what?! I was ready to give her away! She was born at home even before the midwife arrived so I didn't feel it was anything from her birth. I finally decided she must be allergic to foods I was eating, so I took out foods until I got clear down to the AIP (Auto Immune Protocol) diet.

She was better but still more fussy than I felt was okay. She cried every time I held her. I finally broke down and decided maybe she wasn't getting enough to eat as she was still pretty tiny. I knew the only formula I'd give her was the homemade raw milk recipe. So I reluctantly and sadly ordered the ingredients knowing this was the beginning of the end of nursing.

While I was waiting for the ingredients to come, I happened to start reading through the rest of your writing on nursing and baby health and learned about being able to supplement nursing using a Lact-Aid. What's that!? I had never heard of that before. I looked it up and squealed with delight. I thought, "This is the answer!"

And it was. I've been using the Lact-Aid to supplement nursing using the raw milk formula recipe now for two weeks and she is a totally different baby. I love love love her! She is so happy and smiling, cooing and giggling. Also, she sleeps so well now. It's nothing short of a miracle, I feel. So I thank you for saving my sanity and my baby's health. I feel like God led me to your work and your life-saving information, so thank you for all you do.

(Oh, and by the way, I am back to eating normal healthy food. No more AIP for me! She's doing just fine with me back on all those foods.)

> Emily E. McLeran Caldwell, Idaho

PROBLEMS WITH COMMERCIAL PROBIOTICS

Probiotic foods are traditional staples throughout the world. Recent studies on probiotics and probiotic foods are showing amazing findings. It is fascinating to see some of the studies on food-based probiotics and then compare them to commercial probiotics. When studying each food, different techniques are often used to test what the probiotic food can do inside your body, and which pathogens they counteract. Studying commercial probiotics, or using commercial probiotics is a totally different subject.

Commercial probiotics are supplements. The supplement industry is a self-regulated industry, which means the manufacturer determines what is good to put in the supplement.

After writing an article recently on commercial probiotics naming those that don't rank high, I received a phone call from the president and CEO of a supplement company bearing his name. He told me the starch they used in the probiotic caused it to maintain a shelf life that made it profitable. He made it very clear that if I said anything negative about his company or his products,

that I would receive a world of hurt and I would be shut down. He said: "You have no idea what I can do to you, to shame you, to discredit you, to burn through your money in court like it was water." Unfortunately, the article was removed. Instead, I have published a book, *Commercial Probiotics VS Food Probiotics*, now on Amazon.

Finding how commercial manufacturers make their probiotics is not easy, as each told me, "That's proprietary information." After contacting countless companies, only two gave any insight on how they manufacture their probiot-

ics. Both said the information is not to be published connected to their names.

One company said they grew their probiotics on food scraps and put the byproduct into a liquid medium for consumption. Another company said they grew their probiotics on bits of food, where the probiotic bubbled up on top. The probiotic layer was scraped off, dried on large sheets, powdered and put into capsules or containers.

When I set out on the adventure of putting this information together, my intention was simple. I wanted to know whether home-brewed probiotic foods,

IN FOND MEMORY

November 28, 2018 was a day of great loss for our Foundation and for many personally. It was the day we lost one of our greatest friends and supporters, **Cherie Calvert**.

Cherie was a founding board member of WAPF and an advocate until the end. Few of us had met her, but I was one of those blessed few. We met at my first conference in 2003 and, as was typical of Cherie, she never forgot our meeting, nor that of many others whom she felt privileged to meet and work with through the years.

Besides her husband Stephen and daughter Charlotte, Cherie was most proud of her role in WAPF. Everywhere she went she promoted the Foundation and its principles. She always carried WAPF brochures and influenced doctors, dentists, nurses, midwives, restaurateurs, farmers and many others, everywhere she went. In so doing, she made many friends and helped change many lives.

Cherie loved people and had an infectious enthusiasm for life and all that it has to offer. She lived her life with color and great gusto, always surrounded by devoted friends and generously sharing her joy with others. My home is filled with sweet mementos of our friendship as one of Cherie's greatest joys was to surprise her friends with thoughtful gifts; she was always thinking of others!

We will miss Cherie. There is no other who can fill her colorful shoes. She will never be forgotten and we are thankful for her years of service.

Maureen Diaz

I am so sad to hear the news about **Kim Schuette**. She was such a wonderfully honest, gentle, kind soul. She did so much for our community and brought teaching to a whole new level. She was loved by many young mothers who benefitted greatly from her presence in their lives. She was a wonderful mother and friend and I will miss her so very much.

I know how important she was to WAPF and feel this is a big loss for us every day. Of course, there are new stars rising who can carry on the Foundation's work, but there will never be anyone quite like Kim. She was a unique light in this world, and I am very sad to see her go.

Lawren Pulse

It is with great fondness that the GAPS community remembers **Kim Schuette**! She was a GAPS practitioner—a very knowledgeable and experienced one. She has helped thousands of people to regain good health and was a good friend and support for many. Her gentle nature and kindness will be remembered by many people. God bless you, Kim! Wherever you are, may our love keep you warm!

Dr. Natasha Campbell-McBride

like kraut juice, sauerkraut, milk kefir, fermented garlic, fermented fish, fermented beans, beet kvass, kombucha, and others were just as good as commercial probiotics, which cost hundreds of dollars. The findings were shocking.

In our house, we no longer fear getting sick. We no longer rely on the traditional medical model when someone gets sick. Instead we support our systems properly with fermented foods. When someone feels they are picking up a cold, flu or other illness, we simply turn to the specific probiotic food that addresses the ailment, according to the NIH studies I found.

Most recently, my husband suffered from itchy eczema that grew into a horrific fire that itched and irritated his skin so profusely that it was angry and purple, and he was going mad inside his head with itching. He took four hot showers a day to calm the incessant itch. When he told me about it, I didn't trust my findings and ordered hundreds of dollars of commercial probiotics, which he finished in two weeks. After it barely soothed his fire, we began addressing the problem with the probiotic food specific to his issue, namely raw milk kefir. He drank two quarts of it a day and it was 80 percent soothed the first day and totally gone shortly thereafter.

Probiotics are tools in the toolbox, to be used for specific situations. Knowing which ones to use and when is a valuable skill everyone needs to know.

Becky Plotner, ND, CGP, DPSc Rossville, Georgia

CHILDHOOD CANCER

For some time I have been pondering why so many children are in cancer

hospitals—and yes, it is good to cure it, but why does it happen in the first place? What about prevention?

I have just read most of the new edition of *Wise Traditions* (Winter, 2018), particularly the articles regarding vaccinations and about the dangers of sunscreens. It shouldn't have taken me so long to put two and two together to realize that many if not all of the awful illnesses showing up in ever-increasing numbers must certainly be connected to the amount of chemicals in our world—many of which end up inside our bodies, even the most vulnerable, tiny bodies.

I remember a story from Portland, Oregon about the attempt to foist fluoridated water onto the population. A local scientist wrote about how fish migrating up the Columbia River (near Portland) came to a place where they refused to go up the next ladder. Upon investigation it was found that an aluminum manufacturing company upstream had been (illegally) discharging fluoridated aluminum by-products into the mighty river. After the cleanup, the fish continued on their journey. Seems that fish cannot be fooled as easily as some of us humans.

Thank you, Weston A. Price Foundation, for helping to expose the ways in which humans do so much harm to others in the pursuit of money. Your scientific reporting is invaluable.

Charlene Stone Santa Rosa, California

A WHOLE APPLE A DAY KEEPS CANCER AWAY!

I have had the misfortune of knowing quite a few individuals with seemingly healthy diets (a number of

WAPF members included) who have succumbed to cancer. To the best of my knowledge, none of them frequently consumed a nutrient common in many traditional diets. Eating small amounts of amygdalin (also called vitamin B17) on a daily basis should be considered an integral part of a healthy nutritional regimen. The highest sources are bitter almonds, apricot seeds, peach seeds, plum seeds, cherry seeds, apple seeds, and pear seeds. Many wild berries contain high amounts as well. Amygdalin can be degraded by boiling and soaking. Amygdalin does contain a small amount of cyanide, but a person would have to eat an extremely large amount to be poisoned by it! The best rule of thumb for obtaining proper amounts of this nutrient is to eat the seed with the fruit, and keep a small weight close by for cracking when stone fruit is in season! I have been doing so since 1998 with no ill effects

> Scott Kattelman Wayne, Pennsylvania

5G MENACE

In this brave new world, capitalism-at-any-cost continues to drive Father Technology with a vengeance, with seemingly no real consideration for Mother Nature. I am referring to the new 5G towers recently rolled out in Chicago, Los Angeles, Dallas, Atlanta, Washington DC, Houston, Indianapolis, San Francisco, Sacramento and Las Vegas. The former FCC chairman, Tom Wheeler, and other industry leaders are eschewing any safety concerns with the resulting higher radiation levels in order to position the U.S. as the front runner in this emerging technology, and to

benefit from the billions of dollars that can be made.

Fortunately, even people outside our holistic community are speaking up. Firefighters in California have filed to have the 5G towers recently placed outside of their stations moved away after reporting an epidemic of disturbing neurological symptoms (confusion, memory loss, headaches, insomnia). Further, some cities like Santa Rosa, California, are not allowing 5G towers installed until further research on the health repercussions from this powerful radiation are addressed. And although the CDC and EPA continue to report that 5G is safe, over two hundred forty scientists and doctors from forty-one nations have appealed to the UN to institute a moratorium on this 5G roll-out due to the serious human and environmental health risks linked with this dangerous ionizing radiation.

> Louisa Williams Austin, Texas

THIN

I am watching a documentary called *Thin*. My mother-in-law, who just passed away (after the flu shot), was anorexic,

and I am haunted by this. She would ask for food (I was the short order cook), eat a couple bites and stop. We could do nothing about this. I tried to make works of art with one egg, a teaspoon of cheese, parsley and tiny amounts of roasted vegetables. To no avail.

All these women in the film with disordered eating were into constant dieting in their early life. The main theme in the 1970s appears to be lowfat, low-calorie. The nutritional deficiencies stemming from these diets were so terrible, they warped their minds to the point where they just sort of withered and died.

Too many young women today are in this diet trap, and at earlier and earlier ages. Veganism has compounded this problem (I found several books on veganism in my mother-in-law's stash, while cleaning her room after her death, all with extraordinarily twisted science and terrible caricatures of good traditional recipes). The thinness trap is a recipe for absolute disaster.

These are young women of reproductive age, in the prime of their life. They are infertile and at death's door. Is there anything we can do to reach

these women? Seminars? Education? Cooking classes? YouTube videos? Food is the biggest problem for these young women, not encouragement to take math and science.

And you should have seen the therapies they gave in the Renfrew Center treatment facility where my mother-in-law spent her last months. The wall clocks had Prozac and proton pump inhibitor ads on them. Forced feeding of Restore (Ensure-like beverage), uppers, downers and other drugs. Just horrible food. And no education about fats or proteins. No wonder the relapse rate is 90 percent. I'd die in a facility like Renfrew.

Sushama Gokhale Sebastopol, California

REGENERATIVE GRAZING

Thank you for your informative publication. A few issues back, you featured Allan Savory on regenerative grazing. This practice is becoming widely used to increase soil carbon and also resulting in high performance and profit. The carbon that is sequestered in the soil is pulled down out of the atmosphere.

HELP PROTECT ACCESS TO RAW MILK!

Behind the scenes, there is a battle raging over access to raw milk. You can protect your rights, and the rights of your kids and grandkids, to choose raw milk by supporting a unique campaign through the Society for Risk Analysis (SRA).

The SRA team, led by microbiologist and new RAWMI board member Peg Coleman, is engaged in battles that need grass roots support from you! Help us challenge the establishment and protect access to raw milk. Our work will expose the 'Whole Truth' about natural beneficial microbes, the milk microbiota, in a peer-reviewed study in scientific terms, as well as understandable educational materials!

Please donate at any level and share this information with those in your community who also value access to safe, healthful raw milk. colemanscientific.org/blog/2018/12/13/launch-of-sra-whole-truth-whole-milk-campaign

Not ready to donate yet? Follow the campaign and Peg's blogs for updates.

Thanks for supporting this campaign.

The Carbon Farming Solution by Erick Toensmeier highlights all the different ways regenerative agriculture is being used to reduce atmospheric carbon dioxide. In his view, it is profitable to shift global farming practices to these methods in time to avoid not only the worst effects of climate change, but actually reverse it and reap economic and health benefits as well.

The author also believes that in order to achieve this, we will simultaneously need to dramatically reduce carbon dioxide pollution from fossil fuels. Luckily, there is a solution to that. It is the Energy Innovation and Carbon Dividend Act, introduced in the U.S. Congress. It puts a price on carbon pollution and returns all revenue back to American households equally. Please invite Eric Toensmeier to be interviewed or pen a guest article in the farming section of the journal. If readers want to donate time to the amazing group responsible for the climate legislation, please join your local chapter of the Citizens' Climate Lobby.

> John O'Bryan, raw milk farmer Skandia, Michigan

HEALTH BENEFITS OF COFFEE

A letter from Julia Ross published in the summer 2018 WAPF journal states that coffee consumption "ruins our appetite for real food" and increases adrenaline, which interferes with sleep which "weakens health generally." Julia concluded, based on a 2013 study, that "consuming more than three cups a day on a regular basis increases our risk of premature death by 50 percent." Julia also stated that suppression of insulin

response by caffeine can accelerate progression toward diabetes.

My wife and I have followed most dietary recommendations of the Weston A. Price Foundation for more than a decade. We understand that the Foundation does not recommend consumption of stimulants like coffee. However, we drink coffee regularly in the morning in part because of the proven health benefits.

After reading the letter from Julia Ross, I reviewed hundreds of studies on the association of coffee consumption and health. The following abstract lists the main disease conditions that are improved by coffee consumption.

"Coffee is among the most widespread and healthiest beverages in the world. Coffee typically contains more caffeine than most other beverages, and is widely and frequently consumed. Thus, it contributes significantly to the overall caffeine consumption within the general population, particularly in adults. Controversies regarding its benefits and risks still exist as reliable evidence is becoming available supporting its health-promoting potential. Several lines of evidence have highlighted the beneficial effects towards several disease conditions including Type II diabetes, hepatitis C virus, hepatocellular carcinoma, nonalcoholic fatty liver disease and neurodegenerative disorders such as Alzheimer's disease (AD), Parkinson's disease (PD) and Amyotrophic Lateral Sclerosis (ALS). The health-promoting properties of coffee are largely attributed to its rich phytochemistry, including caffeine, chlorogenic acid, caffeic acid,

and hydroxy hydroquinone." (PMID: 29546172)

Review of many studies regarding the effect of coffee on health has reinforced my belief that coffee consumption is highly beneficial.

Jack Cameron Fairhope, Alabama

Many individuals, including your editor, found that they experienced greater energy and had fewer health problems (such as allergies) when they discontinued coffee. (See our "Reading Between the Lines" column in Wise Traditions, Winter 2018.)

THE TRAGEDY OF PSYCH DRUGS

On January 11, 2019, the world lost a kind, gentle beautiful soul: my son, Andrew Jeffrey Rich. His story is yet another example of how profit-driven forced commitment and involuntary medication crushes the mind and spirit of the most vulnerable among us.

Andrew was a bright, happy, creative, charming person who captured our hearts from the moment of his birth on January 28, 1989. He was generous to a fault, always ready to give the shirt off his back to anyone in need. One of his last acts was to purchase a cheeseburger for a friend with the \$2 remaining in his wallet. Andrewwas a true empath—one who could apprehend the mental or emotional state of others, and whose sensitivity made him vulnerable to the world's slights and unkindness. Andrew felt and loved deeply; and taught us that those who love the most, suffer the most. He was a gentle, beautiful 'old' soul. He leaves behind many, many loving friends and

family members whose lives are richer for having known him.

Andrew struggled with opioid addiction for many years. His family supported him, and celebrated with him when he reached a milestone of five years of being opioid-free in May of 2018. Unfortunately, our legal system was not helpful or supportive of Andrew's needs. In 2013, he was prosecuted for being a drug addict, and saddled with a felony conviction for possession of a very small amount of heroin. The collateral consequences of this conviction robbed him of his future. County prosecutors argued against expunging his record, meaning that serving time for the offense was not enough—rather, he was to serve a life sentence that included forever denials of educational, housing and occupational opportunities. He was understandably despondent regarding his circumstances.

Following a breakdown in May 2017, Andrew was diagnosed with a serious mental illness. At that point, he entered the broken mental health care and mental health legal system in Wisconsin. At the time of his breakdown, he was tased and nearly killed; rejected admission at three psychiatric hospitals; and ultimately thrown into an isolation cell at the Sheboygan County Detention Center—treatment known to have lifetime detrimental effects for the mentally ill. He spent time in the Winnebago Mental Health facility, where he reported he was subjected to inhumane treatment and unlawful restraints.

While incarcerated at the jail and the mental health institution, Andrew was fed a diet high in sugar, with virtually all protein coming from soy. He was raised eating traditional foods on his family's farm, and ate a Weston A. Price diet when not confined. Andrew's objections to eating soy and drinking fluoridated water were introduced at his involuntary commitment hearing by a psychiatrist as evidence of his irrationality and delusional thinking.

Following his release, he was assigned to a county-appointed doctor who spent only a few minutes with him each month. He was involuntarily and heavily medicated with psychotropic drugs that were not monitored and which were adjusted only once in a one-and-one-half year period. Just a few weeks before his death, his family asked that they be allowed to select his doctor and monitor his treatment, telling the court that the family, not the county and its taxpayers, should be responsible for this. That request was denied. Andrew was beaten down, hopeless and depressed as a result of this infringement on his civil liberties.

We can and must do better than this. It is our hope that Andrew's tragic passing will serve to raise awareness of the significant defects in how the United States handles criminal cases involving drug addicts and the mentally ill, as well as how involuntary civil commitments are handled. It is, literally, a matter of life and death.

Donations can be made to the Andrew Rich Memorial Fund; this money will be used to advocate reform of the mental health laws and mental health treatments (including institutional diets) that are failing so many people like Andrew. To donate and follow our progress visit: andrewsvoice.org (Vic-

tory Over Involuntary Commitment Excesses).

Elizabeth Rich President, Andrew's V.O.I.C.E. Plymouth, Wisconsin

FATS HAVE SAVED MY LIFE

A year ago, when WAPF came to Perú–just when my health was collapsing after being a vegetarian for years—I started eating a more nourishing diet, which immediately made me feel stronger. But still, depression seemed unstoppable. After several months, I gave up and went to a psychiatrist. He gave me pills and said that, given my condition, I needed to take them for at least two or three years before I might need to readjust the prescription or perhaps I could drop them.

I took them for only two days and then listened to the *Wise Traditions* podcast episode that I knew existed about mental health, for I was now feeling literally crazy under the effect of those pills. Listening to it gave me the strength to keep trying without the pills, but I decided not to follow the recommendation of the doctor interviewed to stop the dairy, for there are some strong testimonials of how it can be a healing food; instead, I actually increased the amount of good dairy in my diet.

What I have seen so far is that even the knowledgeable doctors who understand the WAPF message are recommending we should stop dairy when there are neurological issues, but I believe that including raw dairy was the only way I could let my gastrointestinal system rest and recover while nourishing—and literally reconstructing—my whole body, including my nervous

system. Only months later, I can now say I'm free of most of the symptoms of irritable bowel syndrome I had also been diagnosed with, and it's been a while since I felt any physical or mental sign of depression. I'm positive I will keep improving. Daily, I eat tons of ghee, raw butter, raw cheese, fermented raw milk, coconut oil, lard and several egg yolks, and I am progressively including more and more organ meats in my diet. In my experience and research, eating this amount of fat is mandatory for depression and anxiety.

Eating this way has also been a way to rediscover the traditional foods of my country. Peruvian food is full of shellfish, red meats, organ meats, blood, cheese and lard. Now I'm also including more grains and legumes since I no longer have trouble digesting them (as long as I prepare them correctly).

This is a little bit of what happened to me. I have never felt this good and I have never eaten such delicious food. I'm deeply thankful to WAPF for educating me and giving me what feels like a second chance to live. I'm very happy to be spreading the word about fats!

Verónica Belli Lima, Perú

FOOD TRADITIONS IN HANOI

I live near Washington, DC, where, like everywhere else in the U.S., the food culture contains little resemblance to a pre-industrial tradition. Most Americans have no idea what to eat, and they do not appear to care very much.

In February 2019, I visited Vietnam for the first time. I went for one week with my fiancé, Ha, to meet her family and to celebrate the Lunar New Year.

What I saw amazed me and gave me hope that, at least somewhere, healthy food traditions still exist.

Ha grew up in a small village in the city of Hanoi. Her parents still live there along with numerous extended family members, and that is where we stayed. On the first morning of my visit, we visited a huge farmers market. It was amazing. The U.S. has farmers markets too, but this one had a raw, disorganized, and unpolished quality. Nowhere to be seen were freezers containing pre-packaged meats sealed in plastic with labels and government stamps of approval. I also saw no pastries, jams, and other sweet things often present at U.S. farmers markets. Instead there was simply row after row and table after table where farmers sold fresh pork, beef and poultry, including the liver, heart, kidney, and intestine—all laid on a table in the warm air, unrefrigerated, unpackaged, uninspected, and unapproved. There was a woman sitting next to a small pool containing large swimming fish, and she was gutting and chopping one for a customer. There were cages and cages of clucking chickens next to farmers who were happy for you to pick one and watch it be killed, gutted and plucked.

There were farmers selling buckets of crabs and other exotic live seafood. I saw countless fruits and vegetables and much more, as well as hundreds of customers eagerly shopping for their holiday meal. While the U.S. boasts that it's "the land of the free," these people experienced true freedom at this market. No applications, licenses, waiting times, fees or approvals were required.

During my visit, we ate at several

restaurants. Hanoi is a huge city, and its vast number of streets and alleys are filled with thousands of tiny restaurants and sidewalk vendors that serve just one or two dishes, often called "street food." Like the farmers market, these restaurants face little if any regulation. They do not provide a menu. Instead, you just sit down, usually on a small plastic stool, and they bring you their dish-often a bowl of their signature soup called "pho." Two other favorites are snailnoodle soup and oyster-noodle soup. All of these soups contain rice noodles, meat or seafood, a few vegetables, and the most important ingredient—lots of broth. Sometimes a raw egg is added. These soups are made with very little processing.

I saw a worker preparing bones to make broth. The meat used for the soup often contains chewy bits of cartilage, which are left in. I saw no microwaves but only hot steaming vats from which the soup is ladled. Another favorite dish in Vietnam is "balut," which is a developing bird embryo that is hard-boiled in its egg and eaten from the shell. Everyone there loves it—even the kids. A favorite snack to have along with beer is dried squid.

We enjoyed several meals prepared by Ha's family. Their homemade dishes routinely included ample amounts of organs, including intestine, heart and kidney. Ha told me that one of her favorite foods is pork brain. Their meals also included an abundance of broth, either in soup or in a "hot pot," which is a pot of boiling broth that is placed in the center of the table into which they dip raw meat or fish to be cooked and immediately consumed.

The modern food culture in Vietnam is not perfect. Vietnamese people consume some soft drinks, MSG, vegetable oil, and other processed foods. I doubt that their animals are entirely grass-fed. KFC, Burger King, and Starbucks are increasingly present. Grocery stores contain familiar rows of boxed and bagged products. However, I believe that the food habits of the Vietnamese still contain strong ties to tradition. These ties provide protection against disease.

In Vietnam, I observed almost no obesity, and the elderly were healthy and active. Ha's large family was filled with happy, curious and well-adjusted people of all ages, who welcomed me with open arms. I believe that the health and happiness of the Vietnamese, who thrive despite the obvious hardships of the past, is due partly to their daily consumption of bone broth, organ meats, and other unprocessed foods. I hope that they do not eat such foods blindly but with an appreciation for their food tradition and for the health that it provides. Without such an appreciation, I fear that their tradition will erode with predictable health consequences.

> Patrick Crawford Prince Frederick, Maryland

TRUTH-IN-LABELING CAMPAIGN

Should you be concerned about MSG added to the food you and your family eat?

Our nonprofit Truth-in-Labeling Campaign website blows the lid off FDA and industry assurances that MSG added to food is safe. Unfortunately, our kids are at the biggest risk of suffering lifelong damage.

There really is no controversy. MSG is a toxic substance that puts everyday consumers at risk for a wide variety of health problems ranging from headaches, anxiety and depression to



heart-rhythm ailments and brain damage. Even more frightening, it puts the very young in jeopardy of lifelong conditions such as reproductive disorders and gross obesity.

MSG added to children's food is an excitotoxic endocrine disruptor, meaning it has the power to disrupt how hormones work to coordinate the proper growth and functioning of a child's body.

TLC's new website, truthinlabeling.org, reflects decades of scientific research, personal experience and investigation into the effects of monosodium glutamate, exposing the truths about this commonly used additive. Further, it reveals the "Six Big Fat Lies" used as propaganda by the glutamate industry.

You'll also learn how the Food and Drug Administration has long turned a blind eye to the ongoing efforts to keep manufactured free glutamic acid (found in such ingredients as autolyzed yeast, glutamic acid, hydrolyzed pea protein, maltodextrin, and monosodium glutamate) unlabeled, practically unregulated and unrestricted in foods, drugs and supplements.

Once you realize how our food supply has been compromised to allow a known brain toxin to be liberally used in processed foods, food products designed for invalids and infant formulas, you'll never be able to shop the same way again.

The Truth in Labeling Campaign was founded in 1994 as a nonprofit organization dedicated to securing the full and clear labeling of processed foods. Over the years, the group's activities have included visits with politicians and scientists, attending food industry meetings and giving testimony before the FDA. In 1995, TLC filed a lawsuit against the FDA.

The website also offers visitors a free download of the book, *It Wasn't Alzheimer's*. *It Was MSG*.

All of the information presented at the TLC website is thoroughly referenced with reams of supporting data to help the public make informed choices. The website offers tips on how to avoid hidden MSG in food, as well as ways to advise others about the insidious dangers of this unlabeled additive.

Adrienne Samuels, PhD Chicago, Illinois

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

Caustic Commentary

Sally Fallon Morell takes on the Diet Dictocrats

EAT-LANCET'S PLANT-BASED PLAN FOR YOU

With much fanfare, and a pretentious title ("Food in the Anthropocene"), *The Lancet* has published "an important new study about global nutrition." It seems that since the planet has reached a crisis point, and we are running out of everything, we all have to eat lentils. The diet that is going to save the world from global warming and environmental devastation allows just over one teaspoon of red meat, one-

quarter of a piece of bacon and about two tablespoons of egg per day, eight tablespoons of "plant protein" (soy, lentils, peas or nuts-beans are oddly absent from this list), twenty-five tablespoons of grain foods, and about three tablespoons of olive oil or sunflower oil. The diet allows more sugar (two tablespoons)

than meat! Although prepared by "an international group of thirty-seven scientists," contradictions abound. To quote the amusing analysis by Dr. Georgia Ede, the EAT-Lancet authors claim that while complete protein is essential, it is also cancerous. While meat "can improve dietary quality, micronutrient intake, nutrient status, and overall health," it also causes heart disease, diabetes and cancer. Vitamins and minerals are essential, so we'll need to take supplements; everyone should eat a vegan diet, except for most people growing children, adolescent girls, pregnant women, aging adults, the malnourished and the impoverished (diagnosisdiet.com/eat-lancets-plant-based-planet/). How does EAT-Lancet propose to make people adhere to a plant-based diet when they'd rather eat beef? Suggestions from the report include "the elimination or restriction of consumer choices, and taxation" (eatforum.org/eat-lancet-commission/).

NOW WE KNOW WHY

We've often wondered why government agencies harbor such an intense prejudice against meat, and beef in particular, even for growing children. For example, both the Academy of Nutrition and Dietetics and American Academy of Pediatrics assert that "well-planned" vegetarian and vegan eating patterns are healthy for infants and toddlers. The answer emerges from a study carried out over ten years ago and

> reported by the author at the annual meeting of the American Association for the Advancement of Science In her presentation, Professor Lindsay Allan of the University of California warned that "Denying growing children animal products in their diet during the critical first few years of life is 'unethical' and could do permanent damage." The study she conducted showed that adding just

WE SHOULD BE EATING EVERY DAY ■ FRUIT AND VEGETABLES ■ CARBOHYDRATE Whole grains 232g Fruits 200g Two slices of wholemeal toast Vegetables 300g Rice 60g Pasta 80g Including 100g 50g 100g **DAIRY** SUGAR Added sugar and artificial sweeteners 310 arced PROTEIN FAT thirds thirds of a fish finger) Pork 7g (quarter of of an egg) Plant-sourced Soy foods 25g PROTEIN 52g nuggets) 29g Lentils or peas 50g Nuts 50g (16th of 28a

> one quarter cup of meat daily to the diet of poverty-stricken children in Africa transformed them both physically and mentally. Over a period of two years, the children almost doubled their muscle development and showed dramatic improvements in mental skills. They also became more active, talkative and playful at school. The African study involved over five hundred children in Kenya, typically aged about seven, whose diet chiefly consisted of starchy, low-nutrition corn and beans. Over a period of two years, one group of the children was given a daily supplement of two ounces of meat. Two other groups received either a cup of milk per day or an oil supplement containing the same number of calories. The fourth group had no dietary changes. The meat group had an 80 percent increase in muscle mass over the two years of the study while the milk and oil groups had a 40 percent increase. Test scores for mental skills improved by thirty-five points for the meat group and fourteen for the milk group, with no change in the group that received no supplements.

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Interestingly, the group that received meat "showed more leadership skills" (tinyurl.com/y26ufhgb). Is that why the powers-that-be keep pushing meatless diets, so that no leaders will emerge in the next generation to rock the status quo?

NOT THE ENEMY AFTER ALL

Remember when "high" cholesterol levels were public enemy number one? Then they found out that high-density cholesterol (HDL-cholesterol) was "good," so to maintain the fiction that cholesterol is bad, we started hearing about the villainous low-density cholesterol (LDL-cholesterol). Now it turns out that LDL is not a bad guy either. A review headed by Uffe Ravnskov and just published in *The BMJ* online looked at thirty cohorts with a total of over sixty-eight thousand elderly people. In 92 percent of the participants they found an *inverse* association between all-cause mortality and LDL. In other words, the higher your LDL, the less likely you were to die. Something to tell your doctor when he pulls out his prescription pad for a statin (bmjopen.bmj. com/content/6/6/e010401).

SECRETS OF LONGEVITY

Canadian Lillian Sharples just celebrated her one hundred seventh birthday. Lillian is known for her sense of humor and keen mind. She drove a car until age ninety-four and still plays a weekly game of bridge. She says she's had a "few" drinks over the years but has never smoked. When asked the secret to her long life she answered, "I think I have arrived here by the grace of God and the next best thing is cod liver oil" (*Renfrew Mercury*, February 15, 2018).

CRISPR TECHNOLOGY—A BLUNT AX

Current techniques for genetic modification are sloppy and imprecise—resulting in many unwanted changes to the DNA. Scientists and investors are pinning their hopes on a new generation of genetic engineering techniques called CRISPR (which stands for Clusters of Regularly Interspaced Short Palindromic Repeats). Marketing materials have compared the CRISPR technology to a pair of sharp scissors. According to one puff piece, "CRISPR technology is a simple yet powerful tool for editing genomes. It allows researchers to alter DNA sequences easily and modify gene function. Its many potential applications include correcting genetic defects, treating and preventing the spread of diseases and

improving crops" (livescience.com/58790-crispr-explained. html). But scientist and Harvard professor George Church, one of the developers of the CRISPR technology, is having second thoughts. At a recent medical conference, he called CRISPR a "blunt ax." "It's called editing," he said, "[but] I think it's really genome vandalism" (tinyurl.com/yxgxvre9). Church proposes four other types of gene editing systems that might solve the problems they are seeing in CRISPR (such as making edits to a genome far away from the target site, resulting in "unintended alterations"). Of course, these methods will require similar hype to attract investors and are equally likely to disappoint. Eventually the world must come to the realization that the only solutions to our health and agriculture problems lie in good nutrition and wise soil husbandry.

CRISPR BACON?

Speaking of CRISPR, scientists claim to have created a leaner pig using the CRISPR technique. The genetically altered pigs have a higher body temperature and thus burn more fat and produce leaner meat. The researchers were looking for a way to provide pig farmers with animals that would be less expensive to raise and would suffer less in cold weather; the leanness was an unexpected side effect. But hello? Normal pigs survive cold weather because they are fat! In the U.S., the pork industry uses a chemical called ractopamine to keep pigs from becoming fat. The drug is banned in most of the rest of the world because research has linked it to lowered reproductive function, birth defects and increased disability and death in the animals. We predict that the FDA will show interest in the CRISPR pig as a way to phase out ractopamine. No one knows what effect eating lean CRISPR bacon will have on human beings because no research has been done (tinyurl.com/y9qh5mwo).

SUSTAINABLE BUSINESS MODEL?

One claim for genetic engineering is that the technology will come up with cancer cures. Of course, that will not happen, but belief in the possibility led to a very interesting statement in an April 2018 report, entitled "The Genome Revolution," which Goldman Sachs prepared for investors. The author, Salveen Richter, vice president of Goldman's research division, worries that gene editing might actually eliminate disease, and that would *not* be a good thing. "Is

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curing patients a sustainable business model?" she asks. The answer is No. "The potential to deliver 'one shot cures' is one of the most attractive aspects of gene therapy. However, such treatments offer a very different outlook with regard to recurring revenue versus chronic therapies. While this proposition carries tremendous value for patients and society, it could represent a challenge for genome medicine developers looking for sustained cash flow" (*Moss Reports*, December 14, 2018). Again, the real solutions to disease will come only from good nutrition and nontoxic agriculture, but such solutions are not good for corporate cash flow, only for people.

SKIM MILK AND ACNE

Traditionally, milk maids had beautiful skin; in fact, in the olden days, the young ladies who milked cows (and had plenty of fresh milk for to drink) seemed to be immune to the ravages of smallpox. But data from the massive Harvard Nurses' Health Study found a link between milk consumption and acne, with a very strong link between consumption of skim milk and acne. Those opposed to consumption of dairy products, such as Michael Greger, MD, have used these data to blast away at milk, noting that there are a lot of estrogen and growth-enhancing hormones in modern milk, and that the levels in skim milk are even higher (tinyurl. com/y6ms5wx4). We have a different explanation, of course. Modern pasteurized milk is so highly indigestible and so hard on our beneficial gut flora, that acne is often the result; and since butterfat is beneficial to digestion, gut flora and the skin, to a certain extent it can mitigate the damaging effects of pasteurization. After all, there have always been growth hormones and estrogen in milk, but these didn't seem to be harmful in the past—perhaps because components in real, raw full-fat milk help the body use these in the proper way—after all, milk-drinking tribes are traditionally taller than non-milk-drinking peoples.

WE'VE BEEN PREDICTING THIS

The Mayor of London has instituted a new policy banning "unhealthy food advertisements" at tube (metro) stations and on city buses. The ban targets foods contributing to soaring rates of obesity among British children: sugary foods such as breakfast cereals, cakes, juices, pies and breads. But the policy also bans relatively healthy foods such as sausage,

yogurt, coleslaw(!), pizza and olives because they are sources of saturated fat and salt. The policy bans foods high in saturated fat, salt and sugar. . . but "Advertisers can apply for an exception by arguing they do not target children." McDonald's has confirmed it will continue to advertise on public transport "under the new rules" (London Evening Standard, February 21, 2019).

FLUORIDE WARNING

For decades, the Centers for Disease Control (CDC) and the American Dental Association (ADA) have promoted fluoridated water and toothpaste as a way to prevent tooth decay. Now these agencies are warning that children are getting too much fluoride from their toothpaste. They recommend no more than a pea-sized amount for children ages three to six and for those younger than three, toothpaste no bigger than the size of a grain of rice on their toothbrush. Fluoridated toothpaste actually contains a warning label stating, "If you accidentally swallow more than used for brushing, seek professional help or contact a poison control center immediately," a warning mandated by the FDA in 1997. Fluoride ingestion can cause unsightly mottling of the teeth, but more seriously, it is an endocrine disruptor and neurotoxin shown to lower IQ in children (tinyurl.com/y4hz9n55).

FSMA NOT WORKING

Remember how the Food Safety Modernization Act (FSMA) was going to make our food supply safer? Well, folks, it's not working. Food recalls have risen 10 percent since 2013, with foodborne illnesses killing three thousand Americans per year. Meat and poultry recalls have increased by two-thirds since 2013 (tinyurl.com/yxku6laq).

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.

Surviving in the Aluminum Age

By Christopher Exley, PhD

Te are living in the Aluminum Age.¹ In our school lessons on human history, we learned all about the Iron Age and the Bronze Age, but will school-children in the future be taught about the Aluminum Age? I use this term to describe the period from the late nineteenth century—when we discovered how to make aluminum metal and its salts cheaply and efficiently—until the present day, when myriad aluminum-containing products pervade every aspect of our lives.

The advent of the Aluminum Age heralded the modern world we know today. Aluminum is a feature of our food, our drinks, our medicines, our cosmetics and our environment. So, in a "Gordon Gekko" sort of way, we might say that aluminum (like greed) is good! However, our expectation with all "good things," including those containing aluminum, is that they also be safe—at least, as they say, when exposed "in moderation."

We have been brought up to believe in authority and to respect the opinions of experts and expert committees. In turn, we expect learned bodies and societies to be committed to our well-being. All of these values may be evident for other facets of modern life, but they do not apply to, nor have they been applied to, human exposure to aluminum.² Many will be incredulous to learn that in the Aluminum Age, there are no health-based standards or regulations relating to human exposure to aluminum. Nor are there laws protecting us from aluminum in the air we breathe, the water we drink, the food we eat, the cosmetics we use, the medicines we need, the supplements we take or—I could go on. Aluminum is everywhere, and the result of living in the Aluminum Age is that every one of the cells that make up our body includes at least a few atoms of aluminum.

BODY BURDEN

Why should we be concerned that we are accumulating aluminum in our bodies as we age? The answer is that while the aluminum industry has long perpetuated the myth that aluminum is benign, nontoxic and even safe, nothing could be further from the truth.

In fact, there are few more biologically reactive metals than aluminum. The biologically reactive form of aluminum is its free metal ion, known as A¹³⁺_(aq). Aluminum is bound strongly by oxygen-based functional groups in biochemistry; one example would be the phosphate groups in ATP—the energy currency of our body. Essentially, aluminum (as A¹³⁺_(aq)) is so reactive that we expend energy simply coping with its presence in our body. If there wasn't any

aluminum in our body, all of us would have so much more natural energy.

ALUMINUM AND THE BRAIN

If feeling a little more tired than usual was the only repercussion from our body burden of aluminum, we might tolerate this state of affairs in exchange for all of the advantages of modernity brought about by the Aluminum Age. However, what happens to our brain cells and our neurons, which are struggling to cope with burgeoning amounts of aluminum? I have written elsewhere about neurons' role as the longest-lived cells of the human body; with their biochemical advantages, neurons can be viewed as "an ostensibly immortal cell line" that has enabled human beings to live longer. Unfortunately, the lifespan of neurons also predisposes them to a lifetime accumulation of aluminum. With constant exposure to aluminum, can we tolerate the early loss (death) of this important immortal cell line?

When aluminum loads exceed the body's excretory capacity, they form deposits and accumulate in tissues. In Alzheimer's disease, aluminum accumulates in brain tissue to an extent that the brain's coping mechanisms begin to fail. Think of your brain aluminum burden (while you still can) as a catalyst of the aging process that is bringing about age-related and eventually catastrophic changes in brain chemistry, well ahead of what should be your normal longevity. At a time when we are all living longer, and some dream of living forever, it is noticeable that advancing age is not ushering in better health. We may be living longer—but we are living unwell. In the Aluminum Age, it would seem all but futile to aspire to a healthy older age.

NUMBER-ONE THREAT

I have highlighted the role of aluminum in Alzheimer's disease, but aluminum is everywhere throughout the body and is more than capable of contributing to most chronic diseases, including diabetes, autoimmunity, multiple sclerosis and other neurological conditions. To many, it seems fanciful to suggest that human exposure to aluminum is the number-one threat to human health in the twenty-first century, but thirty-five years of thinking about and researching aluminum at the highest level tell me otherwise.⁵

ALUMINUM AND SILICON

As described in an eBook by the Children's Medical Safety Research Institute (CMSRI),⁹ aluminum is the third most abundant element in the earth's crust and the most abundant metal. However, having remained isolated from biological life for most of geological history, aluminum has no biological function. The situation changed with the onset of the Industrial Revolution, which released aluminum via acid rain from its inert geological stores into bays, lakes and ponds, causing irreparable damage to ecosystems.¹⁰

Studies of acid rain's effects on biological life have shown that the earth also possesses a natural remedy for aluminum toxicity: silicon. Silicon is the second most abundant element in the earth's crust (oxygen being the first). Silicon molecules are able to bind with aluminum ions and render them innocuous, explaining why locations subject to acid rain that are naturally silicon-rich are able to withstand the effects. This has been confirmed in studies measuring aluminum toxicity to fish in waters with various levels of silicon present. Silicon—a natural, plentiful element—could hold the answer to combatting the dangers brought about by the Aluminum Age.

SOURCE: Children's Medical Safety Research Institute.

We found extraordinarily high amounts of aluminum in autism brain tissue.

ALUMINUM AND AUTISM

Ordinarily, I am somewhat of a skeptic when I am alerted to new health issues purportedly associated with human exposure to aluminum. One recent example would be aluminum and autism. While various studies suggested a link between aluminum and autism—primarily via the aluminum adjuvants in vaccines—at first, I could not easily see a biological mechanism to support such a link. We knew that the accumulation of aluminum in brain tissue toward a toxic threshold occurred over a period of decades, so how might this relate to autism in infants? We had to test this link. We did so by obtaining brain tissues from individuals who had died with a diagnosis of autism. We then measured how much aluminum was in the brain and, significantly, where any aluminum was located in the brain.

The rest, as they say, is history. To summarize, we found extraordinarily high amounts of aluminum in autism brain tissue, and we made the unique observation that the aluminum was

associated with a variety of inflammatory (non-neuronal) cells originating both in the brain (for example, the microglia) and outside of the brain (such as lymphocytes). The latter provided a mechanism to link aluminum adjuvants to the rapid accumulation of aluminum in brain tissue and, potentially, to autism. Our data—hard science—on aluminum and autism changed my mind; I now had to consider that aluminum could play a role in autism and that aluminum administered as adjuvants in vaccines could be a significant contributing factor. I am now, apparently, an "anti-vaxxer," as they say—simply for following the science.

PRECAUTION NEEDED

The science that links human exposure to aluminum with disease is now stronger and more robust than at any other time in history. Perhaps this is why research funding for this science is now rarer than the proverbial hen's teeth. (Do we, by chance, have industry and

ALUMINUM ADJUVANTS AND AUTOIMMUNITY

The United States leads the world in the number of vaccines administered to pregnant women, children and adolescents—and many of the vaccines contain aluminum salts used as adjuvants. Scientists bundle vaccines with various adjuvants to increase and achieve "qualitative alteration" of the immune response to certain types of vaccines.¹² A group of aluminum researchers at the University of British Columbia has pointed out, however, that "the same mechanisms that drive the immune-stimulatory effects of adjuvants have the capacity to provoke a variety of autoimmune and/or inflammatory adverse reactions."¹³

Researchers have begun zeroing in on the unique risks associated with aluminum adjuvant *injection*. In 2011, distinguished Israeli immunologist Yehuda Schoenfeld and colleagues proposed the term "autoimmune/inflammatory syndrome induced by adjuvants" (ASIA) to capture reports of unusual immune-mediated diseases in both humans and animals, which were arising, in many instances, after injection with aluminum-containing vaccines.¹⁴ (Cases of siliconosis—illness following silicone gel injection or implants—also fall under the umbrella of ASIA.)

ASIA shows up as "vague and sundry symptoms—chronic fatigue, muscle and joint pain, sleep disturbances, cognitive impairment, skin rashes and more." One of the more extensively documented manifestations of ASIA is a condition called macrophagic myofasciitis (MMF), compellingly described in the 2017 French film, *Injecting Aluminum*. As far back as the early 1990s, French neurologists started encountering patients with what was initially a mysterious ailment; over time, and after repeatedly documenting unusual aluminum deposits in the patients' deltoid muscles, they ascertained that injected aluminum adjuvant from vaccines was not only remaining in the muscle but was migrating to and building up in distant sites such as the brain. At a 2018 conference, one of the French researchers discussed this dangerous biopersistence, stating: "It accumulates, and the more you put in the system, the more you have. When you inject aluminum, you inject it directly into the immune system." The researcher also noted that a person would have to eat "one million-fold higher aluminum to get the same level of aluminum adjuvant at the level of the immune cells."

Since 2014, individuals suffering from MMF or other manifestations of ASIA have been able to report their clinical symptoms to an international registry intended to facilitate greater understanding of the syndrome.¹⁷ In 2018, Professor Schoenfeld and others published a description of three hundred cases reported to the registry.¹⁸ They found that, on average, autoimmune conditions developed about seventeen months after adjuvant exposure, with a range of three days to five years. Although chronic fatigue and muscle and joint pain were the most commonly reported symptoms, nine in ten patients also had another diagnosed rheumatic or autoimmune condition.¹⁸

SOURCE: Children's Medical Safety Research Institute.

governments running scared of the science?) Our group is dependent upon philanthropy to continue our research. (If there are any philanthropists reading this and interested in possibly contributing to our research, please get in touch by email [in bio].)

Until the epiphany comes—when all begin to agree that we have been horribly complacent about human exposure to aluminum—we need to adopt a precautionary approach in trying to protect ourselves against the potential ravages of aluminum. I do this in part by avoiding almost all processed foods and drinks, but mainly I use our most important scientific contribution to date. In brief, that contribution is that silicon is the Earth's natural antidote to aluminum.

Our research includes clinical trials involving healthy volunteers, individuals with Alzheimer's disease and people with multiple sclerosis. These trials have shown that siliconrich mineral water facilitates the removal of aluminum from the body in the urine. You drink the mineral water, and you pee aluminum. It is that simple, and it is completely safe. Every day, I try to drink at least one liter of a silicon-rich mineral water—that is, a mineral water where

the stated content of silicon (as "silica" on the bottle) is above thirty milligrams per liter (ppm).

Do not think of this as a one-off "detox" program, however. It is a philosophy for living in the Aluminum Age and for giving yourself the best possible protection against the toxicity of aluminum—protection that no government or other body is likely to afford you in the near future.

This is not an advertisement. I do not receive any financial support from any silicon-rich mineral water company, although one company based in Malaysia does provide us with mineral water free of charge for our clinical studies (and we are thankful for that small mercy).

Note, also, that there is no silicon or silica supplement that can achieve the same benefits as silicon-rich mineral water. If there were a pill that could achieve the same effects, I would be the first both to use and recommend it. I do want everyone to do everything that they can to protect themselves against what I believe are the inevitable consequences of living in the Aluminum Age, namely, acute and chronic human disease. I do not really want to be around to tell you, "I told you so!"

There is no silicon or silica supplement that can achieve the same benefits as silicon-rich mineral water.

WHICH VACCINES AND WHICH ALUMINUM COMPOUNDS?

U.S. vaccines containing one or more types of aluminum compounds include the following:¹⁹

- All of the diphtheria, tetanus and pertussis vaccines (DT, DTaP, Td, Tdap and combination vaccines with a DTaP component);
- The Haemophilus influenzae type b (Hib) vaccine;
- Hepatitis A and B and the hepatitis A/B combination vaccines;
- The meningococcal and pneumococcal vaccines;
- Human papillomavirus (HPV) vaccines—the newest HPV vaccine (Gardasil-9) contains more than double the amount of aluminum as the original Gardasil vaccine.

Aluminum compounds in vaccines include aluminum hydroxide, aluminum phosphate, "aluminum salts," amorphous aluminum hydroxyphosphate sulfate (AAHS) and potassium aluminum sulfate. Merck's proprietary AAHS—a "super-powered" adjuvant featured in the Gardasil, Hib and hepatitis A and B vaccines—has never been safety tested (either by government regulators or Merck) and is one of the components blamed for the massive number of serious autoimmune events associated with Gardasil. The amount of aluminum injected into babies via multiple vaccinations exceeds anything that can be considered safe.

- Amount of aluminum in the eight doses at the two-month baby checkup: 1,225 mcg²¹
- Amount of aluminum injected into fully-vaccinated babies by 18 months of age: 4,925 mcg²¹
- Maximum allowable aluminum per day for intravenous parenteral feeding: 25 mcg²²

SOURCE: Children's Medical Safety Research Institute.

Medical marijuana users should be concerned "because no one is checking the [aluminum] content of cannabis before it is smoked or used for medical conditions."

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CANNABIS AND ALUMINUM

A few years ago, a medical doctor blogging for a pro-medical marijuana website in Europe reported some "rather unsettling information" that the author described as "so disturbing that it stands to redefine medical cannabis use, and its implications in treating diseases."²³ The "unsettling" discovery had to do with research by Professor Exley showing that modern cannabis contains high levels of biologically available aluminum.

In a 2006 study of both tobacco and cannabis, Exley and colleagues observed that both "active and passive smoking... will increase the body burden of aluminum." Doing some calculations, the blogger reached the astonishing conclusion that "the average one joint-per-day smoker may be absorbing as much as 3,700 micrograms of aluminum per joint into his or her pulmonary circuit," representing "a significant risk factor for neurodegeneration."

Where does the aluminum in cannabis come from? In an interview with the doctor/blogger, Professor Exley hypoth-esized that it comes "both from the soil where it is grown and also that the 'processing' of cannabis for recreational use may also result in its contamination" by aluminum. Exley agreed with the doctor that medical marijuana users should be concerned "because no one is checking the [aluminum] content of cannabis before it is smoked or used for medical conditions." Exley also speculated that "long-term cannabis use may predispose to chronic diseases such as Alzheimer's disease."

SOURCE: medicalmarijuana.eu/harmful-levels-aluminum-cannabis-plants/.

REDUCING ALUMINUM EXPOSURE

The dramatic increase in aluminum use in consumer and industrial products means that everyone is exposed to more aluminum than at any other point in human history. It is estimated that by 2050, the amount of aluminum to which humans are exposed will have increased by 100 percent since 1950.⁹ Yet, despite the clear dangers aluminum poses to the environment, wildlife and humanity, the Aluminum Age shows no signs of slowing down.

The Children's Medical Safety Research Institute recommends ten actions to protect yourself against a toxin that is "rapidly contaminating the globe from the inside out":9

1. DRINK SILICON-RICH MINERAL WATERS

These have been shown to facilitate the removal of aluminum from the body. Fiji and Volvic brand bottled waters are rich sources of silicon.

AVOID OR SPACE OUT INJECTIONS OF VACCINES THAT CONTAIN ALUMINUM.

Aluminum adjuvants in vaccines can cross the blood-brain barrier, and research has confirmed links to autoimmune diseases in susceptible individuals.

DO NOT USE ALUMINUM PANS FOR COOKING.

Good alternatives include glass dishes and covers for baking, stoneware for cookie sheets and cast iron for stove-top cooking.

4. AVOID ALUMINUM FOIL FOR COOKING.

Aluminum has been shown to leach from foil, particularly when cooking highly acidic foods.

5. ONLY USE ALUMINUM-FREE NATURAL DEODORANTS.

Avoid aluminum compounds like aluminum chloride, which alters sweat-producing cells, and aluminum zirconium octachlorohydrex, which obstructs pores in the skin to prevent sweat from leaving the body.

6. DO NOT CONSUME DRINKS THAT CONTAIN DYES (E.G., COLORED SPORTS DRINKS).

Dyes contain aluminum compounds called "color lakes," which contain metal salts such as aluminum.

AVOID SKIN CARE PRODUCTS WITH EMOLLIENTS CONTAINING MAGNESIUM ALUMINUM SILICATE; ALUMINUM TRISTEARATE; OR ALUMINUM STEARATE.

Aluminum tristearate is a thickening agent that prevents liquid makeup from separating or becoming runny; aluminum stearate is a colorant and emulsifier in cosmetics.

8. AVOID STORE-BOUGHT INFANT FORMULAS, ALL OF WHICH CONTAIN ALUMINUM.

See the Weston A. Price Foundation homemade, aluminum-free recipe for a much healthier and safer formula.²⁵

9. AVOID ANTACIDS THAT CONTAIN ALUMINUM COMPOUNDS.

To reduce heartburn, try replacing chalky aluminum-containing antacid tablets with apple cider vinegar diluted in water.

10. LOOK FOR ALUMINUM-FREE ALTERNATIVES FOR ALL PERSONAL CARE PRODUCTS.

Make sure that hair care products, toothpastes, body soaps, sunscreens, nail polishes and buffered aspirins are aluminum-free.

 $SOURCE: Children's {\it Medical Safety Research Institute}.$

The Cannabis Craze:

What You Need to Know

By Kimberly Hartke

hese days, many voices in social media are lauding cannabis as the cure for almost any ailment. Decades ago, however, the notion of "medical marijuana" was so far-fetched that when the editor of *High Times* magazine jokingly stated at a conference that he smoked pot to prevent glaucoma, the crowd roared with laughter.¹

Keith Stroup, founder of the National Organization for the Reform of Marijuana Laws (NORML), seized on the idea of "medical pot" because of its political value. In a 1979 interview he gave at Emory University, he stated, "We are trying to get marijuana reclassified medically. If we do that, we'll be using the issue as a red herring to give marijuana a good name." Richard Cowan, another leader at the same organization, openly referred to medical marijuana as a "scam" that would help legalize recreational use.¹

MODERN-DAY CANNABIS

Cannabis contains two chemical components of medical interest: tetrahydrocannabinol (THC)—the plant's famous psychoactive component—and cannabidiol (CBD), which is considered non-psychoactive. Both compounds are extracted from the plant's cannabinoid acids through exposure to heat or other forms of "activation" (called decarboxylation).³

The highly fat-soluble cannabinoids in marijuana are stored in the fat (lipid) portion of our cells. While stored in fatty tissue, cannabinoids can continue to affect mental performance, the immune system and other cellular activity after initial exposure. Unlike alcohol, which leaves the bloodstream in four to five hours, the psychoactive components of marijuana can remain in the body for days or weeks, impairing neurological function and reaction times. Thus, daily or weekly users never completely detox from the drug and may be at risk for poor judgment and slowed reactions leading to automobile accidents long after use.

Today's marijuana is a far cry from the native weed that 1930s jazz musicians used for relaxation. Cannabis potency has been increasing over the past seventy years.⁵ In the 1960s, cannabis had a THC content in the range of 0.5 to 3 percent. By the 1990s, the THC content had risen to around 6 to 8 percent, and today most

cannabis flowers sold in dispensaries contain 20 percent or more THC.⁶ In fact, cannabis concentrates such as THC butter or hash oil and "shatter" (oil extractions that use butane as a solvent) can reach a THC content of more than 90 percent.⁷ *High Times* magazine even sponsors a breeding competition called the Cannabis Cup ("the world's leading marijuana trade show"), which has taken the 1960s term "flower power" to a whole new level.⁸

A writer for stoppot.org describes the ominous implications of today's highly potent cannabis (nicknamed "skunk"), which has risen in THC potency from 0.5 percent to 95 percent: "Calling skunk 'medical marijuana' in itself is a joke. CBD, the potentially beneficial compound has been largely bred out in favor of THC, the psychoactive ingredient. . . . That is not medicine. It is a lethal weapon. The result has been psychotic episodes. . . and suicides from coast to coast. . . . It is happening to enough young people that Congress should take note and defer to medical science and the FDA as to what constitutes a safe and efficacious medicine."

A DRUG, NOT A CURE-ALL

Cannabis has drug-like effects, some of which may be useful in medicine, but it is not a cure-all, and—like all drugs—it has side effects, including addiction. The U.S. Drug

Today's marijuana is a far cry from the native weed that 1930s jazz musicians used for relaxation.

ARTICLE SUMMARY

- Cannabis has drug-like effects, some of which may be useful in medicine, but it is not a cure-all.
- Cannabis potency has been increasing over the past seventy years.
- After tobacco and alcohol, cannabis accounts for more dependence than any other drug or drug group, and cannabis use carries considerable risk of psychiatric illness and other serious outcomes.
- The THC in marijuana increases the release of dopamine from the brain and, over time, can lead to serious neurotransmitter imbalances.
- Our bodies produce natural cannabinoids from animal fats in our diet. When well-regulated, these endocannabinoids are "feel-good chemicals" that ensure production of the proper amount of dopamine and cortisol.
- The research on cannabis outcomes for seizure-afflicted individuals is mixed. Seizure disorders often respond well to a diet very high in fats and low in sugar and refined carbohydrates.
- The evidence for marijuana as a pain reliever is also weak.
- Thus far, cancer studies have reached mixed conclusions. Marijuana users exposed to the drug's potent THC component may be more at risk for cancer, while results for CBD are inconclusive.
- Advocates for medical marijuana often uncritically credit all forms of marijuana and all methods of consuming
 marijuana as having therapeutic benefits, but patients and providers need to carefully consider dosing, potency, purity,
 potential adverse effects and other factors before entering this new medical frontier.

Gabriel Nahas actively campaigned against the medicalization of cannabis as a result of his research with populations where use of the drug was widespread and problematic.

Enforcement Administration (DEA) continues to classify cannabis as a Schedule I drug (along with heroin and LSD) precisely because of marijuana's "high potential for abuse" and its addictive qualities (described by the DEA as the "potential to create severe psychological and/or physical dependence"). 10 Although cannabis advocates have been pushing hard for a drug schedule change or even complete descheduling—arguing that the DEA "has it all wrong"—a federal court reaffirmed marijuana's Schedule I classification in 2015, opining that medical marijuana had not yet proven its safety and efficacy. 11

Bertha Madras, PhD, a professor of psychobiology at Harvard Medical School who studies how drugs affect the adolescent brain, gave testimony that convinced the federal judge not to reschedule marijuana. Madras later told *Time*, "Wealthy investors and fierce user-advocates have orchestrated a political campaign to medicalize, legalize and normalize an intoxicating, psychoactive, addictive drug...in the absence of unbiased scientific evidence or adherence to rigorous drug approval processes." Dr. Madras was appointed to the president's commission on Combating Drug Addiction and the Opioid Crisis in 2017.

The late Gabriel Nahas, MD, also actively

campaigned against the medicalization of cannabis as a result of his research with populations where use of the drug was widespread and problematic. Dr. Nahas visited isolated cultures with a high degree of cannabis use and studied the downregulation of the immune system by cannabis. In his 1979 book, *Keep Off the Grass*, ¹³ he described a colleague's interaction with a high-ranking public health official in Morocco who expressed the belief that cannabis "makes a bed for tuberculosis." Dr. Nahas also wrote about Egypt's request that the United Nations include marijuana in international drug control treaties because of the scourge the drug had become in Egypt. ¹⁴

ADDICTIVENESS

In 1994, researchers at the National Institute on Drug Abuse (NIDA), a division of the National Institutes of Health, analyzed drug dependence data from a large national survey conducted with over eight thousand participants aged fifteen to fifty-four years.¹⁵ After tobacco and alcohol, the NIDA authors found that "cannabis accounted for more dependence than any other drug or drug group," with almost one in ten cannabis users reporting (and perhaps underreporting) dependence. Men were more than twice as likely to become addicted as women

CBD

The cannabis industry has aggressively promoted CBD products to naturopaths, health coaches and consumers, claiming that the products can cure everything from cancer to seizures to digestive distress. The increasing availability and apparent popularity of over-the-counter CBD products at health food stores have persuaded many consumers that cannabis is a "go-to" product with fantastic health benefits—which people are taking as a supplement rather than a drug. A typical promotion is CBD softgels given freely as a thank-you gift for help in an online event with the promise of "better mood stability, improved sleep, increased mental sharpness, a generally enhanced sense of well-being, and fewer aches and pains—all without the 'high."

While CBD oil taken orally may not be "psychoactive," it definitely has effects on the brain and is associated with side effects. Epidiolex, the first cannabis drug, is a purified form of CBD for the treatment of seizures. The drug comes with precise instructions as to dosage and use, with specific warnings against abrupt discontinuation. "When discontinuing Epidiolex, the dose should be decreased gradually. As with all antiepileptic drugs, abrupt discontinuation should be avoided when possible, to minimize the risk of increasing seizure frequency and status epilepticus." The package insert lists the following side effects: hepatocellular injury, somnolence and sedation, suicidal behavior and ideation, hypersensitivity reactions and withdrawal of antiepileptic drugs.⁷⁴

The findings of K. Watanabe and his research team in Japan indicate further dangers of CBD oil. The team found that when CBD comes in contact with an artificial gastric juice, it is converted into the psychoactive THC.⁷⁵ When people ingest cannabis in cakes or cookies containing sugar, or in beverages containing alcohol, the stomach becomes more acidic and more likely to convert relatively benign CBD into more powerful and dangerous THC. Given these findings, it seems that the safest way to use CBD is as an oil on the skin for localized treatment—while always being on the alert for possible side effects.

(12 versus 5.5 percent).

Other research shared by NIDA indicates that about one in six (17 percent) of those who start using marijuana in adolescence become habitual users, and that 25 to 50 percent of daily users are addicted. Analysis of two waves of longitudinal data from approximately thirty to forty thousand individuals participating in the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) used a structured diagnostic interview to determine cannabis dependence in 25 percent of those who reported using cannabis on a weekly basis in the previous year. Again, men were more likely to be cannabis-dependent than women.

CANNABIS RISKS

Dopamine is a neuro-compound that signals reward and enhances motivation. Much like other addictive drugs, the THC in marijuana increases the release of dopamine from the brain. Over time, this can lead to serious imbalances of this important neurotransmitter, with excessive cannabis intake adversely resulting in lower dopamine levels in the striatum part of the brain. 18 (The striatum coordinates multiple aspects of cognition, including both motor and action planning, decision-making, motivation, reinforcement and reward perception.) For the cannabis-dependent person, dopamine deficits in the striatum result in cognitive impairment and memory and learning difficulties. Decreased striatal dopamine release also is predictive of subclinical psychopathology. 18

Research indicates that cannabis use carries considerable risk of psychiatric illness and other serious outcomes. Summarizing ten years of epidemiologic, clinical and laboratory research, a 2009 report in The Lancet described a high probability of adverse effects from cannabis use, including "dependence syndrome, increased risk of motor vehicle crashes, impaired respiratory function, cardiovascular disease, and adverse effects...on adolescent psychosocial development and mental health."19 Contrary to the notion that cannabis use exerts a calming effect on all users, cannabis also can cause violent behavior²⁰ and death (see sidebars).²¹ Perhaps even more troubling, one study found that cannabinoids can introduce epigenetic changes that

can be passed on to future generations.²²

Some people are aware that marijuana can cause paranoia during or after use, but many do not realize that the drug is associated with the onset of other disorders and symptoms such as anxiety, depression, social impairment, psychosis and schizophrenia, ^{23,24} as well as lowering inhibitions to experiment with other substances. ²⁵ The previously cited NESARC survey found that regular cannabis use "uniquely predicted the development of bipolar disorder, panic disorder with agoraphobia, and social phobia" as well as overall declines in mental health. ²⁶

The Harvard Medical School's Family Health Guide discusses two longitudinal studies that found a link between marijuana and depression.²⁷ First, a survey of sixteen hundred teenagers in Australia found that young women who had smoked marijuana weekly as teens were twice as likely as non-users to report depression when surveyed seven years later.²⁸ The second study collected data from nearly two thousand young people in Baltimore in 1980 and followed up with the same respondents from 1994 to 1996.²⁹ Young women who reported using marijuana daily were five times more likely at followup to struggle with depression and anxiety. The study found that cannabis users who showed no signs of depression at the first encounter were four times more likely than initial non-users to report depression fifteen years later.

Scientists know that the introduction of hallucinogenic substances to the brain and bloodstream carries a risk of psychosis—and the higher the level of use, the greater the hazard. Psychosis can entail hallucinations, hearing voices, seeing people who are not there and other breaks with reality, as well as agitation and violent behavior toward oneself or others.

Unfortunately, with the rise of ever more potent forms of cannabis, the risk of psychosis is increasing. A 2015 study in *Lancet Psychiatry* examined first-episode psychotic incidents in over four hundred adults age eighteen and older in south London and found that 24 percent of the cases were related to use of high-potency cannabis (with "high potency" defined as a THC content of around 25 percent).³⁰ The authors also noted the ready availability of high-potency cannabis in the London area. Other United

With the rise of ever more potent forms of cannabis, the risk of psychosis is increasing.

Kingdom researchers have reported an association between high-potency cannabis and "an increased severity of dependence, especially in young people," with "marked effects on memory and paranoia."³¹

Marijuana's links to schizophrenia are also under-recognized by the general public, even though science on the topic is accumulating.³² A longitudinal study in Finland tracked more than eighteen thousand patients over a sixteen-year period (1987-2003) after their discharge from the hospital for a first diagnosis of substanceinduced psychosis; the researchers found that cannabis-induced psychosis led more often to a subsequent schizophrenia diagnosis (46 percent) compared to psychosis resulting from other substances such as amphetamines (30 percent), "hallucinogens" (24 percent) or opioids (21 percent).³³ The substance least likely to lead to schizophrenia was the one most widely used by Finnish patients: alcohol-induced psychosis resulted in schizophrenia in only 5 percent of the cases.

Alan Clough of James Cook University in Australia is a leading expert on substance abuse among Aborigines and other remote populations. In 2009, Clough and fellow researchers reported on their five-year study of heavy marijuana use in three remote Aboriginal communities,34 describing cannabis use by indigenous Aborigines as "endemic yet neglected." 35 When Clough spoke about the study with the newspaper The Australian, he shared several sobering observations about mental health, noting that "After 15 years of a cannabis epidemic we're really starting to see the chronic mental effects appearing. We've seen acute psychosis that is irreversible, as well as depression and dependence. Unfortunately, we also have the situation where suicide is linked not just with cannabis use but also through withdrawal."36

In August 2018, researchers published the results of the largest known brain scan study in the *Journal of Alzheimer's Disease*; the study involved over thirty-one thousand participants (ages zero to over one hundred) and over sixty-two thousand scans.³⁷ The researchers, led by Daniel G. Amen, MD, founder of the Amen Clinics, found that cannabis use, along with schizophrenia and alcohol abuse, were impor-

tant factors related to accelerated brain aging. "The cannabis abuse finding was especially important, as our culture is starting to see marijuana as an innocuous substance," said Amen, adding that "This study should give us pause about it." In January of 2019, the *Journal of Neuroscience* published a report indicating higher grey matter volume (GMV) in fourteen-year-old adolescents with very infrequent marijuana use, comparing them to nonusers. Higher GMV is associated with lower performance on the Perceptual Reasoning Index and with future generalized anxiety symptoms.

CANNABIS AND SUICIDE

The risks of cannabis use for adolescents are particularly worrisome. As Dr. Bertha Madras at Harvard has stated, "This is not a war on drugs: it is a defense of children's brains." A study in *Lancet Psychiatry* confirms the importance of protecting young people's brains to safeguard their future health and well-being. The researchers examined the association of cannabis use before age seventeen with seven different developmental outcomes up to age thirty. They found "clear and consistent associations and dose-response relations between the frequency of adolescent cannabis use and all adverse young adult outcomes." Youth who had regularly used marijuana were nearly seven times more likely to attempt suicide.

Some of those who start using cannabis as adolescents go beyond attempting suicide to actually succeeding. Lori Robinson, a California parent grieving the loss of her son by suicide, read about Alan Clough's work with Australian Aborigines and cannabis and took special note of the researcher's comments about suicide. Gaining immediate insight into the cause of her own son's death, Robinson coined the term "cannabis withdrawal suicide." Her son Shane had begun using marijuana and experienced two separate psychotic incidents. He was able to recover from the first episode, but when he later relapsed into further marijuana use, he experienced a second psychotic episode with more lasting consequences to his career and his marriage. Tragically, seven months after his parents got him into rehab and he stopped using the drug, they lost him to suicide.

Andy Zorn, described by his family as "handsome and funny," began using cannabis in high school out of a desire to fit in socially. He managed to function at a high level for a time, graduating from high school, earning a college associates degree and serving three years in the military. However, his adolescent drug use became an adult addiction that he could not conquer. When he killed himself at age thirty-one, he left a suicide note that read, "Marijuana killed my soul [and] ruined my brain."

CANNABIS AND THE HEART

Marijuana can raise both blood pressure and heart rate—sometimes even causing the heart to beat more than one hundred fifty times per minute. ⁴³ In the early 2000s, M.A. Middleman, a Harvard heart disease researcher, studied heart patients to determine possible triggers of acute cardiovascular events like arrhythmias and stroke. Publishing a study in *Circulation*, the researcher noted the rising rate of marijuana use "in the age group prone to coronary artery disease" and concluded, based on research with almost four thousand patients, that marijuana could

trigger acute myocardial infarction.⁴⁴ A more recent 2017 review reiterated the association between cannabis and symptoms such as ventricular tachycardia (increased heart rate), high blood pressure and orthostatic hypotension.⁴⁵ The authors of the review also noted the potential for sudden death.

In fact, stories of cardiac deaths triggered by cannabis have appeared in the scientific literature. For example, a report by German forensic scientists identified cannabis as the cause of two fatal cardiac-related deaths in otherwise healthy young men.⁴⁶ The researchers warned that the public is not adequately aware of marijuana's potential to cause rapid increases in heart rate or blood pressure.

A New Jersey mom, Kristina Ziobro, has gone public with the story of her son, who began self-medicating by smoking cannabis, thinking it might help his irritable bowel symptoms. After becoming an avid advocate for cannabis, the young man died at age twenty-two of heart arrhythmia. The coroner initially told the family that their son's death was likely caused by the cannabis but omitted that opinion from his final report. The Ziobro family believes that cannabis played a significant role in their son's untimely death and is fighting to have the official report

reflect the coroner's initial assessment.⁴⁷

In a case in Colorado, poison control doctors attributed an eleven-month-old baby's death from myocarditis (inflammation of the heart tissue) to probable ingestion of cannabis as the baby's blood and urine tested positive for cannabis. ⁴⁸ The related news report described a fourfold increase in emergency room (ER) visits by young people who obtain cannabis "edibles" and show up in the ER with "drowsiness, dizziness, vomiting, agitation, dangerous heart rates and seizures." ²⁴⁹

MEDICAL MARIJUANA FOR SEIZURES

Pediatric seizures are one of the most common reasons parents turn to medical marijuana; indeed, many stories on the Internet describe children with intractable seizures who have experienced relief from using CBD products.

CANNABIS, VIOLENT BEHAVIOR AND PTSD

Dr. Christine Miller, a molecular neuroscientist who studied the causes of psychosis for twenty-five years, offers a download of scientific studies linking marijuana to violence on MomsStrong.org. Author Alex Berenson's new book, *Tell Your Children the Truth about Marijuana, Mental Illness and Violence* exhaustively details the research from around the world proving the link (see page 34). For instance, a study in inner-city Philadelphia in the early 2000s "unexpectedly" found that marijuana users were as likely to engage in violent behavior as crack users, including reckless endangerment, weapons offenses and attempted homicide.⁷⁷

However, two American professors who are often cited by the Drug Policy Alliance (a nonprofit seeking the legalization of all drugs) dispute the scientific consensus and criticize Berenson. Carl Hart of Columbia University and Charles Ksir professor emeritus of the University of Wyoming, in their 2016 review of the science on psychosis concluded that, Evidence reviewed here suggests that cannabis does not in itself cause a psychosis disorder. Rather, the evidence leads us to conclude that both early use and heavy use of cannabis are more likely in individuals with a vulnerability to psychosis. They note a variety of other problem behaviors (e.g. early or heavy use of cigarettes or alcohol and poor school performance) are associated with violent and aggressive behavior in later years.

On the other hand, Norwegian researchers analyzed data on cannabis use and violent behavior in over two thousand young people in the Norway Longitudinal Study, using statistical methods to determine to what extent the association was causal. Their results imply that a 10 percent increase in cannabis use frequency is associated with a 0.4 percent increase in frequency of violence. Their conclusion: "Analysis of panel data on Norwegian youths reveals a statistically significant association between cannabis use and violence." 20

Veterans afflicted with post-traumatic stress disorder (PTSD)—who already suffer from flashbacks, nightmares and severe anxiety and depression—are particularly susceptible to alcohol and drug abuse. The cannabis industry, which views veterans with PTSD as a lucrative market for their products, is actively lobbying state and federal legislators to persuade them that PTSD should be a qualifying condition for medical marijuana. However, a study of cannabis use in PTSD sufferers found that the drug made their PTSD symptoms worse, not better, and was associated with more violent behavior and more alcohol use.⁸⁰

Finally, self-harm and violent suicide are other unfortunate results of acute cannabis intoxication in veterans and non-veterans alike. A 2018 study of over three hundred veterans who had deployed to either Iraq or Afghanistan provided evidence that "heavy cannabis use may be a unique risk factor for post-deployment suicide attempts among veterans."

MomsStrong.org provides a forum where parents can share stories of their children's addiction challenges and cannabis-related deaths.⁸² These parents represent the most serious pushback against this emerging industry, and we would do well to hear them out.

CBD use decreased seizure frequency to a greater extent than placebos but also was associated with higher rates of adverse events.

However, parents need to know that the research on cannabis outcomes for seizure-afflicted individuals is mixed.

For example, a research team at the University of Colorado studied seventy-five pediatric patients (ages six months to eighteen years) who were using oral cannabis extracts to control epilepsy. 50 Publishing their results in Epilepsy & Behavior in 2015, the investigators reported that only one third (33 percent) of the patients responded to treatment (defined as experiencing a greater than 50 percent reduction in seizures). whereas 44 percent experienced adverse events, including increased seizures and one death. (Conventional treatment for seizures typically brings relief to two out of three patients.⁵¹) Eight of the children had adverse events ordinarily deemed "rare," including developmental regression, new movement disorders, transient weakness on one side of the body (hemiparesis) and epileptic seizures requiring intubation.

A 2017 clinical trial reported in The New England Journal of Medicine shared similarly mixed findings. Studying a specific form of childhood epilepsy called Dravet syndrome (which is characterized by seizures resistant to most other drugs), the researchers found that CBD use decreased seizure frequency to a greater extent than placebos but also was associated with higher rates of adverse events, including serious adverse events in ten of sixtyone patients in the CBD group (versus three of fifty-nine in the placebo group). 52 Eight patients in the CBD group withdrew from the trial due to the adverse events, and another ten reduced their CBD dose. Twelve patients in the CBD group (compared to one in the placebo group) displayed an elevated biomarker indicative of liver damage.

In both studies, the authors concluded that additional data are needed to determine long-term efficacy and safety of CBD for epileptic seizures. Nonetheless, the FDA is moving forward on this front, having reviewed and approved prescription-only Epidiolex, the first CBD pharmaceutical, in June 2018.⁵³ However, the FDA approval pertains solely to Dravet syndrome and one other rare and severe form of epilepsy.

Seizure disorders often respond well to a

diet very high in fats and low in sugar and refined carbohydrates, the so-called "ketogenic" diet, especially when short- and medium-chain fatty acids (the kind found in coconut oil) are included. Unfortunately, specialists in seizure disorders recommend this diet only "for children whose seizures have not responded to several different seizure medicines." Since both conventional seizure medications and CBD treatments can have side effects, it makes sense to try dietary intervention *first*, before resorting to any drugs.

LITTLE EVIDENCE OF PAIN RELIEF

Pain is another common reason that people give for medicating with cannabis. A humorous quip often heard from drug prevention activists is that "anyone who can fake an ache qualifies for a medical marijuana card."

What does the science show in terms of cannabis' effectiveness as a medicine for chronic pain? A 2017 review published in the Annals of Internal Medicine suggested that the evidence for marijuana as a pain reliever is weak.55 The author concluded from the limited data available that cannabis may possibly help with neuropathic and cancer pain but not with other common pain conditions; commenting on the association of long-term cannabis use with adverse mental health effects, the author concluded, "it is not certain that the benefits of medical marijuana are greater than its risks." A 2018 systematic review of medical cannabinoids in Canadian Family Physician reached a similar conclusion, reporting that adverse events are the most consistent effects of medical cannabinoids, and that adverse events can have a greater magnitude of effect than the potential benefits for the conditions targeted.⁵⁶ The authors also noted that their methodology underestimated the risk of long-term and serious adverse events, including the risk of psychosis.

A third review, published in 2018 in the journal *Pain*, looked at cannabis extractions used in addition to other pain medications to treat chronic noncancer pain (CNCP). The researchers found that the "number needed to treat to benefit is high, and the number needed to treat to harm is low.... It seems unlikely that cannabinoids are highly effective medicines for

CNCP."57

Dr. Ken Finn, a pain medicine expert in Colorado, has stated, "The public has embraced that marijuana can treat all pain conditions and state governments have followed suit, without scientific evidence, and have allowed an industry to prosper on the thin ice of what is currently and scientifically available." Dr. Finn sees many new patients who come to him already

using high doses of opiates plus marijuana. He explains, "In most cases, the patients admit cannabis does nothing for the pain." Because opioids and cannabinoids have synergistic effects, Finn counsels his patients that it is dangerous to use them together. A 2018 Australian study published in *Lancet Public Health* found that most patients using opioids who added cannabis were unsuccessful in reducing pain or weaning off opioids.⁵⁹

CANNABIS AND CANCER

Does cannabis use protect against cancer, or does it cause cancer?

DON'T FEED YOUR BABIES PSYCHOACTIVE DRUGS

PREGNANCY

The use of marijuana during pregnancy is contraindicated, and leading health institutions point to a sizeable body of scientific evidence to substantiate such warnings for both mother and child. Unfortunately, many unsuspecting women hear that marijuana is a more "natural" way to deal with the normal symptoms of pregnancy. Marijuana-toking mommies are found in chat groups describing their use of marijuana for morning sickness as preferable to using pharmaceutical drugs. But are there better options? Maureen Diaz, a Weston A. Price Foundation (WAPF) nutrition activist who has given birth nine times, explains how WAPF recommends handling morning sickness: "Lots of high-quality protein, such as grass-fed meat, raw milk and juice from fermented foods and sauerkraut."

Because THC passes through the placenta into the child, it can interfere with brain development and set a child up for addiction later in life. A study of maternity ward data from thirty-eight states found that over thirty thousand newborns had extended neonatal hospital stays related to maternal substance use in 2012.⁸³ Most of the babies were going through drug withdrawal.

Proponents of marijuana for morning sickness often cite a Jamaican ethnographic study,⁸⁴ but the study has been refuted by a blogger who is staunchly against any drugs during pregnancy.⁸⁵ According to the blogger, the Jamaican study was flawed because the researchers did not follow the children long enough; recognizing the cognitive damage done to "marijuana babies" requires observing children in the early primary grades. The blogger goes on to outline her reasons why not to be a "stoner with child."

BREASTFEEDING

A mother's milk is naturally high in fat, and this fat is critical for the baby's brain development. Out of concern for avoiding contamination of breast milk with THC, hospitals counsel women not to smoke pot while breastfeeding. Since THC is fat-soluble, it accumulates in the breast milk (and organs of the body) and is slow to exit, interfering with brain development.⁸⁶

BIRTHWEIGHT

Like alcohol and tobacco, marijuana can increase the risk of adverse pregnancy and birth outcomes.⁸⁷ Marijuana-smoking mothers are 77 percent more likely to have an underweight baby.⁸⁸ Low birthweight can compromise babies' ability to breastfeed by affecting their ability to suckle and is a significant risk factor for infant mortality. Low birthweight also can have longer-term health consequences. The Aboriginal Cohort Study, a decades-long research project that is monitoring the health of Aborigines who were born low-birthweight, has noted the disproportionate emergence of chronic diseases such as diabetes and obesity in the participants by their mid-to-late twenties.⁸⁹ British researchers likewise have found that chronic health problems later in life (as well as premature mortality) are associated with underweight at birth.⁹⁰ Pam McColl, a Canadian doula and coauthor of *Baby & Me Tobacco Free*,⁹¹ has stated, "The other harms to children (as they grow) observed by scientific researchers are in these areas: brain maturity, cognitive abilities, executive functioning, short-term memory, verbal outcomes, attention problems, hyperactivity, impulsivity, abstract visual skills, visual reasoning, abstract reasoning, goal setting, planning."

PARENTS-TO-BE

The best thing that female marijuana users who want to conceive can do is to stop using the drug, seeking professional help if needed. Prospective fathers also need to consider the risks of marijuana use to their future offspring. The government of Canada says that men who wish to start a family should not use marijuana for any purpose, citing increased risks of testicular cancer and abnormal sperm morphology as well as other reproductive problems. Damage to sperm can result in possible birth defects and an increased risk of childhood cancer.

While marijuana remains illegal according to the U.S. federal government, a frenzied promotion has taken over the marketplace.

A 2016 literature review found that the association of cannabis smoking with lung cancer is inconclusive,60 but a 2015 study found that marijuana does appear to increase the risk for chronic bronchitis.⁶¹ In a 2012 case-control study, marijuana users had a twofold increased risk of developing testicular cancer compared to nonusers. 62 Assessing cannabinoids as anti-cancer agents, a 2016 review found that THC and CBD induced both regression and progression of breast cancer in mice. 63 And in 2004, researchers found that risk for glioma (a brain cancer) was increased 2.8-fold in those who smoked marijuana at least once per month, after correcting for cigarette smoking and other factors.64

A 2007 study found that THC was a very potent activator of certain cancer-promoting receptors, while CBD gave modest protection. ⁶⁵ These findings may explain the mixed conclusions of cancer studies so far.

THE WILD WEST

While marijuana remains illegal according to the U.S. federal government, a frenzied promotion has taken over the marketplace, targeting not just patients and the alternative health community but businesses and various marketing models, including multilevel and mail-order marketing. In California, with its open recreational marijuana market, cafes and bars are offering CBD-infused smoothies and cocktails, while California wineries are adding cannabis into their wines and selling them through dispensaries. Two Los Angeles restaurants and pop-up venues serve CBD- and THC-containing food and cocktails, and CBD concentrates are used in the manufacture of "edibles" such as cookies and candy. Oprah Magazine even ran a colorful feature story in which the author swooned over a trendy California ladies' tea party featuring THC-infused teas. 66 Cannabis is also having "a serious moment in the skin care space," with the promise of cannabis beauty treatments that "get you high."67 One beauty salon offers marijuana-infused manicures and pedicures.67

Typically, an approved drug will come with dosing instructions as well as warnings about contraindications and side effects, so that both doctors and patients can understand the parameters and risks of the medication. In the Wild West environment in which medical marijuana products and dispensaries are proliferating,

NUTRITION AND OUR ENDOCANNABINOID SYSTEM

Our bodies produce cannabinoids from animal fats in our diet. When well-regulated, these endocannabinoids are "feel-good chemicals" that ensure production of the proper amount of dopamine and limit the overproduction of cortisol. In an article in *Wise Traditions* Winter 2008 issue "The Pursuit of Happiness," Chris Masterjohn details the way that arachidonic acid, an omega-6 fatty acid found in animal fats in our diet, converts to endocannabinoids. The fat-soluble vitamins A and D work together with arachidonic acid to help humans handle stress and retain the motivation to achieve long-term goals. Masterjohn also explains that when we rely on a drug to address one isolated component of the human body's complex interacting systems, the drug "often works for a time, but eventually stops working or produces adverse effects."

External sources of cannabinoids like cannabis are referred to by scientists as "exogenous" cannabinoids. Nora Volkow, a neuroscientist with the National Institute on Drug Abuse (NIDA), explained at a 2015 drug prevention conference in Atlanta that exogenous cannabinoids overwhelm the brain's cannabinoid receptors and can shut down the body's natural production of endocannabinoids. In 2016, Volkow and colleagues published a review article in *Nature* that detailed the variable effects of cannabis on the dopamine system from both animal and human studies. While the "high" created by THC initially releases a flood of dopamine, long-term use of the drug actually blunts dopamine response and reduces dopamine synthesis. The effects vary based on the amount of the drug consumed and the part of the brain affected. When cannabis interferes with the dopamine system in this way, the resulting behavioral effects include increased appetite, memory problems, executive dysfunction, decreased motivation, impaired educational and occupational outcomes, negative emotions and severe addiction. Dr. Volkow also has written about the sixfold increase in the risk of schizophrenia associated with abuse of high-THC cannabis, noting that "aberrant dopaminergic function in the midbrain"—a hallmark feature of schizophrenia—"may underlie this association."

It is so much better to stay balanced, motivated and happy by eating a lot of butter and other animal fats, and by consuming good sources of vitamin A such as cod liver oil, liver and other organ meats! The glycine in nourishing bone broths also helps to regulate dopamine levels. These foods keep us "naturally high" without any need to resort to cannabis and other drugs.

however, dosing instructions and warnings are absent.

Advocates of medical marijuana often uncritically credit all forms of marijuana and all methods of consuming marijuana as having therapeutic benefits, whether smoking a joint, downing a THC-infused soda, eating a marijuana brownie or vaping or "dabbing" highly concentrated THC resin. The average marijuana dispensary lumps all of these together under the mantle of "medicine." The online cannabis marketplace also lacks standardization and quality control, with a high rate of mislabeling CBD and THC content. 69

Contamination represents another serious concern. Recent laboratory tests of retail cannabis products in California found that 80 to 90 percent of the products contained pesticides, fungus and mold—potentially dangerous toxins, especially if inhaled.⁷⁰ Voters in the state ushered in licensed medical marijuana dispensaries two decades ago, yet these recent tests prove that the state is incapable of protecting consumers from contaminated products. In fact, even after media reports of the lab tests, California allowed dispensaries to continue selling the contaminated products for six months rather than forcing a recall. Even if CBD does turn out to hold promise as a medicine for those with rare seizure disorders, users should have access to purified preparations that do not contain harmful contaminants.

Because the side effects of CBD can potentially be serious, parents should not strike out on their own on this new medical frontier. It is important to work under a doctor's supervision so that treatment with CBD can be altered or terminated if necessary. As new information emerges about the patient characteristics (whether genetic or physiological) that may increase the risk of adverse events, the responsibility for evaluating the research and advising physicians regarding cannabis use for medical purposes should remain at the federal level rather than playing out in piecemeal manner state by state.

William Bennett, MD, wrote the following to the FDA: "In 1986, we lost a 22-year-old son at the University of Oregon due to a dose of cocaine taken in a fraternity. We hope that

the Food and Drug Administration will use the same criteria with crude marijuana as medicine that they use for any other therapeutic substance. We need scientific proof of efficacy and safety in well-controlled clinical trials. Further, insistence on exact dosing, standardization of preparation, avoidance of contaminants, and evaluation of the smoking method of drug delivery needs to be done. Clearly crude cannabis contains many ingredients, and this will be almost impossible to standardize for clinical use."

THE PUSH FOR LEGALIZATION

Groups like the Drug Policy Alliance and Marijuana Policy Project continue to lobby state officials to legalize cannabis. However, policy-makers, voters and health-conscious consumers would be well-advised to become better informed about the personal, economic and social costs related to cannabis legalization and thoroughly analyze the medium-range and long-term consequences. Moreover, many of the assertions put forth by pro-pot organizations (such as "it is not addictive" and "it never killed anyone") are so patently false that they should call into question the organizations' sweeping medical claims. It's true that laws against marijuana use have unnecessarily targeted minorities and the poor, often resulting in unjustly harsh prison sentences. But legislators and citizens need to consider carefully the possible effects of removing all laws against the sale and use of marijuana.

Colorado is a revealing test case that may help legislators evaluate the wisdom of allowing similar policies to spread throughout North America. Commercialization of medical marijuana exploded in Colorado beginning in 2009, with favorable health board and legislative rulings allowing the emergence of over five hundred approved dispensaries by 2012 (and hundreds of unlicensed dispensaries) as well as over one hundred and eight thousand registered medical marijuana "cardholders" as of that year. ⁷¹ A report from the Rocky Mountain High Intensity Drug Trafficking Area (RMHIDTA) extensively describes the downside of Colorado's rush to embrace commercial cannabis, covering many adverse impacts. These include statistics on impaired driving, traffic fatalities, youth and adult use, emergency department and hospital admissions and diversion of Colorado marijuana to other states.⁷¹ Health care providers interviewed for the report describe "debilitating" symptoms, lives that have been "completely disrupted" and well-documented cases of psychosis. There has also been a 65 percent increase in first-time marijuana use among Colorado youth since legalization.⁷²

In California, the "Silent Poison" website describes a neglected aspect of the state's booming marijuana cultivation, outlining widespread devastation of the state's ecology. Environmental hazards include heavy use of agricultural chemicals and pesticides and massive pollution of waterways. Other problems described on the website include grower ties to transnational criminal organizations and increased risks of violent robberies and other crimes.

One advocacy group, Smart Approaches to Marijuana (SAM), encourages medical research into cannabis but discourages outright legalization. Concerned with the potential for negative public health outcomes, SAM has lobbied for caution in embracing cannabis as a "wonder drug"

MORE STUDIES ON CANNABIS AND MENTAL ILLNESS

"The association between level of cannabis consumption and development of schizophrenia during a 15-year follow-up was studied in a cohort of 45,570 Swedish conscripts. The relative risk for schizophrenia among high consumers of cannabis (use on more than fifty occasions) was 6.0 (95 percent confidence interval 4.0—8.9) compared with non-users. Persistence of the association after allowance for other psychiatric illness and social background indicated that cannabis is an independent risk factor for schizophrenia..." www.thelancet.com/journals/lancet/article/PIIS0140-6736(87)92620-1/fulltext

"Cannabis use is associated with an increased risk of developing schizophrenia, consistent with a causal relation. This association is not explained by use of other psychoactive drugs or personality traits relating to social integration." www.bmj.com/content/325/7374/1199

This population-based prospective study showed that a baseline history of cannabis use increased the risk of a follow-up psychosis outcome for subjects with a lifetime absence of psychosis, with a dose-response relation between exposure load and psychosis outcome. https://academic.oup.com/aje/article/156/4/319/112397

"Our findings show the importance of raising public awareness of the risk associated with use of high-potency cannabis... especially when such varieties of cannabis are becoming more available." www.thelancet.com/journals/lanpsy/article/PIIS2215-0366%2814%2900117-5/fulltext

"Multiple linear regression analyses showed that cannabis users by age 15 and by age 18 had more schizophrenia symptoms than controls at age 26. These results remained significant after psychotic symptoms at age 11 were controlled for. The effect was stronger with earlier use." www.bmj.com/content/325/7374/1212

"After adjustment for age, sex, socioeconomic status, urbanicity, childhood trauma, predisposition for psychosis at baseline, and use of other drugs, tobacco, and alcohol, cannabis use at baseline increased the cumulative incidence of psychotic symptoms at follow up four years later." www.ncbi.nlm.nih.gov/pubmed/15574485

"These data indicate that Delta-9-THC produces a broad range of transient symptoms, behaviors, and cognitive deficits in healthy individuals that resemble some aspects of endogenous psychoses." www.ncbi.nlm.nih.gov/pubmed/15173844

"Cannabis use is likely to increase the risk of developing schizophrenia and other psychoses; the higher the use, the greater the risk." www.nationalacademies.org/hmd/Reports/2017/health-effects-of-cannabis-and-cannabinoids.aspx

After correcting for history of mood disorders like depression, researchers found that adolescent cannabis use increased the odds of suicide attempts 7-fold. www.ncbi.nlm.nih.gov/pubmed/25273309

"Daily [cannabis] use before age 17 substantially increased odds of later suicide attempts (odds ratio 6.83)." www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(14)70307-4/fulltext

"Statistical significant associations were found between physical aggression and alcohol and/or marijuana use." https://journals.sagepub.com/doi/full/10.1177/0886260512468234

A 2016 paper in *Psychological Medicine* examined marijuana use and criminal behavior among over 400 boys in London, who were followed for more than 40 years beginning in 1961. The boys were surveyed when they were 18, 32, and 48 years old. Researchers found that marijuana at all three ages was associated with a 9-fold increase in violent behavior, even after adjusting for other variables. https://www.cambridge.org/core/journals/psychological-medicine/article/continuity-of-cannabis-use-and-violent-offending-over-the-life-course/F8E66EC005BDA73865872BD1F398A567

Individuals meeting the diagnostic criteria for marijuana dependence were 3.8 times more likely than control subjects to be violent. https://pdfs.semanticscholar.org/3928/d437180cb086857cc665fbbebb4ba185d624.pdf

Note: These research studies are from the work of Dr. Christine Miller and author Alex Berenson. See: http://momsstrong.org/honorary-advisor/and http://www.alexberenson.com/.

and recreational substitute for alcohol. SAM's March 2018 report *Lessons Learned from Marijuana Legalization in Four U.S. States and D.C.* says on the first page that "today's highly potent marijuana represents a growing and significant threat to public health and safety, a threat that is amplified by a new marijuana industry intent on profiting from heavy use." The report also notes that in the four states (and the District of Columbia) that have legalized cannabis, "past-month use of the drug has continued to rise above the national average among youth aged 12-17."

CAUTION ADVISED

Like opium and cocaine, marijuana and similar psychoactive plants have played a role in traditional cultures—opium gum, taken directly from the poppy flower and not manipulated in any way, soothed the pains of the elderly in the Middle East, and a tea of coco leaves helped the peoples of the Andes Mountains survive in the rarified altitude. But these forms of the plants are a far cry from the concentrates and extracts that cause so much havoc today. Today's marijuana, bred to have a highly concentrated level of THC, demands caution. These plants all have medical uses—as anyone who has taken morphine to relieve the pain of kidney stones or a gallbladder attack can attest. However, many of the conditions that cannabis is said to help—from anxiety to insomnia—often disappear with improved nutrition (see "Nutrition and Our Endocannabinoid System," page 32). If psychoactive drugs, including cannabis, are truly needed, they require supervision by a qualified health professional well aware of the potential dangers.

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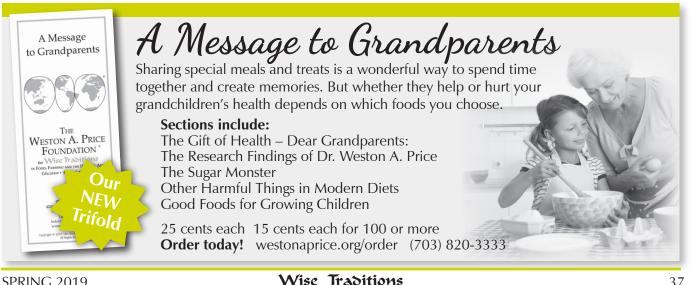
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Water Fluoridation: The Latest Science Indicates That the Practice Must Stop

By Paul and Ellen Connett

ater fluoridation is the deliberate addition of a substance containing, or yielding, fluoride (that is, in the form of the free fluoride ion) to the public water supply with the ostensible aim of reducing tooth decay. The concentrations of fluoride used for this purpose in the U.S. range from 0.7 to 1.2 milligrams of fluoride per liter of water (0.7-1.2 parts per million or ppm). When the practice began in the U.S. and Canada in 1945 there were no published studies available which demonstrated that consuming fluoride at these levels was safe.

Without any formal study, it was assumed that because some people in some places had consumed natural fluoride levels higher than 1 ppm for many years, with no "apparent" harm recorded, adding fluoride to water would be safe.

The authors both work for the Fluoride Action Network (FAN),¹ a nonprofit dedicated to education and sharing information on the toxicity of fluoride. FAN maintains the largest database dedicated to fluoride's toxicity on blood,² bone,³ brain,⁴ heart,⁵ kidney,⁶ liver,⁷ lung,⁸ the reproductive system,⁹ and the thyroid gland;¹⁰ as well as the largest collection of news articles on fluoride¹¹ that are accessible by country, by state for the U.S. and by province for Canada. The website also contains links to many videotaped interviews,¹² government reports by country,¹³ fluoride industrial emissions by state¹⁴ and more.

NEITHER ETHICAL NOR SCIENTIFIC

It was neither ethical nor scientific to force people to consume fluoride in 1945, and it is not ethical or scientific to do it today. The arguments get stronger as U.S. authorities are finally getting around to doing the studies on tissues that they should have conducted many years ago—and should have done before they started what has amounted to one of the largest public health experiments in U.S. history.

PROTECTING A BELIEF SYSTEM

The dilemma for those who believe that this practice is causing harm is how to end it when most people don't even know their water is being fluoridated and don't know the potential risks it may be posing to their children. Sadly, most doctors and dentists simply follow the policies of their professional bodies without reading the literature for themselves. The media are not telling the public about the latest health studies and are simply parroting statements from organizations like the American Dental Association (ADA) and agencies like the Oral Health Division of the Centers for Disease Control and Prevention (CDC), which hold a long standing "belief" in the "safety and effectiveness" of this practice. Meanwhile, government health departments at all levels appear to be more interested in protecting this outdated policy than protecting the health of our children.

The task that FAN has set itself since 2000 is to share the science about the dangers posed by this practice with those who are willing to read and listen, mainly through our web page at FluorideALERT.org and through public pre-

sentations (for example, in Seattle¹⁵). The latest science makes it very clear that the practice of fluoridation must stop!

FLUORIDE AND INTELLIGENCE

In 2006, the National Research Council (NRC) of the National Academies concluded that "fluorides have the ability to interfere with functions of the brain" and for the first time called fluoride an endocrine disruptor. 17

In 2006, there were only five IQ studies available to the NRC panel. Subsequently, many more have been published (including studies that were previously only available in Chinese). As of 2019, we now have sixty studies, fifty-three of which have shown a lowered IQ in children in communities with high fluoride exposure compared to communities with lower fluoride exposure.¹⁸

Most of these studies have been carried out in China, but others took place in India, Iran and Mexico. In 2012, twenty-seven of these studies were subjected to a meta-analysis by a team from Harvard, which was published in one of the world's leading environmental health journals, *Environmental Health Perspectives*.¹⁹

While this team had concerns about the lack of information on several possible confounding factors in many of these studies, they were struck by the consistency of the results. Even though the research was carried out over a period of twenty-one years, by many different research teams, in two countries (China and Iran) and in many different locations, twenty-six out of the twenty-seven studies found the same result: a lowering of IQ. The average lowering was seven IQ points.

It should be noted that a shift downward of five IQ points in a large population would halve the number of very bright children (IQ greater than one hundred thirty) and increase by over 50 percent the number of mentally handicapped (IQ lower than seventy). Such a downward shift would have both huge economic and social consequences for a country like the USA.

Promoters of fluoridation have done their best to diminish the significance of these findings for fluoridated communities, but recent findings have largely undermined their self-serving arguments. A rigorous U.S. government-funded In 2006, the National Research Council (NRC) of the National Academies concluded that "fluorides have the ability to interfere with functions of the brain."

The authors found strong associations between fluoride exposure to the pregnant women (as measured in their urine) and lowered IQ in their offspring.

study carried out by a highly qualified research team headed by Dr. Morteza Bashash confirmed that fluoride is neurotoxic at levels currently experienced in fluoridated communities and, for this effect, the most vulnerable stage of human life is during fetal development.²⁰ This study was conducted in Mexico City with two hundred ninety-nine mother-offspring pairs. The authors found strong associations between fluoride exposure to the pregnant women (as measured in their urine) and lowered IQ in their offspring at age four and again at six to twelve years of age. Subsequently, in 2018, a study reported that the lowering of IQ in the same cohort also occurred in an earlier age range (one to three years).²¹

In 2018, using the same Mexico City cohort, Dr. Bashash found that there was a strong association between some of the symptoms of ADHD in the children and urine fluoride levels in the pregnant women.²² A 2015 study found a relationship between the prevalence of ADHD in the U.S. and fluoridation status by state; the higher the percentage of the state fluoridated, the greater the prevalence of ADHD.²³

It is hard to overstate the importance of the 2017 Bashash study.²⁰ Strikingly, it was funded by U.S. government agencies, two of which (National Institutes of Health and the Environmental Protection Agency) have promoted (NIH) and defended (EPA) the safety of water fluoridation. The study was part of a twentyfive-year ELEMENT research project (Early Life Exposures in Mexico to Environmental Toxicants) directed by professor Howard Hu from the University of Toronto. The Bashash study took over twelve years and involved researchers from many distinguished universities and institutions in Canada, the U.S. and Mexico. These included the universities of Toronto, Mc-Gill, Indiana, Illinois, Michigan, Harvard, as well as Mount Sinai and the National Institute of Perinatology in Mexico. These researchers have published over fifty studies conducted along similar lines for other neurotoxicants. Of particular importance was the fact that, unlike most of the other IQ studies on fluoride, this study involved measurements at the individual (not community) level for both mother and child. Based upon their extensive experience, the authors controlled for a large number of

potential confounding variables, and even after controlling for these they still found a very strong relationship between fluoride exposure during pregnancy in the mother and lowered IQ in their offspring.

Fluoridation promoters, including the American Dental Association, have claimed that this study was not relevant to fluoridated communities in the U.S. because Mexico City does not have artificial fluoridation and pregnant women there are likely to have higher doses of fluoride from fluoridated salt and some naturally fluoridated water areas. Such arguments are not convincing because the biometric of exposure used was fluoride levels in the urine, which is a measure of total dose of fluoride and is independent of the source. Moreover, the range of exposure in Mexico City was within the range of fluoride levels in the urine of adults in the U.S. This point was further confirmed by a subsequent national study of the urine fluoride levels in pregnant women in Canada. This study found that levels of fluoride in the urine of Canadian women living in fluoridated communities were almost identical to the levels in Mexico City, namely 0.87 ppm in Canada versus 0.91 ppm in Mexico City.24

As far as the politics of fluoridation are concerned, it is significant that some of the world's leading neurotoxicologists, like Phillipe Grandjean (mercury specialist) and David Bellinger (lead specialist), are now participating in this research as well as reviewing the literature. ^{25,26} They now see fluoride's neurotoxicity in the same vein as that of lead, arsenic, mercury and other well-established neurotoxicants.

It should also be stressed that in addition to the fifty-three IQ studies discussed above, there are many other animal, human, biochemical and cellular studies that provide an overwhelming weight of evidence that fluoride is neurotoxic. These include one hundred thirty human brain studies;²⁷ two hundred forty-one animal brain studies;²⁸ thirty-three cellular brain studies;²⁹ and thirty review studies.³⁰

FLUORIDE AND HYPOTHYROIDISM

In the 1930s, '40s and '50s, doctors in Argentina, France and Germany used sodium fluoride to lower the activity of the thyroid

gland for those suffering from hyperthyroidism (overactive thyroid gland).³¹⁻³⁷ Despite this knowledge, government agencies in the U.S. and other fluoridating countries have never seen fit to investigate a possible relationship between fluoride exposure and the rising level of hypothyroidism in their countries. Only recently have scientists reviewed the matter.³⁸⁻⁴¹

A 2018 study, reported that while they could find no relationship between fluoride exposure and TSH levels (thyroid stimulating hormone and an indicator of hypothyroidism) and fluoridation status among the general population, they did find that for those who had low or even borderline iodine intake, fluoride exposure was associated with an increase in their TSH levels.⁴²

The importance of this finding is that it gives a very plausible mechanism for why fluoride might lower IQ in children born to mothers with high fluoride exposure. When the fetus comes into existence it has no thyroid gland. It is entirely dependent on the mother's thyroid levels for its early mental development. So any depression in the mother's thyroid hormone levels will increase the risk of lowered IQ in their offspring (see Vyvyan Howard's explanation of this situation in a PowerPoint presentation he gave in New Zealand in 2018).⁴³

WARNING PREGNANT WOMEN

One of the sad consequences of the medical community's acceptance of the safety-andeffectiveness argument for water fluoridation, based upon dogma rather than upon the latest science, is that many doctors are oblivious of these findings. The result is that women are not being warned to avoid fluoride exposure during pregnancy. They are not being warned by their doctors, by health departments, by professional bodies or by the media. It has been left to nongovernmental bodies like FAN to get the word out the best we can via social media, the Internet (see the Moms 2B Campaign),44 press releases,45 leaflets and talks. We have been trying to do so since 2017, but it is an extremely difficult task, as is the continuing battle to try to end the wellentrenched practice of water fluoridation.

LAWSUIT PROVIDES NEW HOPE

In November 2016, the Fluoride Action

Network, along with Food & Water Watch, the American Academy of Environmental Medicine, the International Academy of Oral Medicine and Toxicology, Moms Against Fluoridation, the Organic Consumers Association and individuals, petitioned the EPA⁴⁶ to ban the deliberate addition of fluoride to public drinking water under provisions in the Toxic Substances and Control Act.

We argued that "[t]he risk to the brain posed by fluoridation additives is an unreasonable risk because, *inter alia*, it is now understood that fluoride's predominant effect on tooth decay comes from topical contact with teeth, not ingestion. Since there is little benefit in swallowing fluoride, there is little justification in exposing the public to any risk of fluoride neurotoxicity, particularly via a source as essential to human sustenance as the public drinking water and the many processed foods and beverages made therefrom. The addition of fluoridation chemicals to water thus represents the very type of unreasonable risk that EPA is duly authorized to prohibit pursuant to its powers and responsibilities under Section 6 of TSCA, and Petitioners urge the Agency to exercise its authority to do so."

In September 2017⁴⁷ the EPA rejected our petition on its scientific merits. In response to an appeal from FAN, a federal court denied EPA's motion to dismiss in December 2017.⁴⁸

Also in December 2017⁴⁹ the EPA argued that no other studies should be added to the case after our petition was first delivered to them in November 2016. The court disagreed with EPA⁵⁰ and ruled to allow new studies, such as those by Bashash and others discussed above. A trial date has been set to take place in federal district court in San Francisco in August 2019.

We are confident that we can win this case. In order to do so, it will require us to demonstrate three things: 1) that fluoride poses a hazard to the developing brain; 2) that there is a risk at current exposure levels (from all sources combined) in fluoridated communities; 3) that this is an unreasonable risk because there are other ways that tooth decay can be prevented.

Moreover, even if fluoride is one of those alternatives, there are other and more appropriate ways of delivering fluoride to the surface of teeth than putting fluoride into the drinking water. Indeed, the majority of countries worldwide that do not fluoridate their water have actually demonstrated this over many years.

SUMMARY AND CONCLUSIONS

There are many ethical and scientific arguments against the seventy-year practice of water fluoridation. The evidence that swallowing fluoride reduces tooth decay remains weak. Not a single randomized controlled trial has been attempted to demonstrate this, and promoters have relied on studies with far weaker methodologies. Meanwhile, the number of studies that indicate harm can be caused, even at the doses experienced in fluoridated communities, has been growing, particularly studies on the brain. 20,22,24,42,46

With such risks on the table, it is unconscionable, in our view, that governments continue to promote the deliberate addition of a known

ELEVEN ARGUMENTS WHY FLUORIDATION SHOULD BE ENDED

- 1. **Fluoridation is unethical.** Using the public water supply to deliver dental therapy goes against all recognized principles of modern pharmacology and ethical healthcare practice. It imposes medication on all water consumers indiscriminately and without the individual's informed consent. These include the unborn, bottle-fed infants, persons with chronic diseases known to be aggravated by fluoride (such as poor kidney function), the poorly nourished (such as those with low iodine intake) and the elderly. It does so with uncontrolled dosage, no monitoring of adverse effects and no possibility of avoiding treatment for most, if not all, people. This is especially true for those on a low-income budget who simply cannot afford avoidance measures like reverse osmosis filtration systems.
- 2. **Fluoridation is unusual.** The vast majority of countries worldwide do not fluoridate their drinking water. Out of one hundred ninety-six countries, only twenty-four have any fluoridated cities, and of those, only ten, including the U.S., fluoridate more than half their population. Ninety-five percent of the world's people drink water without artificial fluoridation. Over half of those who do, live in the U.S. In Europe, where forty-three out of forty-eight nations have no water fluoridation, 98 percent of the population is not forced to drink fluoridated water. A few European countries (namely France, Germany, Switzerland and Austria) have fluoridated salt available, but people are not forced to buy this salt, as non-fluoridated salt is also available. Despite this, World Health Organization (WHO) data⁶¹ indicate that since the 1960s, tooth decay in twelve-year-olds has been coming down as fast in non-fluoridated countries as in fluoridated ones.
- 3. Children in fluoridated communities are being grossly over-exposed to fluoride. In the U.S. and other fluoridated countries, there has been a dramatic increase in young children and teens in the prevalence of dental fluorosis (discoloration of tooth enamel caused by low-level systemic fluoride toxicity during tooth formation). This condition indicates that children have been grossly over-exposed to fluoride before their permanent teeth have erupted. The latest national survey indicates that over 60 percent of U.S. teens have dental fluorosis. 52,53 Of those, 24 percent have moderate and nearly 2 percent have severe levels of the disease. These levels can produce yellow and brown staining and structural damage to the enamel. To put this into context, the early promoters of fluoridation anticipated only 10 percent of the children in fluoridated communities would be affected by this condition, and these would be only in the "very mild" category. They believed that this was an acceptable trade-off for reducing tooth decay. Even avid promoters of fluoridation no longer accept that the current prevalence rates as acceptable but they tend to blame other sources of fluoride—rather than water fluoridation—for the dramatic increase. In reality, every source of fluoride ingested contributes to this prevalence. The contribution from water fluoridation can be eliminated with a simple policy change.
- 4. **Fluoride has the potential to damage many other tissues.** Because of the prevalence of dental fluorosis, there is no question that fluoride can damage the developing teeth. Nor is there any question from the evidence provided in countries with large areas of endemic fluorosis (such as India and China) where millions of people have both dental and skeletal fluorosis, that high doses of fluoride can damage other tissues including bones, connective tissue, the brain, the endocrine system, the gut and kidneys. The Indian Ministry of Health & Family Welfare⁵⁴ provides an excellent description of the problems faced by thousands of villages poisoned by fluoride. For the Western world, much of this evidence was provided in a comprehensive review of the literature conducted by the National Research Council of the National Academies in 2006.¹⁶ What has emerged since 2006 is a growing body of evidence that this harm can occur at doses experienced in artificially fluoridated communities.
- 5. **Fluoridation is unnecessary.** Fluoride is not an essential nutrient. No one has ever demonstrated that a single biological process in the human body needs fluoride to function properly. There is no such thing as a "fluoride-deficiency" disease. Children can have perfectly good teeth without ingesting fluoride. Even promoters of water fluoridation admit that the predominant benefit of fluoride is topical, not systemic. 55-58 Thus, it is morally indefensible to force people to ingest fluoride via the public water supply, when for those who want fluoride,

fluoridated toothpaste is universally available. Moreover, the fluoride used in toothpaste is pharmaceutical grade whereas the fluoride used to fluoridate water is an industrial grade hazardous waste product from the phosphate fertilizer industry.²⁵

- 6. **Today's fluoride is worse.** The fluoridating chemical used in over 90 percent of the fluoridating communities in the U.S. is a substance called hexafluorosilicic acid (H2SiF6). This substance is removed from the scrubbing systems of the phosphate fertilizer industry as a 23-25 percent solution. It is contaminated with trace amounts of other toxic substances including aluminum, arsenic, lead and radioactive isotopes (the same ore that is mined for fluoride in Florida is also mined for uranium). Ironically, this waste product cannot be dumped into the sea by international law, but health authorities blandly allow it to be put untreated into the public water supply!
- 7. Fluoride is very toxic and nature has developed protection mechanisms for many living things. For lower creatures like bacteria and fungi, there are genes—switched on by high levels of fluoride—which code for proteins called fluoride exporting proteins (FEX proteins). These proteins are located in the cellular membranes and pump fluoride out of the cell.²⁶ In mammals, the kidney excretes about 50 percent of fluoride ingested each day from healthy individuals, and most of the rest is rapidly sequestered in hard tissues like the bones. Importantly, the human breast appears to act as a fluoride filter for the new born baby. The level in mothers' milk is remarkably low (0.004 ppm).²⁷ Thus, a bottle-fed baby, when the formula is made up with fluoridated tap water (0.7 to 1.2 ppm), will get approximately two hundred times more fluoride than a breastfed infant (that is, two hundred times more than nature intended).
- Fluoridation is unscientific. Fluoridation is promoted with PR techniques like endorsements, not with sound science. Most of the endorsements were made shortly after the U.S. Public Health Service endorsed water fluoridation in 1950 with virtually no science on the short-term—let alone long-term—health effects. Citizens should be very wary of taking such endorsements at face value unless they are accompanied by an up-to-date review of the literature—and very few are. Incredibly, in over seventy years there has been no randomized control trial (RCT) to demonstrate that swallowing fluoride lowers tooth decay. As far as the U.S. Food and Drug Administration (FDA) is concerned, an RCT is the gold standard for approving new drugs. According to the FDA, fluoride is an unapproved drug²⁸ and the FDA has never approved fluoride tablets for ingestion. Many decision makers and journalists around the world are impressed when they read the notorious statement from the CDC in 1999 that "Fluoridation is one of the top public health achievements of the 20th century." However, what they may not realize is that this statement did not come from the CDC itself (which has about thirty thousand employees, many of whom are highly qualified in many medical fields as well as toxicology) but from the CDC's small Oral Health Division with only thirty employees, most of whom only have dental qualifications. Moreover, their job is defined as promoting fluoridation. They even admit to not following—or being responsible for—the science pertaining to fluoride's harmful effects. Journalists and others have been impressed by a public relations exercise by a promotional body, not by a body that maintains a careful overview of any harm the practice may be causing.
- 9. **Health risks are ignored in fluoridated countries.** Sadly, because the imposed dental practice of water fluoridation is so entrenched in the psyche of the medical, dental and public health establishments in fluoridated countries, neither governments nor the mainstream media are warning the public about the large and growing body of scientific research³⁰ that shows that fluoride exposure poses many health risks.
- 10. **Fluoridation violates the precautionary principle.** The scientific evidence that swallowing fluoride lowers tooth decay is weak,³¹ but the weight of evidence that it causes harm to the developing brain is so one-sided, that to wait for further studies before halting the deliberate addition of fluoride to water is a rash and irresponsible public health position.
- 11. **Fluoridation violates the principles of environmental justice.** The addition of fluoride to public water is an environmental injustice to people living in poverty in fluoridated areas who do not have access to alternative water sources and are captive to tap water for all their water needs. Moreover, it is well established that those with poor nutrition are more vulnerable to fluoride's toxic effects, and poor nutrition is more likely to occur among those with low incomes.

neurotoxic and endocrine-disrupting substance to the drinking water of millions of people, most of whom have not been informed of the risks involved, or been given the opportunity to give—or refuse—their consent on the matter.

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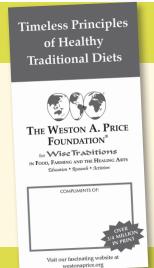
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Reading Between the Lines

By Merinda Teller

Children's Love Affair with Tablets: Neither Cute nor Harmless

Children and their developing nervous systems are uniquely vulnerable to radiofrequency radiation.

In 2010, Apple launched its first iPad. The event made a big splash in the tech marketplace, almost instantly transforming tablets from "fictional gadgets from the future" into "essential everyday companions." More significantly, the iPad and other tablet brands began reshaping consumer expectations, feeding an insatiable demand for kid-friendly hand-held devices—and young children became some of the tablets' most avid users. By 2017, almost four in five U.S. families with young children had a tablet in the home. In fact, as one reporter quipped, "If you are an adult in possession of both a tablet and children, the children are likely to take possession of the tablet."

Children's ready adoption of these enticing accessories has drawn praise from some quarters and consternation from others. For example, after a research team in the UK conducted studies seeming to show that the devices accelerated certain developmental milestones,6 the investigators enthusiastically gushed that "tablets should be part of a baby's world from birth."7 On the other hand, a Harvard expert who has questioned the wisdom of tablet use by very young children reminds parents of the irreplaceable importance of experiential learning—the feeling of paint "squishing through...fingers."8 Even the American Academy of Pediatrics (AAP)—a trade organization not otherwise known for adopting enlightened positions on child health—crafted a policy statement warning of the potential for harm from "excessive digital media use" and agreeing that what young children need most is "hands-on exploration and social interaction with trusted caregivers."9

As some developmental experts inch toward branding young people's diet of empty media "calories" as a public health issue, 10 there is another set of dangers that has remained largely off the table in discussions about children's screen

time—namely, the risks associated with the radiofrequency (RF) electromagnetic radiation that tablets and other mobile devices produce.¹¹ This concern should be paramount, however, because children and their developing nervous systems are uniquely vulnerable to RF radiation.¹² Over a decade ago, a group of researchers was already cautioning that because exposure to manmade RF radiation is widespread, even the smallest effects "can have large public health consequences."¹³

THE EVIDENCE IS IN

In 2014, a news report on young people's use of tablets asserted that "the dangers of tablet use for children—if dangers exist—are as yet unidentified."5 This disingenuous opinion ignored the game-changing pronouncement made a few years earlier (in 2011) by the World Health Organization's International Agency for Research on Cancer (IARC), which classified the RF radiation from cell phones and comparable devices as a "possible human carcinogen."14 IARC members clarified that this carcinogenic potential held for "all types of radiation within the radiofrequency part of the electromagnetic spectrum, including the radiation emitted by base-station antennas, radio/TV towers, radar and Wi-Fi."15 And, in terms of radiation effects. all of the wireless devices commonly used by children—tablets, laptops and smartphones— "pack the same punch under the hood."16

In 2018, the U.S. National Toxicology Program (NTP) reinforced IARC's warnings by releasing findings from a rigorous twenty-five-million-dollar cell phone study that bumped the evidence of carcinogenicity up from "possible" to "conclusive." The senior scientist who led the design of the study stated, "We can no longer assume any current or future wireless technology is safe." Although many of the media

outlets downplayed the significance of the NTP study, word has gotten out to many parents about the risks that cellular and wireless technologies pose for children. In a brief survey conducted by the Environmental Working Group (EWG), to which over twenty-one thousand people responded, over 95 percent of respondents were "extremely" or "very" concerned about young children using cell phones and wireless devices such as tablets.¹¹

CONSTANT BURSTS

When people use tablets to connect to the Internet, they can go online in one of two ways: through Wi-Fi or by connecting to a cellular network. However, even when the user is offline, the radiation does not "automatically stop." In fact, wireless tablets emit "constant bursts" of pulsed RF electromagnetic radiation—up to nine hundred times every hour.¹⁹ The same holds true for wireless-enabled laptops, which are "always 'checking in' and searching for a Wi-Fi connection."²⁰ Why is this the case? As the Environmental Health Trust (EHT)—an education and research organization focused on wireless technologies and other environmental health hazards—explains:¹⁹

Tablets "have up to five transmitter antennas emitting radiation as a beacon signal that transmits even when the internet is NOT being used.... The bursts continue because the tablet antennas 'check in' with what is called a 'digital handshake' to the base network which is usually a Wi-Fi router or hotspot, or a nearby cell tower. If the network signal strength is low, then the tablet's radiation burst is higher. This digital handshake continuously repeats."

As EHT and others point out, children do not usually heed the fine-print warnings that come with tablets and laptops. Tablet manufacturers tell users to avoid direct contact with the transmitting antenna or to place the antenna away from the body, but instead, "many children will lie down on the floor with a tablet very close to their face, exposing their eyes and brain." With small children's heads more directly in front of the antenna, "the radiation will more

directly penetrate their head, neck and chest area."²⁰ Italian researchers who analyzed different tablet and laptop exposure conditions (that is, "antenna at different distances..., in different positions and orientations") for male and female preteens and young adults found that young people tended to absorb the most RF energy "in more sensitive organs such as eye, genitals, and breast."²¹

Children (and many parents) are also unlikely to be aware of the Federal Communications Commission's (FCC's) obsolete guidelines for human exposure to RF electromagnetic fields, which were last updated over twenty years ago, well before today's more powerful devices had entered the marketplace. Even at that time, however, the FCC specified that mobile devices were "designed to be used... in such a way that a separation distance of at least 20 centimeters [about eight inches] is normally maintained between radiating structures and the body of the user or nearby persons."22 Yet as a children's advocacy organization has commented, for small children "it is almost impossible to follow FCC recommendations and keep 8 inches from the body."20 The AAP has criticized the FCC regulations for not being strict enough to protect children.

THE DIGITAL INVASION OF SCHOOLS

With growing awareness of mobile devices' powerful effects, discerning parents are taking steps to mitigate wireless risks at home. They have little control, however, over their children's wireless exposure at school. Over an astonishingly short period of time, wireless tablets and lightweight laptops have inundated U.S. classrooms. Cheery news accounts herald tablets and laptops as a way to "sustain students' interest," "reward their achievements" and keep students up to date on "the latest events or research."23 By 2014 (just four years after the introduction of the iPad and three years after Google's introduction of its Chromebook laptop²⁴), roughly three in five schoolchildren in grades three or higher had access to a tablet or laptop—as well as 41 percent of children in grades K-2.25 By early 2018, the Chromebook's relative affordability and Google's "robust partnership program" with schools had allowed the Chromebook to claim

Wireless tablets emit "constant bursts" of pulsed RF radiation—up to nine hundred times every hour.

The FCC's decades-old guidance on RF exposure does not reflect "current science and newer exposures, especially to children."

60 percent of the school computer market. 24,26

As these statistics suggest, the push to swap textbooks for tablets has been very good for business, particularly given the near-saturation of demand for mobile devices in other corners of the consumer market.²⁷ According to a 2013 report in *Bloomberg*, "tech companies are falling back on the old adage: get 'em while they're young"—and "if you're looking for young people, there's no better place to find them than in schools."²⁷

Common Core provides a clear example. The bold Bill & Melinda Gates Foundationbacked initiative is now acknowledged by no less than Bill Gates himself to have been an educational flop,²⁸ and a disappointment to parents, students and teachers alike. Nonetheless, Common Core was a "huge boon" for the tech industry, inspiring a "gold rush" to supply the iPads and laptops on which the digital curriculum was meant to be delivered.²⁹ The devices were also central to Common Core's push for "individually adaptive computerized assessment"30 and the collection and cloud storage of troves of "Big Brother" data on schoolchildren.31 Although the initiative appears to have tanked (for now), Common Core encouraged a new level of "corporate encroachment in public education"32 that may be here to stay.

With such strong incentives to push the wireless revolution forward in schools, the technologies' impact on schoolchildren's health has, once again, been a nearly invisible topic of discussion. In some states, however, concerned citizens have nudged officials to take a closer look. In Maryland, for example, the Maryland

Children's Environmental Health and Protection Advisory Council (an advisory body to the state's General Assembly and state agencies) undertook an "expansive" investigation after hearing from parents worried about schools' increasing use of wireless tablets and laptops.³³ Parents expressed concerns about health risks as well as frustration over their lack of any say over their children's in-school exposure to Wi-Fi radiation.

Guided by a literature review, a medical presentation, public meetings and emails from citizens, the Maryland Council considered "chronic health effects such as cancer, as well as chronic and acute effects such as impacts on vision..., and non-health outcomes such as educational performance." One of the critical insights produced by the review was that the FCC's decades-old guidance on RF exposure does not reflect "current science and newer exposures, especially to children." Thus, the Council recommended that Maryland's Department of Health and Mental Hygiene ask the U.S. Department of Health and Human Services (HHS) "to formally petition the FCC to revisit the exposure limit to ensure it is protective of children's health and that it relies on current science."33 (For the council's additional suggestions, see "Recommendations at School.")

Ironically, schools' uncritical rush to get a tablet or laptop into every student's hand has given rise to some unanticipated problems. For example, after purchasing iPads for fifty thousand students at almost fifty schools, the Los Angeles Unified School District encountered challenges with keeping the devices "secured"

RECOMMENDATIONS AT SCHOOL

An investigation on school-based Wi-Fi risks conducted by the Maryland Children's Environmental Health and Protection Advisory Council resulted in a number of recommendations for local school systems:³³

- Use wired instead of wireless devices wherever possible.
- Have children place devices on desks "to serve as barrier between the device and children's bodies."
- Locate laptops in a way that "keeps pupil heads as far away from the laptop screens (where the antennas are) as practicable."
- Use a switch to shut down Wi-Fi routers when not in use.
- Teach children to turn off Wi-Fi when not in use.
- Place routers as far away from students as possible.
- Fund research on the health effects of electromagnetic radiation in schools.
- Educate parents and the public on ways to reduce exposure.

overnight and on weekends.³⁴ The district also discovered that students could easily breach the security measures that were supposed to keep them from visiting websites such as Facebook and YouTube.

More troubling than these hassles, however, are the indications that school performance (especially reading and mathematics) is deteriorating in the countries that have "invested the most in introducing computers in schools." Children's ability to store memories and knowledge is declining due to the rapid shifting of focus between tasks, and devices are pulling time and concentration away from schoolwork due to users' constant access to messages and "digital amusements." 35,36

In Uruguay—which launched an ambitious One Laptop Per Child initiative in 2006 (called *Plan Ceibal*)—evaluations have repeatedly showed no improvement in students' academic results at any socioeconomic level; the report describing the lack of improvement states that the findings are consistent "with most of the literature on the impact of the use of computers for learning, which found null or negative results." However, this has not stopped *Plan*

Ceibal's proponents from pushing for a nationwide wireless network and a massive Internet of Things infrastructure, ostensibly to ensure efficient "device maintenance and replacement" and reduced "downtime" for users.³⁸

IMPACTS COMING HOME TO ROOST

The twenty-first century has been marked by "aggressive development" of wireless communications, including not only the proliferation of mobile phones and Wi-Fi but also "exponentially increasing RF radiation from base stations and satellites"—translating into nonstop exposure, for "both biosphere and mankind," to a "multitude of...RF signals." Although these technological developments have brought social and economic benefits to some sectors of society, many experts are deeply concerned about our inability to assess, predict and manage the health consequences. 13,39

The literature already documents a number of troubling spillover effects on health, including ergonomic problems; increased risk of overweight and obesity; impaired development of mirror neurons; declining empathy; risk of depression and other mental health problems;

School performance is deteriorating in the countries that have "invested the most in introducing computers in schools."

RECOMMENDATIONS AT HOME

At home, the safest option is to eschew wireless connections entirely and use only wired (Ethernet) connections. Although this option may seem quaint to those who have grown accustomed to "anytime, anywhere" access, Ethernet connections offer greater peace of mind in terms of radiation exposure. The Environmental Health Trust (EHT) points out, for example, that "more data = higher radiation," meaning that wireless streaming of music or videos will produce a higher radiation intensity. Instead of streaming, EHT recommends either pre-downloading or watching or listening using a wired connection.

EHT offers the following additional recommendations for safer tablet (or laptop) use:19

- Set up wired Ethernet connections throughout the home.
- If you choose to stick with Wi-Fi rather than wired connections, turn off the router at night and keep the router away from bedrooms.
- Do not purchase a tablet unless it can be used non-wirelessly. Connect the tablet (or laptop) to Ethernet with an adapter and cord. The adapters will vary depending on the tablet's make and model.
- Turn on airplane mode.
- Set the Wi-Fi, Bluetooth and other antennas to OFF (this requires careful checking).
- Always place the tablet on a table, not the body, even when wireless antennas are turned off.
- Do not use devices when there is a poor connection.
- Avoid using devices in cars, elevators, trains and buses.

Other recommendations pertinent to children include keeping electronic devices out of children's bedrooms and turning off all screens at least thirty minutes before bedtime. Never allow children to sleep with a wireless device under their pillow (this also applies to college students)!

"No other environmental carcinogen has produced evidence of an increased risk in just one decade."

sleep problems; and an increased risk of attention deficit hyperactivity and conduct disorders.³⁵ Of even greater concern, cancer is now the second leading cause of death for five-to-nine-year-olds, the third leading cause of death for the very youngest children and preteens, and the fourth leading cause of death for young people between the ages of fifteen and thirty-four.⁴⁰ Pediatric rates of brain cancer—as well as of liver, kidney and thyroid cancers—increased between 2001 and 2014 "across sex, age, race/ethnicity, region, economic status, and rural/urban status." Similar childhood cancer trends are playing out in Europe.⁴²

Although many aspects of modern life are undoubtedly contributing to these developments,⁴³ few are as unrelenting or pervasive as RF electromagnetic radiation. In 2013, Swedish researchers found a fourfold increased brain tumor risk in children who began using mobile devices before age twenty. They pointed out that "no other environmental carcinogen has produced evidence of an increased risk in just one decade."⁴⁴ Because policy- and decisionmakers seem disinclined to heed the warning signs, the burden continues to fall on parents to educate their children and control risks (see "Recommendations at Home").

At the same time, it is important for all citizens to continue to pressure school admin-

istrators and legislators—at the local, state and federal levels—to do something about the growing risks outside the home (see "5G update"). The stakes are very high not just for children but for all of us.

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5G UPDATE

The global rollout of 5G networks and technology is unfolding at a fast and furious pace, ⁴⁵ despite intense opposition from citizens, scientists and medical professionals alarmed by the technology's serious risks to human health and the environment. Ground-based 5G infrastructure involves placement of millions of small cell towers on virtually every street corner, but in addition, this infrastructure will soon be supplemented by thousands of low-Earth-orbit 5G communication satellites. ⁴⁶

Martin Pall, PhD, professor emeritus of biochemistry and basic medical sciences at Washington State University, recently declared that "Putting in tens of millions of 5G antennae without a single biological test of safety has got to be about the stupidest idea anyone has had in the history of the world." Dr. Pall, who is "particularly expert in how wireless radiation impacts the electrical systems in our body," also says that wireless technology hazards are creating a public health crisis that is "the worse one I've ever heard of."

Thus far, over forty-eight thousand signatories from around the world have signed on to the *International Appeal* to *Stop 5G* on *Earth and in Space* (still available for signing at 5gspaceappeal.org/the-appeal/), addressed to the United Nations, World Health Organization, European Union, Council of Europe and governments of all nations.⁴⁹ The *Appeal* "urgently calls for a halt to the deployment of the 5G...wireless network, including 5G from space satellites," describing 5G deployment as "a crime under international law." The *Appeal* makes reference to a literature base of "well over 10,000 peer-reviewed studies" documenting that RF radiation is overwhelmingly harmful to all life on the planet. The planned 5G deployment "threaten[s] to provoke serious, irreversible effects on humans and permanent damage to all of the Earth's ecosystems."

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THREAT TO VACCINE EXEMPTIONS IN COLORADO

Vaccine activist Del Bigtree and more than two hundred fifty adults packed a hearing on vaccine choice in Colorado. They met with Representative Kyle Mullica, sponsor of a potential



bill to remove all vaccine exemptions. Mullica had not even heard of the Vaccine Adverse Event Reporting System (VAERS) nor of the lack of double-blind placebo studies. Religious and philosophical exemptions are under threat in many states this year, including Colorado, Washington and New York.



The Wise Traditions Pantry

ESSENTIAL RECIPES FOR THE WISE FAMILY By Maureen Diaz

There are certain recipes that are essential to every wise traditional cook. For good health and tremendous flavor, here are a few of what I consider to be the most basic recipes that every good cook should master. And all made easy!

GOOD HEALTH AND FLAVOR WITH STOCKS

Stocks and broth are the backbone of classic recipes in many cuisines from around the world. They are made from the bones, skin, connective tissues and flesh of land and sea animals. For instance, you can use a whole chicken or a roasted chicken carcass—or a bone-in roast or just the beef bones (see "Making a Great Stock or Broth"). Enhanced with the flavors of herbs and vegetables, the concentrated flavors and nutrients of stocks and broths provide both enjoyment for the palate and healing to the body.

If you are able to acquire the feet of any animal (cleaned), toss them into your stock or broth for added nutrition and healing collagen and gelatin. I buy bags of chicken feet from one of my farmers and throw a few in the pot when making chicken stock. Neck and back bones also

add extra potency and flavor.

Stocks and broths can be used at full strength for a variety of dishes, including soups, stews, gravies, and as the liquid to cook rice or other grains. The delicious flavor can also be increased by gently reducing the defatted stock at a simmer, uncovered, for several hours, or, for faster results, by boiling it down. (Save the fat for sautéing or adding to vegetables.) The flavor will also be tremendously enhanced by adding stock that has already been made, adding a little wine or brandy and including seasonings such as mustard, herbs, tomato paste or lemon rind. The resulting reduction—or "consommé"—is the basis for all great sauces and can be added in small amounts to vegetable dishes and casseroles for a real boost in flavor.

MAKING A GREAT STOCK OR BROTH

Stock

One whole chicken or 3-4 pound roast (beef, venison, pork or lamb)

1/4 cup vinegar

1 yellow onion

3-4 cloves garlic

1-2 carrots and 1 stalk celery

Herbs (bay leaf, thyme, parsley)

Coarse unrefined salt and peppercorns

Instructions:

- 1. Place the whole chicken or roast in a stock pot. Add vinegar (I generally use apple cider vinegar, but other vinegars may be used) and cover with water (preferably filtered).
- 2. Peel and quarter the onion and smash and peel the garlic cloves and drop these in the pot.
- 3. Add carrots and celery stalk, coarsely chopped.
- 4. Complete the mix with a bay leaf, a few sprigs of thyme tied together (or one tablespoon dried thyme), two to three teaspoons of coarse salt and a few peppercorns.
- 5. Let the pot sit for one hour.
- 6. Bring the contents to a gentle simmer (don't boil) and let the pot simmer for at least twelve hours, skimming any impurities that rise to the top.
- 7. Add a large sprig of fresh parsley at the very end to round out the flavor.
- 8. Strain the liquid, picking and retaining the bits of meat off the bones for use in soups or other dishes.

For broth, the procedure is basically the same, with the added step of roasting the bones first, which greatly enhances the flavor. (Carcasses from roasted poultry do not require a second roasting, however.)

CONDIMENTS GALORE

Who doesn't love ketchup on a burger, dressing on a salad or mayonnaise on a sandwich? The trouble is, most commercially available products, even when "organic," are made from health-compromising rancid oils, loads of sugar and powdered eggs whose proteins have been damaged. Fortunately, making your own condiments need not be difficult.

Traditional condiments are made using

simple fermentation methods (see "Three Simple Condiments"). Sauer-kraut is the most basic and will give you a vibrant condiment with juices ready for the preparation of other condiments. Kraut need involve no more than shredded cabbage and salt, possibly with a little added water for additional moisture (and brine for drinking). I use sauerkraut liberally to top salads, as a side for burgers or as a vegetable accompanying any meat. The juice is also very useful for treating stomach complaints and aids in detoxification.

A basic ketchup can be made using a mixture of crushed tomatoes and tomato paste, a little juice from the fermented sauerkraut (or whey)

THREE SIMPLE CONDIMENTS

SAUERKRAUT

- 1. Shred desired quantity of cabbage into a large bowl.
- 2. Add unrefined salt (about 1 tablespoon per medium-sized head of cabbage), working salt in with clean hands.
- 3. Let the cabbage sit for about twenty minutes to allow the salt to bring out the juices, adding water if needed. It is not necessary to macerate the cabbage.
- 4. Adding a few herbs such as dill or caraway seeds, and chunks of apple or garlic (not both) take the flavor from basic to marvelous. My favorite? I add thin slices of cucumbers, dill and a little garlic (or juice from fermented pickles) for a really delicious summertime kraut.
- 5. Pack tightly into either a stoneware crock or glass jars and let sit at room temperature, with an airlock or daily "burping," for at least five days.

MAUREEN'S FERMENTED KETCHUP

- 29-ounce can Muir Glen fire roasted tomato purée
- 2 tablespoons raw apple cider vinegar
- 2 tablespoons whey (liquid, unpasteurized) or juice from kraut, pickles or kimchi
- 1/2 tin anchovies in olive oil
- 1/4 large green pepper, sliced
- 1-2 tablespoons raw honey
- 2 cloves fresh garlic
- 2 teaspoons basil
- 2 teaspoons salt
- 1 teaspoon ground mace, 1 teaspoon dry mustard, 1/2 teaspoon powdered chipotle
- 2 pinches each ground cinnamon and nutmeg

Instructions:

- 1. Purée the ingredients in a blender, Vitamix or with an immersion blender.
- 2. Let sit at room temperature for several hours to culture. Makes about one quart.

MAYONNAISE

- 2 whole eggs and 1 egg yolk from pastured hens
- 1 1/2 tablespoons fresh lemon juice and 1 1/2 tablespoons juice from a ferment (such as sauerkraut or pickles) 1/2 to 1 teaspoon salt
- 1 teaspoon Dijon or whole-grain mustard
- 1 1/2 to 2 cups good-quality olive oil

- 1. Pulse or blend (using a small food processor, blender or immersion blender) the eggs, lemon juice, ferment juice, salt and mustard.
- 2. Add olive oil in a slow, steady stream with the motor on high speed until desired thickness.
- 3. Alternatively, put everything in a wide-mouthed jar and use immersion blender on high speed for about twenty seconds.

and seasonings. I use anchovies (flat fillets in olive oil) as a seasoning in place of fish sauce and find it much easier and less costly. Mustard is also easy to make and more delicious than most store brands.

I make at least one quart of mayonnaise per week for a variety of purposes. If you wish, you may use bacon fat, avocado, avocado oil or a percentage of cold-pressed organic sunflower or flax oil to replace part of the olive oil. To make aioli, just add one or two cloves of garlic. Adding various herbs can also take your mayo from merely good to extraordinary.

A salad dressing can be as simple as a three-to-one ratio of olive oil and vinegar of your choice (or lemon juice). Adding fresh herbs and allowing the dressing to sit for several hours (or days) adds another flavor dimension (see "Three Simple Salad Dressings").

SAUCES DEMYSTIFIED

There are many sauces that add depth and dimension to a variety of foods, but I'll cover just a few that I consider essential for most home kitchens.

First, there is a classic white sauce—the basis for most casseroles, including macaroni and cheese. Although this sauce is customarily made in a saucepan over heat, for most applications, it need not be (see "Two Ways to Make a White Sauce"). A basic white sauce is always made with butter, but if you are using the white

THREE SIMPLE SALAD DRESSINGS

BASIC SALAD DRESSING

1 cup good-quality olive oil

1/4 cup good vinegar

1 teaspoon honey

1/2 teaspoon salt

1 teaspoon Dijon mustard

1 sprig fresh tarragon (or a mixture of fresh rosemary, thyme, basil and/or marjoram) or dried herbs

Instructions:

- 1. Starting with the olive oil, add the other ingredients.
- 2. If using dried herbs, remember that their flavor is more concentrated, so use half as much as fresh.
- 3. You can make the dressing creamier by adding a little sour cream.

GLORIFIED CAESAR SALAD DRESSING

- 2 cloves garlic, minced
- 8 anchovy fillets
- 1 1/2 teaspoons fresh lemon juice and 1 1/2 teaspoons juice from fermented sauerkraut, pickles, or kimchi
- 2 whole eggs
- 1 egg yolk
- 3 tablespoons aged Parmesan or Romano cheese, freshly grated
- 1 tablespoon black olive tapenade (optional but delicious!)
- 1-2 teaspoons raw honey
- 1 teaspoon Dijon mustard
- 1 teaspoon salt
- 1 ripe avocado
- 1/2 cup sour cream
- 1/3-1/2 cup high-quality olive oil

Instructions:

- 1. Blend the garlic, anchovy, lemon juice and ferment juice and let rest for five to ten minutes. A stick blender makes fast and easy work of this dressing.
- 2. Alternatively use a Vitamix or upright blender (but at step #4, add the oil in a very fine stream, slowly).
- 3. Add the eggs, egg yolk, cheese, tapenade, honey, mustard and salt, and blend.
- 4. Add avocado, sour cream and olive oil.

MAYONNAISE-BASED SALAD DRESSING

A delicious mayonnaise-based salad dressing can be made by adding chopped blue cheese, scallions or red onions and a few drops of good vinegar (apple cider, rice or white wine vinegar) to a cup of mayonnaise.

sauce in any type of baked dish (or cooked on the stovetop as part of a recipe), it is an easy thing to add soft butter to warm ingredients (as in cooked pasta, rice or vegetables), and then stir in the rest of the pre-mixed sauce ingredients. For example, I cook my rice or sprouted grain pasta first, toss it with butter and cheese and stir in the uncooked white sauce mixture. Then, I pour all the combined ingredients into a casserole and bake. The oven heat cooks and thickens all at once.

Second, most of us enjoy a good Italianstyle tomato sauce, whether over pasta or vegetables. It is quite easy to make and need not take hours of simmering, although the longer it simmers, the more flavorful.

The final "sauce" that I consider not truly essential but highly valuable is not actually a sauce, but more of a paste that can be added to other sauces. This "umami" paste—which adds amazing flavor to many sauces, meats and stews, and can be spread on a burger or sandwich—represents the concentrated "fifth

taste" after sweet, sour, salty and savory. A little goes a long way, so I only use about one to two tablespoons in a pot of soup, or even less in a casserole. The paste relies heavily on anchovies and fermented soy for its intense flavor (see "More Sauces. . . and Dessert").

BAKING MIXES FOR BREAKFAST AND BEYOND

We all want a baked treat now and then, or pancakes or waffles for breakfast. In my home, I like to keep a mix or two ready so that my kids can whip up a quick breakfast or dessert to share. The basic ingredients are the same for both, with adjustments in sweeteners, fats and flavorings as needed (see "Baking Mixes"). I make both sprouted grain and non-grain alternative mixes. If you have a food processor, you can put the fats in the mix ahead of time. If not, add the fats separately when using your mix.

You may also use instead a combination of alternative flours such as cassava, tiger nut, green banana, plantain, sweet potato, garbanzo bean or others. Please remember to avoid using harmful soy flour or starchy flours that can change the texture of your baked goods to glue—and which are also banned on most gut-healing protocols.

ONE LAST ESSENTIAL RECIPE: DESSERT!

Let's not forget dessert. One very simple, quick dessert that I believe should be included in every home cook's repertoire is panna cotta (see "More Sauces. . . and Dessert"). It can be adjusted in many different ways

TWO WAYS TO MAKE A WHITE SAUCE

BASIC MIX-AND-BAKE WHITE SAUCE

- 1 pint whole milk
- 2 tablespoons arrowroot powder
- 1 teaspoon salt
- 1/2 teaspoon ground mace
- 1 teaspoon yellow mustard (if for mac-n-cheese)
- Freshly ground black pepper

Instructions:

- 1. Add soft butter to cooked pasta, rice or vegetables.
- 2. In a separate jar or bowl, mix sauce ingredients with a whisk.
- 3. Pour over the other buttered ingredients, mixing together well.
- 4. Put into a buttered casserole dish and bake at 350° for 30 minutes.

STOVETOP WHITE SAUCE

Same ingredients as mix-and-bake white sauce PLUS

- 2 tablespoons butter
- 2 cups shredded cheese

- 1. In a small bowl, combine arrowroot and seasonings with 1/4 cup cold milk.
- 2. Heat the remaining milk (1 3/4 cups) in a saucepan with the seasonings.
- 3. When very hot, turn down the heat and add the arrowroot mixture, whisking briskly until thickened.
- 4. Remove from heat (overcooking will cause the thickening action of the arrowroot to break down).
- 5. Stir in butter. For a cheese sauce, add 2 cups of shredded cheese. (I like a combination of Emmenthal, Gruyère and a medium-aged cheddar or Gouda.)

with the addition of carob, fruits, mint and so forth. Just about anything you like in a dessert can be incorporated into this creamy, smooth delight!

So, there you have it—each of these are the essential recipes or formulas upon which I base most of our family's meals. Will you share some of your own as well? I'd love to know what you find most important in your own kitchen!

Maureen, her husband George and their family live on a Virginia mountaintop where she enjoys learning, teaching, growing and creating new things every day. Maureen has produced three DVDs on traditional food preparation, healing and weight loss. For more information, visit mamasfollies.com or email your questions to her at mamasfollies@gmail.com.

MORE SAUCES. . . AND DESSERT

BASIC TOMATO SAUCE

1/2 cup minced yellow onion and 3 cloves minced garlic

- 2-4 tablespoons good-quality olive oil
- 1 large can organic crushed tomatoes (or the equivalent in meaty, fresh tomatoes)
- 2 tablespoons tomato paste

Zested rind of 1 lemon or 1 tablespoon of balsamic vinegar

1/4 cup fresh basil (or 2 tablespoons dried) and 1 tablespoon fresh marjoram (or 1 teaspoon dried)

Salt and pepper

1/4 cup Asiago, Parmesan or Romano cheese, freshly grated (optional)

Instructions:

- 1. In a medium saucepan, sauté the onion and garlic in olive oil until soft.
- 2. Add the tomatoes, tomato paste, zest or vinegar, herbs and salt and pepper.
- 3. Simmer over medium heat for twenty to thirty minutes. Alternatively, combine in a Vitamix and blend until hot.
- 4. Adding 1/4 cup of grated Asiago, Parmesan or Romano cheese enriches this classic sauce.

UMAMI PASTE

1/2 tin flat anchovy fillets in olive oil

- 1 tablespoon tamari or shoyu sauce
- 1 tablespoon tomato paste
- 2 tablespoons aged Parmesan or Romano cheese, freshly grated
- 2 tablespoons olive oil
- 2 cloves garlic
- 4 shiitake mushrooms
- 1/2 teaspoon miso (optional)
- 1/2 teaspoon good-quality balsamic vinegar

Instructions:

- 1. Using a food processor, combine all ingredients. Store in a small container in the fridge.
- 2. This keeps for several months. You can divide it up into small containers and freeze for use throughout the year.

PANNA COTTA

- 4 cups cream or full-fat coconut milk, divided into 1 cup and 3 cups
- 4 teaspoons gelatin
- 2 vanilla beans (split and seeds scraped into the pan) or 1 tablespoon good vanilla extract
- 1/4 cup honey or maple syrup

- 1. In a saucepan, sprinkle the gelatin over 1 cup of cream or coconut milk. Let soften for five minutes.
- 2. Add vanilla beans, if using. On medium heat, stir gently until the gelatin is dissolved. Remove from heat.
- 3. Add the remaining milk, sweetener and vanilla extract (if using), stirring to combine well.
- 4. Strain into dessert cups, ramekins or a serving dish. Cover with plastic wrap; chill for at least one hour until set.
- 5. Serve with sliced fruit or fruit compote. Adding 2-4 lightly beaten egg yolks in step #3 makes it even richer.

BAKING MIXES

SPROUTED GRAIN BAKING MIX

6 cups sprouted grain flour (spelt, soft wheat or any other sprouted grains you like)

1/4 to 1 cup sucanat, Rapadura or muscovado sugar (for sweeter confections, substitute honey or maple syrup)

2 tablespoons aluminum-free baking powder (store bought or homemade - see note below)

1 tablespoon salt

1/3 cup soft fat (such as lard, butter or coconut oil)

Instructions:

Mix ingredients in a food processor or by hand in a large bowl. Store in the refrigerator in a closed container. *Note*: Make your own baking powder by combining two parts each cream of tartar and arrowroot powder and one part baking soda (skip the arrowroot if you are on the GAPS diet) and storing in an airtight container.

PANCAKES AND WAFFLES

1 cup sprouted grain baking mix 3/4 to 1 cup whole milk or coconut milk

1 egg (lightly beaten) 1 tablespoon melted fat (if not previously incorporated into baking mix)

Instructions:

- 1. Mix all ingredients, adding the melted fat only if fat has not previously been incorporated into the baking mix.
- 2. Drop by the quarter-cupful onto a hot, greased skillet. When bubbly, flip and cook an additional minute or two.
- 3. For extra fluffy pancakes or waffles, add an additional egg, separated. Beat the egg whites until stiff and fold into the batter after everything else is worked in. Do not over-beat or the end product will have a tough texture.
- 4. Serve with fresh fruit, maple syrup and/or warmed honey sauce. (Make honey sauce by combining and warming gently in a small saucepan 1 cup honey, 1/4 cup raw butter and 1 teaspoon ground cinnamon.)

MUFFINS AND CAKES

3 cups of sprouted grain baking mix

3 eggs (optional: separate eggs and beat whites until stiff)

2 cups milk

Up to an additional 1/3 cup of sweetener (honey or maple syrup work well), if desired

1 tablespoon good-quality vanilla extract

Spices as desired (such as cinnamon, nutmeg and cloves)

Instructions:

- 1. Mix all ingredients together (except beaten egg whites, if using).
- 2. Fold in beaten egg whites (if using).
- 3. Pour into muffin cups or a lightly greased and floured cake pan.
- 4. Bake muffins at 375° for about twenty minutes; bake cakes at 350° for twenty-five to thirty minutes.

GAPS-FRIENDLY GRAIN-FREE BAKING MIX

7 cups blanched almond flour (or alternative, grain-free flour)

2 cups coconut flour (full fat)

1 cup ground chia seeds

3/4 cup aluminum-free baking powder

1 3/4 tablespoons soft fat (such as lard, butter, ghee or coconut oil)

Scant 2 tablespoons salt

- 1. Follow the same directions as for the sprouted grain mix. For the sweetener, add raw honey to your batter as desired (according to what you are making).
- 2. Blanched almonds have fewer of the irritating compounds found in other seeds, nuts and grains; however, they should still be soaked in salt water and dehydrated before use in baking mixes.

Homeopathy Journal

FAR OUT: HOW HOMEOPATHY UPROOTS ILLNESS RELATED TO CANNABIS By Joette Calabrese, HMC, CCH, RSHom(Na)

Homeopathy harnesses the potential benefit inherent in harmful or toxic substances and uses them to our advantage.

"Far out, man." Oh the language of the '60s! I don't hear that phrase much anymore, but that certainly doesn't mean that getting high is no longer in. In fact, it's more prevalent than ever, but the argument in favor of marijuana has fundamentally changed over the years. Instead of the acknowledgement that a substance—in this case, cannabis—can be brain-disrupting, the new conversation is now focused on its potentially medicinal action.

This is certainly not an earth-shaking revelation to homeopaths—we've always acknowledged that plants and other substances can have coexisting properties that are harmful as well as beneficial. In fact, that observation in many ways describes the very essence of homeopathy, which harnesses the potential benefit inherent in harmful or toxic substances and uses them to our advantage. This is done by noting the substance's toxic effect and the symptoms provoked in a person exposed to that substance. When the substance is diluted and potentized through homeopathic pharmacology, we see it address those very symptoms in the person who suffers from them.

CURATIVE ACTION TO THE FORE

The homeopathic way to derive benefit from the marijuana plant does not rely on using any part of the plant in its gross form. Instead of smoking marijuana, baking it into brownies, distilling it or drinking it, homeopathic manufacturing pharmacies dilute and potentize it. If you know anything about how homeopathic medicines are made, you can understand how the dilution process eliminates the toxic elements present in the gross form of the plant and allows for the curative action to come to the fore. When the original plant is highly diluted in water or alcohol, according to the standardized pharmacological and mathemati-

cal homeopathic method, the potentially harmful aspects of the plant (or any substance from which a homeopathic medicine is made) are minimized, while the curative characteristics of the plant remain.

A TRADITIONAL HOMEOPATHIC REMEDY

Interestingly, homeopaths have employed *Cannabis sativa* and *Cannabis indica* for about a century, and they are two of our most valuable medicines. For what? Start with what ingestion or inhalation of cannabis might cause. Given that the plant is noted for its ability to affect the mind, it stands to reason that when used in a homeopathic formula, it will address similar conditions. This homeopathic medicine's beneficial action can be accomplished in four different kinds of people:

- Someone who has never been exposed to cannabis but who has symptoms that are similar to typical ailments that cannabis use would produce.
- 2. Someone who has been left with psychological conditions as a result of using marijuana.
- 3. Someone whose parents had a marijuana habit for a time before their conception or during pregnancy.
- 4. Someone seeking to break the marijuana habit (*Cannabis sativa* 200 has been used in some instances for this purpose).

In each of the above cases, the symptom picture that the person is presenting must have enough overlap with the cannabis *Materia Medica* picture to justify the use of the homeopathic version of cannabis. Homeopathic *Cannabis* preparations are medicines, not supplements or recreational drugs. Instead of seeking a high or

"enlightenment," we look to the curative action to be released, specifically in an effort to uproot illness that *looks like* what a cannabis user or the child of a cannabis user might suffer.

HOMEOPATHIC USES

The list of conditions that the homeopathic formula will uproot reads like a list of what marijuana users most typically complain of. Or in most cases, it's their families and employers who are doing the complaining. Those who use marijuana—particularly on a regular basis—don't always have the wherewithal to take note of their undesirable behaviors.

Let's begin with what marijuana use can cause. This will give us an outline of what Cannabis 200C is capable of uprooting. Those who use marijuana often describe feeling happy, lighthearted, easily amused, spacey, creative and relaxed, or they evoke a sense of euphoria and heightened sense perception. Wait—that's why they smoke it in the first place, right? So far, that sounds like it might be good, right? But what if the person is seeking out this artificially produced state of mind by using marijuana on a regular basis? What if this habit is not appreciated by everyone else around them because it is having a negative impact on everyday life, such as when the marijuana user is behaving like every night is Saturday night, or when they're more intent on getting their high than they are on finding a job, running a business or putting the kids to bed? When this kind of attitude or addiction causes frustrating laziness or a lack of personal responsibility, we're embarking on mental illness.

Some of the more negative results include forgetfulness or memory problems, paranoia, panic, confusion and a sense of unreality. These feelings can lead a user to laugh inappropriately or leave him or her with a distorted sense of time and space. The very same person may also swing in the opposite direction, with unfounded anxiety or a fear that he or she is descending into insanity. On the more extreme end, marijuana use can lead to hallucinations, delusional ideas, psychosis and a disordered sense of personal identity.

Those who are struggling with a marijuana habit and those who are trying to get off of the

drug may wonder whether homeopathy can mitigate the effects of the drug or cure dependency. The answer is that it has indeed been used for those purposes, but it is more often employed when a person's sober behavior matches the symptom picture. In other words, if a person has symptoms such as spaciness, lack of motivation, lack of appropriate gravity (for example, inappropriate laughter similar to how a "stoned" person would behave), paranoia and a sense of unreality—even when they are not *currently* using marijuana, or even if they've *never* used marijuana—that would be a typical case in which *Cannabis* might be used homeopathically.

As with most homeopathic medicines, the ability of the Cannabis medicine is often sweeping and covers many conditions in the body. However, Cannabis's primary action falls squarely on the mental plane. In addition, it is well suited for conditions relating to the urogenital area and for cardiac conditions: Cannabis in its homeopathic form can be of service for conditions related to chronic urethritis, burning on urination, prostatitis, pain around the kidneys (especially during laughter) and a noteworthy excessive sexual desire. Should any of these conditions be present along with the more striking mental conditions, it's likely that Cannabis sativa 200 used twice daily for a few weeks will bring down the symptoms to a more manageable degree.

SYMPTOMS

Here are the most common symptoms, found in Roger Morrison's *Desktop Guide To Keynotes and Confirmatory Symptoms*,¹ that would lead a homeopath to consider using *Cannabis sativa* or *Cannabis indica*:

- Mental states that are confused;
- Sense of ecstasy;
- Mistakes in speech, writing and depth perception;
- Anxiety that may include panic attacks or fear of losing the mind completely;
- Reaching implausible or exaggerated conclusions;
- Confusion, inability to concentrate and continue with a train of thought or direction;
- Lack of initiative;

The list of conditions that the homeopathic formula will uproot reads like a list of what marijuana users most typically complain of.

• Feeling that thoughts come so rapidly that the sufferer can't grasp them.

Dr. James Tyler Kent was an American physician and homeopath of the last century. His voluminous works that describe human ailments associated with their homeopathic medicines are still used today. In his treatise, *Materia Medica*,² he states the following for the study of *Cannabis indica*:

- Things seem strange and unreal. He seems as though in a dream. Confusion as to his personal identity. Makes mistakes in writing and speaking, and misunderstands what he reads and hears said.
- Sounds in the room seem to come from a distance. When she speaks, it seems as though someone else were speaking. Seems as though her senses would vanish.
- Despondent in forenoon, lively in the afternoon. Fear of going to bed. Hysterical feeling in the throat. Anxiety in the stomach. Confusion of mind and vertigo.
- Chordee (curved penis). Burning at starting and closing of urination.
 Intense stabbing pain in urethra when not urinating. Most difficult and painful urination. Pain that extends from meatus back along the urethra while urine flows.
- Pressing out feeling at the orifice of the urethra after urination in a woman. Violent urging to urinate. Constant or frequent urging to urinate. Involuntary urination. Violent pain at the close of urination. Bloody urine.
- Intense sexual excitement in both sexes.

AIMLESS HARRY

How are these symptoms addressed using homeopathy? Let me illustrate using a clinical example. Harry was his mother's greatest worry. At age twenty-four, Harry was aimless and incapable of carrying through a directive and had pie-in-the-sky ideas and impractical plans that he never followed through on. His mother recalled that this had been a long-lasting problem for him. Harry often made his mother squirm with discomfort and embarrassment due to his immoderate and inappropriate laughter, which seemed out of context.

Had he had an increased appetite, physical coordination problems or slow physical reflexes, his mother might have suspected the use of marijuana, but Harry actually didn't have any interest in weed. However, Harry's father did. In fact, a day rarely went by without Harry Sr. getting high. This had been his lifestyle since college, well before Harry Jr. was conceived. While Harry's mom had lost interest in smoking the stuff around the time they married, Harry Sr. either smoked it with friends on weekends or alone in the garage daily. Harry Sr. was a musician, with a home music studio in the garage. The family struggled financially because he always seemed to have exalted ideas of what he was going to do with his music. Harry Sr. was loved by all, due to his childlike, easygoing and sanguine personality. His wife admitted that he had stage presence and a great deal of charisma, but that didn't pay the mortgage. It seemed as though Harry Sr. just hadn't grown up.

Harry Jr.'s mom worried that the son had inherited his father's personality. Young Harry spent far too much time theorizing about and pondering the science fiction books he devoured. At first, his mom thought it was intelligent and precocious of him to take these theories to a deeper level and discuss them late at night instead of getting to sleep at an early hour. Sure, he had little interest in looking for a job or earning some pocket money, but his mother initially rationalized that, in her admiration of her son's deep thoughts. But now that he had graduated from college, she couldn't help but note that he seemed to have little common sense and no interest in moving out of the house and facing adulthood.

It was around this time that Harry's mom learned about homeopathy from her friend Darcy, who had been studying it for months. Darcy knew enough about the family to recognize that there might be a homeopathic medicine that could help Harry Jr., but because she was still new in her studies, it didn't occur to her that homeopathy might be helpful to Harry Sr. as well.

Darcy offered to take Harry Jr.'s case as part of her homeopathy class study, and this is what happened. On Darcy's recommendation, Harry Jr. took *Cannabis sativa* 200C once per day for three weeks. Within the first few weeks, Harry's mom noticed some minor changes that only the watchful eye of a mother would recognize. She noticed that Harry was getting to bed at a reasonable time and was waking proportionally early in the morning.

Second, she was surprised when Harry initiated a conversation with her about some ideas he'd had about pursuing a job with a neighbor's advertising business. A few months earlier, their neighbor had been looking for someone to work in his shipping and receiving department. When the neighbor originally proposed the idea, Harry's eyes had glazed over, indicating his lack of interest at the time. But now, he returned to the idea with uncharacteristic enthusiasm.

The third remarkable change came after two months, when Harry declared that he had gotten the job in the shipping and receiving department and was hoping to find his own apartment within a few months. He even had a timetable of some of his goals scribbled on paper. Harry's mother

was elated at the changes. As she described it, Harry had seemingly "grown up."

MATCHING SUBSTANCE TO SYMPTOMS

When there is a strong list in the column of symptoms that points in the direction of a specific homeopathic medicine—with an additional component of a parent having used the substance in gross form for years before, during and after conception—it often adds up to a call for the substance in homeopathic formula. Cannabis would not qualify for use based only on the history of the father—one must see whether the current symptoms line up as well. Indeed, there must be pathology or debilitation of some sort. In other words, if Harry Jr. was healthy and had no troubling behaviors, then even having a father with a history of marijuana use would not be sufficient justification for the use of a homeopathic medicine. That is because there would be nothing to correct.

Given that homeopathic remedies are indeed medicines, they ought to be used only when a medicine is called for. *Cannabis sativa* 200C and *Cannabis indica* 200C have been clinically shown to uproot mental conditions that most often arise from previous marijuana use by the person (or his parent), setting the person on a course of reality minus the burden of mental dis-

ease. It's a tall order, but homeopathic medicines have been known to take the order seriously. As Harry's dad would say, "Outa sight, man."

Joette Calabrese, HMC, CCH, RSHom(Na) is a homeopathic consultant and educator and, more importantly, a mom who raised her children to adulthood using only homeopathy and Wise Traditions methods. Learn the homeopathy methods that Joette used in her study guide, Gateway to Homeopathy: A Study Group Guided Curriculum. This guided curriculum teaches you and your friends gathered in your living room or online group how to gain the confidence and skills to become the healers of your families. Learn specific protocols for particular conditions and a new homeopathic paradigm that Joette has termed Practical *Homeopathy. Go to* HomeopathyStudygroups. com to find everything you need to get started and to read inspiring testimonials from moms, grandmothers and others who have taken this powerful eight-week study course.

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If Harry Jr. was healthy and had no troubling behaviors, then even having a father with a history of marijuana use would not be sufficient justification for the use of a homeopathic medicine.



Technology as Servant

OPTIONS FOR DRINKING WATER FILTRATION By John Moody

Water filters are both an important and affordable way to deal with our nation's water woes, especially compared to bottled water.

The importance of clean water (and the lack of it, especially in municipal water supplies) continues to garner national attention. The Flint water system debacle highlights the problem: our nation's water supplies are compromised—some egregiously, most, seriously.

Flint was the proverbial tip of the iceberg.¹ According to Scientific American, the problem of lead contamination that Flint highlighted for the nation was far from an "aberration," with "nearly 3,000 areas with recently recorded lead poisoning rates at least double those in Flint during the peak of that city's contamination crisis"; in over a thousand communities, the rate of elevated blood tests has been shown to be at least four times higher than in Flint.² "Poisoned places" described by Scientific American include a town on the Allegheny River in Pennsylvania (high lead levels in 36 percent of children tested), a "zip code on Goat Island, Texas, where a quarter of tests showed poisoning" and "pockets of Baltimore, Cleveland and Philadelphia, where...the rate of elevated tests over the last decade was 40-50 percent."2

Moreover, lead is just one very problematic contaminant. Water supplies also face issues with at least three dozen or so other contaminants, including other heavy metals, industrial waste chemicals like perfluorooctanoic acid (PFOA) (see my cookware article³) and more. In addition, almost all municipal water utilities disinfect with chlorine⁴ or chloramines,⁵ leaving our water full of dangerous chlorine byproducts.

Seventy-five percent of Americans on community water systems consume water to which toxic fluoride chemicals have been added.⁶ Fluoride's presence in our drinking water is unnecessary for its stated purpose (prevention of tooth decay),⁷ but also poses a real danger to our health and the health of our children.⁸

NO GUESSING

These problems with municipal water systems have helped propel several commercial responses, including the unsustainable, costly and wasteful bottled water industry; reusable water bottles; and water filtration. Although the bottled water business has thus far outpaced water filtration as a response, it is important to point out that water filters are both an important and affordable way to deal with our nation's water woes, especially compared to bottled water. Many water filtration systems bring consumers significantly improved water for under ten cents a gallon. Bottled water, which is often no different from nor any better than tap water, does it for ten to fifty times that cost!

Not all water filters are created equal, however. Even more importantly, specific situations sometimes require specific filtration solutions. To put it another way, there is no perfect onesize-fits-all water filtration system for everyone. Water quality and contamination levels vary greatly. The best system is the one that is tailored to the specific challenges and needs at hand.

This is one reason why testing your water is important. As I constantly say during homestead and farm consults, "Until you test, it's just a guess!"—and guessing generally turns out to be far more expensive than testing. (For more information about water testing, see "Which filter should I choose?" below and check out my 2014 *Wise Traditions* article on water testing.⁹)

FILTERS VERSUS PURIFIERS

Many people use the terms "filtration" and "purification" interchangeably. Technically, the two terms are not interchangeable, but some systems accomplish both functions. A water *filter* is generally designed to remove a *portion* of contaminants, some at a high rate, including protozoa and bacteria. A water *purifier* will re-

move 90 percent or more of *all* contaminants in water, including viruses. This viral component is especially important in some situations, such as when traveling abroad or in remote areas where you will make use of water sources of unknown purity. A water purifier is almost always superior to a water filter, but on occasion, a system that is rated to purify water may still leave behind some dangerous contaminants.

In considering the major types of water filtration and purification systems and how they compare, many consumers focus on the external aspects, such as the location of the water filter—countertop, under the sink, inline or the like—but the location of a filter matters far less than its internal characteristics and its effectiveness. Here, I want to focus on the materials and methods of five main types of water filters, rather than on more superficial considerations.

CARBON-BASED FILTERS

This type of system uses a high-carbon medium to capture contaminants. These filters are primarily or only carbon-based, but other types of filters may also feature a carbon medium component. The porous structure of the carbon substrate traps chemicals and other contaminants. Over time, the carbon medium "fills up" and needs to be replaced. Systems come in both gravity-powered models (such as Brita) or inline (such as Multipure). Some systems have add-ons to deal with fluoride.

Some carbon-based filters use activated carbon instead of plain carbon mediums. Activated carbon has been treated to increase its porosity. To explain just how porous activated carbon is, note that one gram can have a surface area of over three thousand square meters, or thirty-two thousand square feet!¹⁰ So, there are a lot of places for pollutants to get trapped in even a small amount of activated carbon, increasing this type of filter's effectiveness.

In fact, carbon-based filters vary considerably in effectiveness. Some of the most popular water filters on the market (like the Brita or those found on many refrigerators) don't actually filter much. They are generally just very basic carbon filters, removing some chlorine and chlorine byproducts, and that is about it. The vast majority of low-cost or appliance-

based water filtration systems will leave the more problematic water contaminants—lead, industrial chemicals and the like—mostly or even completely untouched. This is changing to some extent because of consumer concerns after incidents like Flint, but older models with older filter technology should not be trusted to deliver truly clean water.

REVERSE OSMOSIS

Reverse osmosis (RO) is one of the most well-known water filtration options. In a nutshell, it uses a membrane to capture contaminants, coupled with pressure to force the water through the membrane. The process suffers from efficiency issues, however, with some of the systems creating about three gallons of waste water for each gallon of filtered water they produce. Some newer RO systems have reduced the ratio to one to one.

CERAMIC FILTERS

Most water contaminants are quite large, especially compared to water molecules. They are so large that the use of materials with an incredibly small pore size and a large, maze-like structure allows the medium to trap everything from bacteria to lead. This is how ceramic filters work. Many ceramic filters also incorporate silver or a similar bacteriostatic agent to keep pathogens from colonizing the filter medium. The main material used for most ceramic filters appears to be diatomaceous earth, which contains primarily silica.

Ceramic units have one feature that is both a benefit and a drawback—the outer filter surface needs regular cleaning to remove built-up surface contaminants. This means the filter often lasts longer than other types, but it also requires that you deal with a surface possibly heavily covered in pathogens (and whatever else the filter collects from your water). So exercise caution when cleaning a ceramic filter!

By itself, a ceramic filter does little to deal with chlorine and some other problematic compounds. As a result, many also contain a carbon core and fall under the next category: multi-medium filters.

Carbon-based filters vary considerably in effectiveness. Some of the most popular water filters on the market don't actually filter much.

Almost all major filter brands have independent test results showing various chemical reduction levels.

MULTI-MEDIUM FILTERS

Multi-medium filters (such as New Wave Enviro and Berkey) go beyond just using carbon or ceramic. Instead, such systems use layered mediums of different materials such as micron pads and carbon substrates—generally in a particular, purposeful order—with the aim of filtering water and achieving other benefits, such as altering the water's pH or adding minerals back into the water. Given that some use proprietary technology, there is no easy way to evaluate all the possible arrangements of multimedium filters or to be 100 percent sure what these systems employ and how they work.

MULTI-STAGE FILTERS

A few systems opt to use a number of different approaches to deliver clean water. Many are similar to multi-medium filters—just substantially upgraded! For example, the Radiant Life water filter involves fourteen stages of filtration, purification, sterilization, restructuring, reprogramming and remineralizing. These processes rely on a sediment prefilter, carbon pre- and post-filtration, a reverse osmosis membrane, a mixed bed de-ionization system, ultraviolet light and other features.¹¹

COMPARING LAB TEST RESULTS ACROSS FILTERS

Almost all major filter brands have independent test results showing various chemical reduction levels. However, it is very important to note that because different labs use different tests, equipment and testing protocols, comparing test results can pose significant problems. Ideally, a single lab at some point will test a wide number of systems and contaminants so that all the systems are tested under the same conditions. Until then, while the available tests are helpful, they should not be viewed as definitive.

For an example, take fluoride. If a lab tests a filter's ability to remove fluoride but starts at twenty parts per million (ppm), while a second lab tests fluoride removal starting at ten ppm, then one filter has double the amount of fluoride to remove. If the first test then documents removal of twelve ppm, and the second filter removes eight ppm, achieving a 60 percent and 80 percent reduction, respectively, any comparison between the two will be misleading. The second filter might have tied with the first if it, too, had removed twenty ppm.

Other variables, such as water pressure or flow rate, may also be different between labs. Unless the various labs are all using the same testing set-up for all the tests—which is unlikely given how many contaminants each lab is testing for—comparing results may be like comparing apples and oranges (or perhaps oranges and minneolas)! In other words, close—but not quite the same.

With that said, Marge Sweigart of *The Safe Healthy Home* website compiled a chart of the test results for six major gravity filter brands (Berkey, Propur, Alexapure, AquaCera, AquaRain, Zen Water).¹² The lab results were collected from the information that the various

TABLE 1. Contaminants potentially removed by some gravity water filters

Fecal Coliform Nitrate Glyphosate Chloride E. Coli Aluminum Atrazine Fluoride Bacteriophage MS2 (Virus) Antimony Sodium Fluoride **DDT** Arsenic Raoultella (Klebsiella) Terrigena (Bacteria) Hexafluorosilicate Acetaminophen Lead Cryptosporidium Parvum Oocysts Caffeine Fluorosilicic Acid Barium Microcystin-LR **Turbidity** Triclosan Poliovirus 1 Chromium VI Bisphenol A (BPA) Benzene Rotavirus Mercury Toluene **Pretroleum Contaminants** Chloramines Dimethyl Phthalate Giardia Lamblia (Cyst) Styrene Free Chlorine Gross Alpha (Radioactivity) Total Coliform **MTBE** Gross Beta (Radioactivity)

Note: Adapted with permission from The Safe Healthy Home (copyright 2019).

companies posted to their websites after having independent testing performed on their filters. Table 1 lists the contaminants reduced by some or all of the filters during the tests. (The specific results are available at thesafehealthyhome.com/best-countertop-gravity-water-filter-systems-review/. A result of 75 percent would mean that the filter removed 75 percent of the contaminant, leaving 25 percent after filtration.)

In this comparison, one filter looked like it was worse at removing glyphosate than the other systems, but this result may not tell the whole story. As Mike Adams of *Natural News* and CWC Labs explains, specific characteristics of the notorious glyphosate molecule make it challenging to produce accurate and reproducible test results and require "unique, complex chemistry far beyond the typical...chemistry used to detect [other] pesticides or common contaminants."13 These same features can also make it difficult to remove glyphosate from water.14 Having perfected a testing method, Adams and his mass spectrometry lab recently performed their own independent tests on the ability of selected countertop pitchers and larger gravity filters to remove glyphosate, and, importantly, they used the exact same methodology and equipment across the eleven brands. Their tests found some of the filters to be "far more effective than...predicted," including 100 percent removal of glyphosate in several instances.¹³

WHICH FILTER SHOULD I CHOOSE?

In choosing a water filter, there are a number of issues that you may wish to take into account. First, consider your water source—is it municipal water, from a well or spring, or rainwater? As Table 2 shows, each of the three main sources of water is prone to particular risks.

Next, test your water. If you are on municipal water, do your own testing and also request copies of the water system operator's test results (if they do not already publicly post the full test results). You will want both sets of results because a lot can happen en route from the water treatment plant to your home tap, including problems associated with old pipes and all sorts of other issues. It is important to know what kind of water piping your house uses and whether it poses any risks. Modern homes mainly use PVC pipes or PEX tubing; to my knowledge, neither of these poses any significant dangers that a standard water filter will not substantially mitigate. However, some older homes may have pipes that contain heavy metal or other risks that are worth checking.

If you are on well or spring water, ask your local health or other offices whether there are

Their tests found some of the filters to be "far more effective than. . . predicted," including 100 percent removal of glyphosate in several instances.

TABLE 2. Most likely contaminants, by water source

WATER SOURCE	MOST COMMON CONTAMINANTS		
Municipal water	ChlorineChloraminesLeadFluoride		
Well and spring water	 Pesticides (as per the Environmental Protection Agency definition, any and all agricultural chemicals, including nitrates and nitrites) Regional or geographically specific risks (check with local water quality office), including arsenic, other heavy metals and radiation Industry-specific pollutants, such as PFOAs (if the area manufactures them or local industry uses them) Pathogens and other microorganisms 		
Rainwater	 Particulates and debris Roofing-specific contaminants (e.g., metal, shingle, slate) Pathogens and other microorganisms Weather-borne industrial chemicals, depending on location 		

At the end of the day, any good low-cost filter is better than no filter. any county- or area-wide testing results available for well or groundwater. Ask your neighbors whether they have tested their water as well. This can help give context and additional insight into your test results.

Third, consider whether you have particular health problems or genetic predispositions that might make you more susceptible to some contaminants. If you have a thyroid condition, for instance, you may want to prioritize a filter (or add-on) that is highly effective at removing fluoride. Some water filtration systems also use add-ons to deal with pathogens and possible contamination, ranging from ultraviolet light, iodine, hydrogen peroxide and a host of other approaches. My article on pool water filtration systems explores a number of these in detail, and I encourage you to check it out.

MAKING IT PRACTICAL

In an ideal world, we would all be able to afford and have access to 100 percent pure water and food. In the real world, however, many of us have budgetary constraints and time and money trade-offs that we have to consider. (Do I purchase pastured chicken or do I invest in a whole-house water filter?) Hopefully, the information in this article can help you sort out where you most need to allocate the resources you have to get the greatest benefit for you and your family. Ideally, with testing results in hand and an awareness of your specific health concerns, you will be able to build a system around your actual challenges and needs.

At the same time, don't let analysis lead to

paralysis. If you can't decide what to do, just get an affordable basic filter. Any good-quality system in the seventy-five to three-hundred-dollar range will provide substantial benefits, removing anywhere from 75 to 90 percent or more of a wide range of common water contaminants. Table 3 compares the cost per gallon for a handful of popular models. As the table shows, the cost per gallon can vary substantially, and it doesn't always directly link to performance! For example, the Brita filters that accomplish very little in the way of meaningful filtration cost about two to four times more per gallon than other far more effective brands.

At the end of the day, any good low-cost filter is better than no filter. Also, filtered water is almost always going to be better than bottled water, both in terms of cost and quality. However, skip the countertop pitcher or similar filters that do little to provide any real improvement over standard tap water.

With any home, I always recommend running out your tap for a minute or so in the morning to cycle the standing water out of the system. If your water filter is on a bypass, this can help protect it from sediment or any other build-up or precipitation that formed or settled in the lines overnight.

With rainwater collection, it is ideal to have a "preflush"—a set-up that diverts the first ten to twenty gallons of rainwater, which will be the most contaminated and dirtiest water the roof produces during rain—away from your storage tanks. This will increase filter life and performance substantially.

TABLE 3. Cost comparison chart

BRAND	COST PER GALLON	NOTES
Berkey	2-3 cents/gallon	The cost per gallon goes down after the first filter replacement. Adding filters for fluoride and arsenic increases the cost to around 7 cents/gallon.
Brita (standard pitcher)	13 cents/gallon	Set-up cost varies.
Brita (Longlast filter)	12 cents/gallon	Set-up cost varies.
Doulton	20-38 cents/gallon	Cost per gallon is lower for countertop models and higher for under-the-sink models.
New Wave Enviro	5-8 cents/gallon	The cost per gallon goes down after the first filter replacement.

NOTE: The cost comparisons are based on the lowest price easily found online, which might involve purchasing filters in packs of two or three (for those that last less than a year). Real-life costs per gallon could run substantially higher depending on shopping habits and place of purchase.

LAZINESS IS NOT AN OPTION

Any system that relies on a filter poses one particular danger to users: backwash after the medium reaches capacity. Filter mediums can only absorb so much contamination. Once they reach saturation, they may not only stop filtering incoming water, but backwash the many, many months of concentrated, built-up contamination back into your water! Thus, it is very important to change your filter cartridges or medium regularly based on its rated capacity and your water usage. Basically, the more water you use, the sooner you should replace your filter, regardless of any monthly or annual guidelines the manufacturer gives. Some companies make this easy by allowing you to sign up for automated reminders (mail, text or email) or even automated shipment of new filters on a set schedule. No matter what reminder system you choose, it is very important that you find a way to ensure that you don't use your filter past its capacity.

Depending on your water source, some systems either use or will benefit from a prefilter. Generally, a prefilter doesn't so much remove contaminants that are dangerous to *your* health as it takes care of stuff that is dangerous to your *filter's* health and performance. In setting up rainwater catchment systems, for example, prefiltration to remove dust, dirt and large debris is a must and will help protect and extend the life of the next stage of filtration substantially. Without a prefilter, the main filtration system will underperform (because it is dealing with particulate matter and other incoming debris), and the system's rated life will be greatly re-

duced. This is just one example of why figuring out exactly what filtration you need for the water system you have is vital.

John Moody is the fortunate husband to Jessica, father to five fantastic kids and a well-known writer and speaker on issues relating to health, homesteading and more. Embracing the wisdom of Weston Price allowed him to save his health and help countless others over the years. John's book, The Frugal Homesteader, is available at homesteaderhandbook. com. Fantastic traditional foods like elderberry syrup made by his farm and family can be found at abbyselderberry.com.

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Wise Traditions Podcast Interviews

INTERVIEW WITH FORREST MAREADY



HILDA LABRADA GORE: My guest, Forrest Maready, had an interesting and varied career in the film and television industry before he became a medical historian, researcher and author of the book, Crooked: Man-Made Disease Explained.1 Today we focus on his "crooked" theory, which is the idea that many illnesses leave a visible sign on our faces that something is amiss, like a crooked smile or misaligned eyes. The theory also addresses how seemingly unrelated conditions and neurological and immunological illnesses like eczema and asthma can be traced back to a single root cause that leaves lesions on the brain stem, wreaking havoc on our mental and physical health. Forrest helps us understand neurotoxins, incorrect antibiotic use and other factors that affect our health—and also discusses what we can do about it. Forrest spoke about the crooked theory at the Weston A. Price Foundation's Wise Traditions conference in Baltimore (November, 2018), discussing what he believes to be the root cause of most disease.

Forrest, I want to talk about your interesting background. You used to work in the film industry. What made you change from film to the field of wellness?

FORREST MAREADY: Yes, that was my career for quite a while. I worked mainly behind the scenes and sometimes on the set but never in front of the camera. Then my wife and I started going down rabbit holes doing a lot of research into Crohn's disease and other chronic illnesses that had affected some of our family members. Through some of that research, I started paying more attention to vaccinations as a potential source of problems. And through some of *that* research, I started noticing how frequently people seem to exhibit on their face what we now know as cranial nerve damage. That was a fifteen-year journey, which I'm condensing down very quickly.

HG: What is cranial nerve damage?

FM: Basically, people noticed this in the 1800s when children came down with "teething paralysis"—something children seemed to get after they were teething—or what they then called "infantile paralysis" and later became known as polio. A lot of children would exhibit something they called "squint" (or being "cross-eyed"), which we now call strabismus. It is where their eyes would not point in the same direction. You might have one eye point inward or one pointing outward. Children with polio would often have eyes that wouldn't point in the same direction.

If you look a little harder, you notice people saying that a part or side of their face became paralyzed, similar to what we may think of as Bell's palsy. For many years, this has sometimes been associated with vaccination. The focus was always on the eyes or the mouth, though I think—after a lot of research—that this is actually a problem in the brainstem that affects what we call cranial nerves. The brain is a grey spongy thing with a protrusion, which we call the brainstem, that connects the brain to the spinal cord. There are twelve cranial nerves in the brainstem. These nerves are different than the nerves that come off the spinal cord, which control your arms or legs. Some of the cranial nerves control your face and let you smile. Some control your eyes and the direction they point. They also function as inputs. They control your hearing and sense of taste. There is one cranial nerve that many have heard of called the vagus nerve. That one actually interfaces with quite a few functions in our body, including, most importantly, our gut.

What I started realizing, through much research, was that it wasn't just the mouth or the eyes that were being affected; it was all of the cranial nerves. Often, you see a child who has

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strabismus, where their eye points in, but they may also have suddenly developed a speech impediment. Speech pathologists will spin their wheels trying to figure out why this kid is suddenly unable to talk. To me, it is fairly obvious: their eye is turned in, and if you look two millimeters down the brainstem, you'll see the cranial nerve that controls the tongue. It may have developed a problem that keeps the tongue from being able to form properly. You may have a kid who used to say "yellow" but now says "lellow" because they can't control the sides of the tongue anymore. The cranial nerves can affect all kinds of things, and they can explain so many mystery ailments—such as a baby who was latching perfectly and was able to breastfeed just fine and then suddenly is unable to latch. To me, that's a dead giveaway for tongue paralysis, which is a cranial nerve problem. I could go on and on. These cranial nerve problems manifest themselves in a million different ways, and usually they leave doctors completely flummoxed.

HG: What conclusion did your research and observations lead you to, Forrest?

FM: Part of my research led me to a realization that the brainstem is frequently the target of attack or assault in different ways. For me, most importantly, it was frequently under assault via damage from the neurotoxic aluminum adjuvants in vaccines. [Editor's note: Childhood vaccines that contain aluminum adjuvants include various diphtheria-tetanuspertussis vaccines (DT, DTaP, Td, Tdap and combination vaccines with a DTaP component); Haemophilus influenzae type b (Hib); hepatitis

A and B; human papillomavirus (HPV); and meningococcal and pneumococcal vaccines, which may include one or more of the following aluminum formulations: aluminum hydroxide, aluminum phosphate, potassium aluminum sulfate or amorphous aluminum hydroxyphosphate sulfate (AAHS).]

HG: You said the brainstem is "under attack." How does it show up in the eyes, mouth and elsewhere? What other patterns did you notice?

FM: I started to notice a pattern where it wasn't just the eyes or the mouth. I saw problems with other functions within the brainstem affected by cranial nerves. Have you ever seen a kid who had a speech impediment? Have you seen mystery ailments that doctors can't diagnose?

HG: When you were talking earlier about the eye problem that kids with polio had, it made me think of what we call "lazy eye." I've seen young children who have to wear corrective glasses or an eye patch. I know the doctors don't often have a reason for why that happens. You're saying there is more to this than meets the eye?

FM: Most definitely. We've come to accept that it is a rite of passage that weird things are going to happen to our kids that doctors can't explain. I've come to the conclusion that a lot of these things may be explained by what I call lesions in the brainstem where all these cranial nerves emanate from.

HG: What would cause the lesions?

FM: There can be many causes. Normally, the

Cranial nerve problems manifest themselves in a million different ways, and usually they leave doctors completely

flummoxed.

THE WISE TRADITIONS PODCAST CELEBRATES A MILESTONE (OR TWO)!

The Wise Traditions podcast hit the nice round number of *one million* downloads in January 2018, right around the two-year mark of the show's launch! We are thrilled that more and more listeners are checking out the podcast.

The second milestone we hit just recently is that the Wise Traditions podcast is ranked as number thirty among all podcasts in the "alternative health" category in Apple Podcasts. In fact, the Wise Traditions podcast is ranked ahead of the People's Pharmacy podcast. There are hundreds, if not thousands, of alternative health shows. Apple lists only the top two hundred and we are number thirty! Not one but two great reasons to start listening.

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ones that doctors are familiar with can be seen on MRIs or cat scans and are easily diagnosable. My fear is that the biggest cause of this cranial nerve damage may be the neurotoxic aluminum adjuvants frequently injected via vaccinations.

HG: There are many skeptics who immediately claim that vaccines are safe and effective the minute they hear anything or anyone questioning the efficacy of vaccinations. They consider me and others who think differently as lunatics. How can you be so sure that the adjuvants are the irritants and that vaccinations are causing these brain lesions?

FM: That is fairly easy to explain, especially if you realize that the amount of aluminum adjuvant in any given vaccine is easily enough to kill an infant. If injected into the right place in their brainstem, it could instantly kill them. We've always relied on the thought that injection into the body will dilute it so much that the amount required to do enough damage to the brainstem to kill someone would never actually get there. We assume that no one would be that unlucky and that the entire dosage—the entire five hundred micrograms of aluminum hydroxide—would never make its way to the brainstem. [Editor's note: There are two hundred and fifty

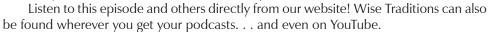
micrograms of aluminum in a single dose of the hepatitis B vaccine routinely administered within twenty-four hours of birth. By eighteen months of age, babies who adhere to the childhood vaccine schedule will receive almost five thousand micrograms of aluminum.²]

We've realized that there are two problems. First, an aluminum adjuvant doesn't dilute inside the body. Think about pouring a package of grape Kool-Aid powder into a pitcher of water; you can imagine it spreading out into a perfect purple hue. That's not what happens with an aluminum adjuvant. It gets picked up by the white blood cells, but the white blood cells don't travel around the body randomly—they move where they are signaled to go by the immune system. This was one of the big discoveries I write about in *Crooked*.

TARA COUTURE ON RECENT WISE TRADITIONS PODCAST

How do you eat the Wise Traditions way in real life?

Tara Couture, a farmer, holistic nutritionist, devoted mother and wife, answered just this question on episode #175 called "Slow Diet in a Fast World." She lives with her family on Slow Down Farmstead, a small, organic, grass-based farm in Canada. On the episode, Tara shared with us her personal journey from following a vegetarian diet and struggling with her health, to recovering through traditional nutrient-dense foods. Today, she and her husband do their best to raise healthy, strong children, but that doesn't mean it's been easy. One daughter's diet is so radically different from her teammates' that this sets her apart socially. Tara's middle daughter, at age eleven, was diagnosed with an eating disorder that had her parents sick with worry and wondering how to bring her back from the brink. In short, Tara shares both the highs and lows on her journey of helping her family embrace slow, real food in this fast-paced modern world.





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Unfortunately, when a child is vaccinated, the brainstem signals very aggressively for help from the immune system. There are three reasons for that. The first one, which I just mentioned, is pathogen invasion; when your body senses that a microbe is invading your brainstem, the dorsal vagal complex—this very particular part of your brainstem—actually sends out signals for help from the white blood cells. Second, when you have tissue injury, and your body senses that you've been cut, it signals for white blood cells to go to the cut, but it also signals for white blood cells to go to the brainstem. It is a very intriguing bit of science that proves this. The third reason is the most disturbing. The dorsal vagal complex signals for help from the immune system whenever you're being restrained, and you don't think you can escape. It is a very primal response to being afraid. This is the absolute horrible reason why I believe vaccines are so frequently associated with autism. Not just any vaccine, but the vaccines that are administered at the twelve-to-eighteen-month mark. This is when children are probably the most terrified of being pinned down and given vaccines. I don't know for sure if this is true, but I'm terrified that it is true. Those are the

main reasons I believe that aluminum adjuvants have a proclivity for the brainstem. It is because the body's immune system is signaling for the white blood cells—which we know pick up the aluminum adjuvant contained in vaccines—to come to the brainstem, the very part that seems so frequently damaged after vaccination.

HG: If I'm picturing this correctly, it is like these white blood cells are going to help wherever the brain tells them to go, whether it's an injury on a limb or to mitigate fear in the brain. They unintentionally take with them the hitchhikers that cause harm. Is that right?

FM: Yes. I couldn't have said it better. You could not devise a more diabolical scheme if you tried. You basically hijack your body's attempt to help itself with an invader that does more damage to the most vulnerable part of the brain. The brainstem is different than your brain. You hear about children who have horrible brain injuries, like a traumatic physical injury from a car wreck. They are able to survive and regain a lot of the function they lost. There is a lot of redundancy within your brain. They call it "plasticity," it's your brain's ability to heal itself. The brainstem is very different. There is very little redundancy there, and it doesn't take much to do a lot of damage. These are tiny gossamer neuronal pathways that are so easily damaged. This is very macabre, but when someone is hanged for an execution, they are trying to snap their brainstem, not strangle them. In my opinion, the brainstem is the heart of what is being attacked by vaccine adjuvants. That is why this situation is so insidious.

HG: Wow, this is a radical theory that I haven't heard articulated quite as

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you have done. Are you the first to have made this connection?

FM: I don't know. As far as I know, I'm the first person who has connected immobilization and restraint as reasons why vaccination seems to be so frequently associated with neurological damage. As mentioned, many people have talked about eye and mouth problems from vaccines. I don't know if other people made the connection that vaccinations affect all the cranial nerves, but the restraint and immobilization ideas came from studying Stephen Porges, who is the creator of Polyvagal Theory.³ He offers an explanation of the human body's response to stress.

Interestingly, the female response to stress is remarkably different than the male response. As a scientist put it, besides pregnancy and childbirth, the single characteristic that most distinguishes between female versus male is the female response to stress. I believe the reason why autism is so disproportionately associated with males over females is because the female response to stress is markedly different than the male response. Females do not create the aggressive signaling for white blood cells to the dorsal vagal complex while under stress. I explain it more thoroughly in my book. That's my thinking as to why females seem to have less frequent neurological damage from vaccinations.

HG: That is fascinating. You also say in your book and videos that it isn't just autism. Autoimmune disorders and some other neurological conditions may also be rooted in this aluminum invading other parts of the body. Is that right?

FM: Unfortunately, I believe the answer is yes. I would love for this not to be true. I can't emphasize this enough: I have nothing to gain from this being true aside from perhaps the ability to solve this problem and find a better way to promote health among our population. From the amount of research my wife and I have done, we're fairly certain that aluminum is capable of creating what are called "intracellular bacterial infections." An intracellular infection is one where the bacteria are stripped of their cell wall, and they actually begin to replicate inside the white blood cells. My understand-

ing of this came about through our research trying to understand what causes Crohn's disease. Bacteria have a cell wall, and certain things, like antibiotics, can strip the cell wall. That is how a lot of antibiotics actually kill bacteria. They strip the cell wall of the bacteria, and this prevents them from replicating. However, some bacteria actually thrive under these conditions and proliferate.

Let's say you have a kid with an infection, and you give them penicillin-family antibiotics. It actually turns the bacterial infection into an intracellular infection. Your body ends up having a really difficult time getting on top of this infection. I believe that PANDAS (Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcal Infections) should be associated with penicillin or any penicillin-family antibiotic, as that is the source of the problem. The strep by itself does not cause PANDAS. The administration of the antibiotic turns the infection into an intracellular infection, and your body has a very difficult time getting on top of it. You can see it with Crohn's disease, by the location where Crohn's disease starts. It is the location where aluminum tends to accumulate in the intestines.

HG: Going back to what you said about antibiotics brings to mind something that Dr. Natasha Campbell-McBride said recently. She said that we give antibiotics for every cough, sniffle and sneeze. Are we cultivating some of these issues in children or ourselves because of the overuse of antibiotics? What do you recommend? Should they not take antibiotics?

FM: I would definitely not suggest that. Although I'm about as antivaccine as you'll meet, I'm not as "anti-antibiotics" as some people are. I think there is a time and a place for them, but, like anything, there is also a cost. Everyone knows of someone who took an antibiotic, and it completely wrecked their gut for weeks. People have been near death from them. We know that antibiotics can cause problems. But we're starting to learn which antibiotics don't work well with certain bacteria. Unfortunately, this is a field of study that most doctors or nurses have no clue about. If you have a strep infection, they wouldn't think twice about giving you amoxicillin or some other penicillin-family antibiotic, even though anyone who spends more than five minutes reading about this would tell you not to administer a penicillin-family antibiotic for strep. This is a known problem. It will cause it to go intracellular and run rampant. You have a kid who starts with strep and a sore throat. They'll get a course of penicillin, and then they'll have rectal strep. It will work its way through their entire gastrointestinal tract. You have to look into this and learn which antibiotics are safe for which bacteria. Unfortunately, it is an understudied part of immunology because it is difficult to study intracellular bacteria. They don't stain well. They don't show up on microscopes as easily as we would like. But people recognized intracellular bacteria a hundred years ago. No one has taken the time to study it thoroughly. There are a couple of people like my wife and me, and other people like Royal Rife and Edward Rose. There are scientists from seventy years ago who knew about it even though they didn't understand it. It needs to be studied.

HG: Who has read your book and gives it credence? Who considers it as on track and wants to start studying these things?

FM: Well, like any new hypothesis or theory, it has been met with a lot of scorn from academia. I expected that. I can't say what gives it credence other than it makes a lot of sense to people whose children have suffered. They start to connect the dots and realize how everything lines up. They see that their child, for example, could see perfectly fine, and suddenly they were going to the doctor to get glasses. At the same time, the child started having a problem where he couldn't swallow his food. Now they've gone to two different doctors to treat those issues—an optometrist and a gastroenterologist—as if these are two completely separate issues. The problem is, it's the same issue. It is a neurological issue in the brainstem. I can guarantee you that those two cranial nerve nuclei are only a few millimeters apart. If you have damage in one, you're likely to have damage in the other. It is rare to see a kid with a crooked smile, losing muscle control in one side of their face, who does not have some other problem that seems unrelated. Yet when you look at the anatomy of the brainstem, you'll see that these things are millimeters apart from each other.

HG: It is funny how we compartmentalize medical care and medicines.

FM: It's the problem with specialists. We need general practitioners. They need a fifty-thousand-foot view because we're being killed by specialists. Doctors need to go back up to the fifty-thousand-foot view and also look back two hundred years to the beginning of the 1800s. They need to become familiar with medical history. When they realize what their profession has done over the past two centuries, it will give them a real big dose of humility. It will also give them a holistic view of health and show that there were things in the past that actually worked. Practitioners in the past weren't crazy people. They had actually figured out—like humans have always done, through trial and error—that there are remedies (not made in a laboratory) that work. There are legitimate cures for things.

HG: That is exactly what we're about at the Weston A. Price Foundation, those wise, traditional healing ways. What can we do right now to avoid

these issues that come from that aluminum attacking the brainstem?

FM: Well, everybody has heard the saying, "An ounce of prevention is worth a pound of cure." Nowhere is that more true than with exposure to injected metals. I'm going to be really specific here and say "injected metals." There are a lot of concerns about toxins in the environment, but injected metals are far more insidious than just about anything you could eat. If you are dead set on getting your child vaccinated-do not let anyone inject aluminum hydroxide into your child. This horrible neurotoxin bypasses all of your body's defense mechanisms when injected. You are asking for trouble by doing that. Eating well and getting rid of toxins is necessary for good health and certainly helps people who are immunocompromised and have damage. But someone who has never had injected metals and has never been exposed to antibiotics has got it easy. They don't have to make all these adjustments because their gut is probably in better health, and they aren't so susceptible to environmental toxins and other things.

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Thanks to Amy Mattias for transcribing our podcasts.

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All Thumbs Book Reviews



Cancer is Natural, So Is the Cure By Dr. Tedd Koren Koren Publications

Philosophy is a subject that for many people (like me) inspires images of wizened professors who squint through little wire-rimmed glasses as they babble about obscure concepts and Greek scholars with long, funny names. I'm sure plenty of that does go on, but philosophy doesn't have to be dry and dull. This book starts with a down-to-earth discussion of how philosophy underlies all branches of science. Without some basic philosophical assumptions, science has no direction, and the result is chaos. Wrong assumptions also end badly. That's how we know they are wrong assumptions.

One assumption underlying modern medicine dominates mainstream medical practice: a mechanistic view that displaced the vitalist view with the notion that our bodies—or living beings in general—are nothing more than very complex machines. The assumption is that we can be "fixed" like any other machine. Just add the right motor oil or chemical, and everything will be fine. If not, then the malfunctioning part can be cut out and discarded (if not considered important) or replaced if it is important.

How is this working out where cancer is concerned? If you can see through the statistical distortion and farces like "five-year survival rates," it is clearly not ending well. Nineteenthcentury American cancer rates were very low. That has changed, and now cancer rates are high. The first question the intelligent problemsolver should be asking is, what changed? By what logic did medical science decide to spend most of its time and resources on exotic drugs? Why is so little effort expended on trying to retrace our steps and understand where we went wrong? People in previous centuries stayed mostly cancer-free with little medical attention, but now we must submit to almost constant surveillance by the medical high-priesthood. Any heretics who dare question this orthodoxy must

be censored and severed from polite society.

One of many great quotes in Dr. Koren's discussion of philosophy is: "We must believe in free will. We have no choice." Another is: "The person who takes medicine must recover twice. Once from the disease and once from the medicine." Today, health freedom is under increasing attack, and the only option approved by the "anointed" (as Dr. Thomas Sowell calls them) is mainstream medicine. If you consult with mainstream practitioners but don't take their advice, don't expect them to respond like mature adults. Some will, but with others, you may hurt their widdle feewings. Some may even make evil threats—but that is because they care about you. Really, they do. Seriously. Don't laugh. Why are you looking at me that way?

The book discusses an important concept from the vitalist view that prevailed before mechanistic thinking came along: namely, the human body is not inherently suicidal. Tumors do not form because the body is trying to kill itself. They serve an important purpose. Toxins that could be deadly are sequestered in tumors. That is how your body protects itself. The key, therefore, to reducing or eliminating tumors is to stop the toxic exposure. One important step, of course, is to remove the source of toxins. Koren explains sources ranging from chemicals to radiation to root canals to toxic thinking. Avoiding toxins is certainly the best way to go, but, in this world, that is kind of like avoiding death and taxes. Thus, much of the rest of the book is about protocols to help the body clear toxins.

None of this is meant to minimize the difficulty of more advanced cases. Cancer can obviously reach the point where there are no easy answers. Tumors can reach the size where they start to impair critical organ function, and emergency measures are needed. This book does not address the extreme cases in much detail, but for earlier-stage cancers, it does an excellent job of helping the reader develop an organized approach to a natural cure. Thumbs UP.

Review by Tim Boyd

The human body is not inherently suicidal. Tumors serve an important purpose.

All Thumbs Book Reviews

Nature's Garden: A Guide to Identifying, Harvesting, and Preparing Edible Wild Plants By Samuel Thayer Forager's Harvest

With spring just around the corner (at least as I write this review!), my thoughts always turn back to fresh, local foods: what we grow on our farm, what will come into season from other local farmers and also, what we will forage from our land. There has been a dramatic increase in attention to foraging over the past decade, leading to the resurgence of many previously lesser-known foods—foods like purslane, leeks and many types of mushrooms—but also to the rediscovery of the fact that many so-called "weeds" and other often unwanted plants are actually meals waiting to happen.

Thayer is one of the best at teaching people to appreciate these wild, traditional foods. His book starts off on a humorous note—instead of a disclaimer, Thayer gives us a claimer. In an age where many authors write poorly researched, often shoddily fact-checked works, Thayer stands behind his book 100 percent.

He then moves on to important introductory matters—where and why to forage, along with how to do so responsibly. The latter is a very important matter, as successful native cultures that relied on traditional foods were very careful to collect them in ways that preserved and enhanced the food supplies they depended upon. Those who neglected proper harvesting paid a heavy price, and if we are not careful, we run the risk of doing the same (and, in some respects, we are already paying the price). The point is that foraging done right, like farming done right, enhances rather than harms the environment. Thus, anyone getting into foraging needs to learn the rules and methods for different forageable foods.

One of the main rules is knowing the right part of plants to harvest—namely, the meristems. Meristems are where growth occurs in plants, and thus, they are the most edible and enjoyable parts. Meristems govern almost all foraging, so Thayer takes the time to explain what they are, what they look like and why they matter.





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 coil binding.

All Thumbs Book Reviews

Successful native cultures that relied on traditional foods were very careful to collect them in ways that preserved and enhanced the food supplies they depended upon.

how he and his wife went on a one-month "wild food" diet. This included deer, many types of seafood, maple syrup and many other foods that some would consider relatively common, along with an extensive array of not-so-common ones. The meals that Thayer presents as examples are of particular interest, since many remind me of similar meals that traditional groups consumed before the displacing foods of modern commerce altered so many dietary landscapes irrevocably. This section is instructive and honest—foraging and food preparation take time. Whereas the average American spends only about thirty minutes per day on food, the Thayers, if they were to go on a 100 percent foraged diet for an entire year, would dedicate roughly six times that (i.e., three hours).

The subsequent sections represent the heart of the book. First comes a foraging calendar. This is especially useful for those new to foraging, as you can't forage what isn't available, and you only want to forage certain things when they traditionally were collected and consumed. Then, plant by plant—with lovely pictures, extensive descriptions, warnings for any major look-alikes and more—Thayer meticulously walks us through Nature's garden. Each section contains all the information you need to forage

and feast upon each particular plant. Each section is also a glimpse into Thayer's rich life, filled with stories that shape and inform his experience of plants and wild foods from his childhood to this day.

Thayer does not appear to present the plants in any particular order, and the plant profiles vary substantially in length. Some, like acorns, go on and on, in a fashion that is much to be appreciated. This is because acorns are an incredible food source but require far more skill and care in collection and preparation than most wild greens. So Thayer varies his approach, making sure readers get all they need to succeed with each plant.

The extensive pictures help make sense of the text. The plant-by-plant approach means you can read the entire work or just pick it up when you are in the mood to learn about one or two particular wild foods.

Whether you are new to or experienced with foraging, Thayer's book will serve you well. With spring set to arrive any day (at least, most of us hope!), it is a timely tome to enjoy during the final, lingering days of winter, preparing us for the bounty that spring brings. Two thumbs up.

Review by John Moody



Designed by Sally Fallon Morell, these fun notecards are a great teaching tool and conversation starter about the Wise Traditions diet. Each card has a different wordle describing one aspect of our diet. Enjoy reading them and sending them to friends.

\$15 for the set of twelve cards Order at westonaprice.org

Tim's DVD Reviews

Stink! Produced and directed by Jon J. Whelan

You might think that products like kid's pajamas are carefully tested and regulated to make sure they aren't laced with any toxic chemicals. You might think. As is often the case with government regulation, logic is not operative here. One concerned parent (Jon) started looking into it when he bought some rather strong-smelling PJs from the clothing firm called Justice for his daughter. He contacted Justice, and what he eventually figured out—after much persistence on his part and runaround on their part—was that there was no chance of getting a straight answer from Justice. Why not? Because they, in fact, do not know. The pajamas are made in China, and who knows what is going on over there?

Even if they do know, Jon found that companies he talked to like to hide behind the word "proprietary." When companies use that word, it means that you, the customer, don't have any right to know what you are being exposed to.

So, Jon had a lab analyze the pajamas. They found endocrine disruptors and flame retardants that had been banned long ago from children's clothing. What are the government regulatory agencies doing about this? Nothing. Why not? Two reasons: one, they don't know about it, and two, they apparently have no authority to do anything about it. What is Justice doing about it? I'll give you one guess.

All this led Jon to research what goes on at fragrance companies. Most commercial fragrance companies are harder to get into than Fort Knox. One that did let him in had over three thousand different chemicals. I'm not sure if this was for real or just a set-up for the video, but a large can or barrel in the background was labeled "monkey farts."

There is a very funny commercial showing a stampede of high school girls in their underwear converging from every direction. They are scaling every obstacle, splashing through shallow streams—nothing can stop them. At the end of the commercial, you see they are stampeding toward one guy wearing a popular fragrance product.

Then Jon did some hard research and asked a real high school girl what she thought about guys who wear strong colognes. Pay attention, guys. She thought they were trying too hard. Did you get that? Walking around in a cloud of chemicals does *not* impress the girls. You can save your money...and your health.

Another romantic factoid for you: some of the same fragrance chemicals found in Chanel No. 5 perfume are also found in toilet bowl cleaner. Give yourself a treat today—and don't forget to flush.

Jon chased down a leading lobbyist for the chemical industry and asked about the safety of industry products. Like a good little industry parakeet, the lobbyist just repeated that industry products are in full compliance with FDA regulations. The FDA has a nice list of all their chemicals and the associated risks. Elsewhere in the video, we see Senator Kerry interviewing an FDA representative. The FDA has no such list. Or if they did, they lost it. Or the dog ate it. That really wouldn't surprise me. I suspect dogs run the place. All the FDA knows is what manufacturers tell it. They have no authority to regulate any of it and don't seem very interested in anything about the subject. But a timehonored traditional food like raw milk, which has never been near any chemical...the FDA is all over that. Watch out! That stuff will kill ya.

The European Union has banned over one thousand chemicals (raw milk is not one of them). The U.S. has banned about ten. Not ten thousand, just ten. When you think about these unregulated and untested chemicals in just about everything on the market, it is no wonder that even people who are health-conscious are getting cancer. The thumb is UP.

The European Union has banned over one thousand chemicals. The U.S. has banned about ten.

Tim's DVD Reviews

There is a profit associated with every vaccine given. There are insurance penalties for vaccination rates that are too low.

Former "vaccine bully" pediatrician no longer vaccinates his own children... youtube.com/watch?v=8RwoGibCKhc

Dr. Bob Zajac was a vaccine pusher until he started to see with his own eyes what happens to too many kids after they are vaccinated. He also noticed his patients were generally not as healthy as chiropractor patients who were not vaccinated. By his own admission, he was arrogant and did not change his mind easily. Over time, however, this board-certified, highly qualified pediatrician's faith in vaccines was crushed by the evidence.

He swallowed his pride and admitted that seventeen years of education had taught him nothing about vaccines. He started reading and doing his own research. He has been reading on the subject for about an hour a day ever since. He admits that there are many parents with no special education out there who read ten or more hours a day, and they know much more than he does.

He will still vaccinate, but only after having a straight talk with the patient or parent about the risks. Once they are truly informed, they are free to make their choice, and he will respect it. In order to pull him back on the vaccine bandwagon, he says it would be nice if the vaccine industry had some accountability. That is the only way that safety happens, and it is not happening right now. He would also like to see some actual placebo-controlled studies.

There is a profit associated with every vaccine given. The first time he calculated how much he personally had lost in profits from not unconditionally vaccinating, the number was seven hundred thousand dollars per year. Since then, it has gone up. There are insurance penalties for pediatricians whose vaccination rates are too low. His practice overall loses almost two million dollars per year. Why do so many pediatricians vaccinate so aggressively? Read this paragraph over again.

To be fair, most pediatricians simply do not know. This knowledge vacuum is enhanced by extensive education that gives them the strong illusion (or delusion) of infallibility. It is simply not remotely possible for them to be wrong about anything. There is no shortage of experts willing to pontificate, ruminate and bloviate on subjects they know nothing about. So, when someone tries to argue about what the experts say, tell them to watch this video and then talk to you about what the experts say.

This video makes it clear that we need accountability, and we need to remove the profit motive from vaccination. We also need a medical education system that increases knowledge rather than decreasing it. The thumb is UP for this video.

The Biggest Little Farm
Directed by John Chester
Produced by John Chester & Sandra Keats
Farmlore Films

John and Molly manage a farm north of Los Angeles that had suffered years of neglect. The soil was dead, and the ground was as hard as a rock. If they were looking for an easy, cushy life, that was a really bad move. Fortunately, they weren't. With the help of their mentor, Alan York, they began to rebuild the farm literally from the ground up.

Vermiculture, compost tea and an irrigation pond were some of the first steps. Diversity was the theme of Alan's approach. They planted dozens of different kinds of fruit trees. There were cover crops. There were cows, sheep, ducks, chickens and Ugly Betty. Ugly Betty was a pig. Her name was quickly changed to Emma.

Pulling all that together was the easy part. Then came the hard part—keeping it from falling apart again. In addition to the farm animals, there were numerous uninvited guests, varmints and predators. Coyotes liked the chickens and ducks. Gophers dug everywhere and tore up

Tim's DVD Reviews

crops. Starlings and other birds rendered the fruit useless for anything but chicken feed. Cow pies promoted an insufferable fly population. Snails swarmed fruit tree leaves and other crops. Aphids joined the party.

This is where the film gets interesting. How do you coexist peacefully with nature and produce anything on the farm? Sadly, their mentor Alan died before all these problems were solved, and they had to figure it out for themselves. They discovered a few helpful things. Ducks love snails. Chickens also like snails and insects in general, including flies, maggots and aphids.

They got guard dogs for the chickens, but the slaughter continued. They were on the verge of concluding that the only way to peacefully coexist with coyotes was to shoot them. Then they discovered that one of their guard dogs was part of the problem and not part of the solution. After correcting that problem, the remaining guard dogs did their job, and the coyotes turned their attention to the gophers, which was actually helpful. But there were more gophers than the coyotes could keep up with, and those starlings were still making a mess of the fruit. What was

the answer to that problem? The answer was to wait. Wait for help from above. Eagles, hawks and owls picked up the slack with the gophers and scared away the starlings.

There were other challenges. The worst drought in twelve hundred years is a little hard to coexist with, but their cover crops and soil quality were very good, which made it easier. When the rain did come, it did not run off but soaked in, and the farm recovered quickly.

If you are a starry-eyed wannabe farmer, this is a great film to watch. The production quality is excellent, comparable to *Food, Inc.* or *Farmageddon*. You get a realistic look at the challenges you will deal with. This film doesn't go into great detail on the cost but does say that John and Molly did not have the money to do it. The old cliché is true—if you have to ask how much it costs, you can't afford it. They were fortunate enough to find investors with deep pockets. Losses for the first several years are almost unavoidable, so if you think you are smart and you are expecting quick success, you will find you are not as smart as you imagined. There is also no way for two people to run a farm like that by themselves. They needed a lot of help with the labor involved.

The difficulty makes it all the more rewarding when things do start coming together. Without the diversity, things would not come together. None of it would come together without one other key component: the wise farmer. Films in this category can often be too slow-paced and, frankly, boring. This film, however, is fascinating, and the thumb is very much UP.

Eastern Shore Food Lab

informed by the past



inspired by the future

Washington College (Maryland) students at the on-campus Eastern Shore Food Lab prepare plates of sourdough bread (baked in wood-fired ovens) and fermented butter during a themed meal that took diners through a journey from our dietary past. They learn a nose-to-tail approach using every part of the animal including the offal, bones and skin. Headed by professor William Schindler, the students focus on food processing technologies and approaches that increase the nutrient density and bioavailability of our foods such as fermentation, nose-to-tail, root-to-stalk, wild plants, aging, curing and nixtamalizing. They make foods such as sourdough breads, lacto-fermented vegetables, cheeses, charcuteries and salumi, and all sorts of dishes from nixtamalized maize such as tortillas and atole.



Vaccination Updates

MEASLES: A CLOSE EXAMINATION OF THE FACTS TO COUNTER THE FEAR By Kendall Nelson, Director, The Greater Good

In developed countries, measles fatalities are exceptionally low.

The recent measles outbreaks have created a virtual media and legislative firestorm. Headlines purport that measles is "deadly" and vaccines are "vital." It is nearly impossible these days to pick up a newspaper without reading sensationalized headlines like this one from *The New York Times* on March 10, 2019: "The Anti-Vaxxers' War on Truth." Never will you read an article in the mainstream media titled "U.S. Government Pays Over 4 Billion Dollars to Victims of Vaccine Injury." Unjustly, anyone who questions the safety of vaccines or has legitimate philosophical or religious objections is being blasted as uninformed, anti-science and dangerous to public health.

Those of us working within the vaccineawareness community, as well as parents with unvaccinated children are blamed for the "resurgence" of measles. As a result, lawmakers have introduced numerous bills this legislative session to eliminate exemptions in states that allow parents to decline one or more vaccines for their children. But what if vaccine-awareness advocates and parents know something the vaccine proponents refuse to tell us? Perhaps it is time to take a deep breath, step back from the hysteria and thoroughly examine the facts.

MEASLES FACTS

Global statistics show the worldwide incidence of measles to be an average of nineteen cases per one million persons annually. In 2017, there were approximately one hundred ten thousand deaths from measles with the overwhelming majority (more than 95 percent) of deaths occurring in countries with low per capita incomes and weak health infrastructures. Insufficient nutrition (particularly vitamin A deficiency) is the leading risk factor.

In developed countries, measles fatalities are exceptionally low. Between 1900 and 1962, as living conditions improved in the United States, the mortality rate declined by over 98 percent. This decline happened prior to the development of the first measles vaccine in 1963. England experienced a similar decrease

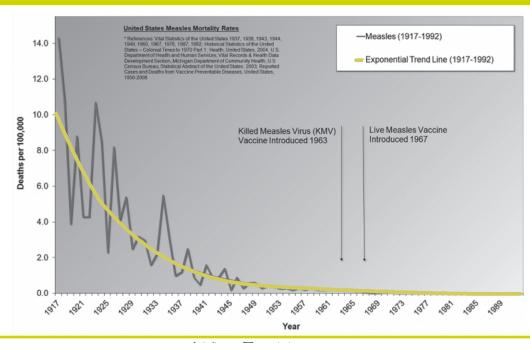


Figure 1. Measles mortality rate in the U.S.

in deaths before introducing the measles vaccine in 1968 (see Figure 1 and 2).²

According to the Centers for Disease Control and Prevention (CDC), in the decade before 1963, nearly all children got measles by the time they were fifteen years of age. During this time, the CDC estimates three to four million people in the United States were infected each year, causing approximately four hundred to five hundred deaths, forty-eight thousand hospitalizations, and one thousand cases of encephalitis (swelling of the brain).³

Measles infection begins in the nasopharynx and is shed through respiratory secretions (nasal discharge and sneezing). Symptoms typically appear ten to fourteen days after exposure to the virus. They may include fever, dry cough, runny nose, sore throat, conjunctivitis, tiny white spots with bluish-white centers on a red background found inside the mouth or inner lining of the cheek and a skin rash made up of large, flat blotches that often flow into one another, which lasts for about one week.4 Complications may include very high fever, diarrhea, otitis media, seizures, pneumonia, encephalitis (0.1 percent reported) and, very rarely, subacute sclerosing panencephalitis (SSPE, a progressive, debilitating and deadly brain disorder) and death.5

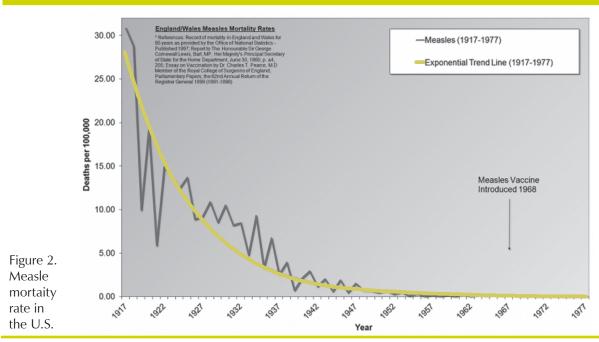
From January 1 to February 28, 2019, the CDC confirmed two hundred six individual cases of measles in eleven states. The states

that reported cases to the CDC are California, Colorado, Connecticut, Georgia, Illinois, Kentucky, New Jersey, New York, Oregon, Texas and Washington.⁶ While this may sound like a lot of cases, it is important to know that between 2010 and 2019, the highest number of measles cases was six hundred sixty-seven in 2014 with no deaths in a population of over three hundred million people.⁶ The last confirmed measles death in the United States occurred in 2015. The victim was a fully vaccinated woman in her twenties. Prior to 2015, the last confirmed measles deaths occurred in 2003, a thirteen-year-old immunocompromised child and a seventy-five year-old international traveler.⁷

VACCINE FAILURE

One may wonder how a fully vaccinated person can contract measles. The answer is vaccine failure. For example, a 2014 study published in *PLOS ONE* titled: "Difficulties in eliminating measles and controlling rubella and mumps: a cross-sectional study of a first measles and rubella vaccination and a second measles, mumps, rubella vaccination" brought to light the ineffectiveness of two measles vaccines—measles—rubella (MR) and measles, mumps, rubella (MMR). The study found that the incidence of measles remains high even with 99 percent vaccination compliance in the Zhejiang province of China.⁸

One may wonder how a fully vaccinated person can contract measles. The answer is vaccine failure.



Another study from 2017, published in *BMC Public Health*, showed that measles antibody level among China's general population have been declining since 2012.9 These two studies contradict the widely-claimed promises that measles vaccines prevent outbreaks in highly vaccine-compliant populations and that the protection from measles vaccination lasts for more than twenty years.

Not only are measles vaccines not as effective as claimed, but they contain live viruses. Vaccinated individuals not only can contract the disease, they can also spread it to others through a process called shedding. Although public health officials maintain that live attenuated virus vaccines rarely cause complications in the vaccinated person and that vaccine strain viral shedding rarely causes disease in close contacts with the recently vaccinated, vaccine strain live virus infection can sometimes cause serious complications in vaccinated persons and vaccine strain live viruses can be shed and transmitted to others with serious or even fatal consequences.¹⁰

In 2015, a measles outbreak at California's Disneyland garnered nationwide attention that led to the demonization of unvaccinated children. The outbreak helped fuel the fire in support of the horrendous law SB 277 that took away philosophical and religious exemptions for schoolchildren in California.

What was never disclosed to the public, but known to CDC officials, is evidence published in the *Journal of Clinical Microbiology* stating the following: "During the measles outbreak in California in 2015, a large number of suspected cases occurred in recent vaccinees. Of the 194 measles virus sequences obtained in the United States in 2015, 73 were identified as vaccine sequences."

The co-author of this report, Rebecca J. McNall, is a CDC official in the Division of Viral Diseases. Her data prove the measles vaccine's failure to provide immunity, thus giving an explanation as to how outbreaks occur in both vaccinated and unvaccinated children.¹¹

The CDC acknowledges that despite relatively high vaccination rates, small measles outbreaks continue to occur. In 2011, the CDC reported that in two hundred twenty measles cases, "sixty-two percent were in persons not vaccinated." That means that 38 percent of measles

cases in the United States in 2011 were in vaccinated persons. The CDC Pink Book further acknowledges that, "Some studies indicate that secondary vaccine failure (waning immunity) may occur after successful vaccination." In their article "A witch hunt against parents of unvaccinated children," the Alliance for Human Research Protection (AHRP) brilliantly points out, "Evidence of MMR vaccine-induced infection undermines the protective rationale for its indiscriminate mass use, much less mandating its use against parents' objections."

THE RISK

One of the most important things to know is that measles vaccines are not free from risk, and therefore the vicious disparagement of people who choose not to vaccinate is unjust. As of March 31, 2018, there were more than eighty-nine thousand reports of measles vaccine reactions reported to the federal Vaccine Adverse Event Reporting System (VAERS), a voluntary reporting system. These included 445 related deaths, 6,196 hospitalizations, and 1,657 related disabilities. Over 60 percent of those adverse events occurred in children three years old and younger.13 Add to this the fact that the Food and Drug Administration (FDA) states that less than 1 percent of all suspected serious adverse vaccine reactions are reported to VAERS, so we actually have a large number of serious reactions to the measles vaccine.14

The CDC recommends and States mandate that all children get two doses of MMR vaccine starting with the first dose at twelve to fifteen

VACCINE EXPERT: MEASLES VACCINE HAS FAILED

According to Dr. Gregory Poland, one of the world's leading vaccinologists, the measles vaccine has failed. In a 2012 paper (*Vaccine*. 2012 Jan 5; 30(2): 103–104), he noted that measles has become a "serious public health threat... outbreaks are occurring even in highly developed countries where vaccine access, public health infrastructure, and health literacy are not significant issues. This is unexpected and a worrisome harbinger—measles outbreaks are occurring where they are least expected." Poland cited large numbers of measles cases in fully vaccinated individuals. Poland describes a "too-high failure rate" and protection "that quickly wanes." And Poland admits that the current vaccine "cannot be administered to those who are immunocompromised, who have allergies to vaccine components and who are pregnant..."

Poland's concerns are self-serving. He does not want to end vaccines but to encourage more investment in his research into genetically tailored vaccinations. Through this new medical discipline of "vaccinomics," Poland predicts that "medical science will not only have the wherewithal to finally achieve the decades-long dream of eradicating measles and other diseases, but do so at a lower cost while addressing the concerns of the educated public." This sounds like the same kind of hype that heralded the current generation of measles vaccinations. But it is good to hear from an insider that the current measles vaccine is a failure.

months of age, and the second dose at four to six years of age. The CDC also recommends the MMR vaccine for adults who do not have evidence of immunity.¹⁵

Ingredients found in measles vaccines include chick embryo cell culture, WI-38 human diploid lung fibroblasts, MCR-5 cells, vitamins, amino acids, fetal bovine serum, sucrose, glutamate, recombinant human albumin, neomycin, sorbitol, hydrolyzed gelatin, monosodium L-glutamate, sodium bicarbonate, potassium chloride, potassium phosphate, sodium phosphate and sodium chloride. (Potassium chloride is used to cause cardiac arrest as the third drug in the "three drug cocktail" for executions by lethal injection.)

MOTHER NATURE KNOWS BEST

There is no doubt that the results of near-universal vaccination have not been completely positive and perhaps, in the case of measles, Mother Nature knows best. We are supposed to get measles, but not as an adult or as an infant. According to *The Lancet Infectious Diseases*, when people contract measles today it is four to five times worse than in pre-vaccination times because of age distribution. Measles is a more serious disease for adults, whose vaccine-based immunity wanes, and for infants, who no longer receive passive immunity from their naturally immune mother to protect them during their most vulnerable period.¹⁷

According to the CDC Pink Book: "During the 1989-1991 measles resurgence, incidence rates for infants were more than twice as high as those in any other age group. The mothers of many infants who developed measles were young, and their measles immunity was most often due to vaccination rather than infection with wild virus. As a result, a smaller amount of antibody was transferred across the placenta to the fetus, compared with antibody transfer from mothers who had higher antibody titers resulting from wild-virus infection. The lower quantity of antibody [in the vaccine] resulted in immunity that waned more rapidly, making infants susceptible at a younger age than in the past."

The million-dollar question is this: Are we trading potential vaccine-induced immunity

for problems greater than the natural measles infection? Measles dates to the beginning of recorded human history, and contracting natural measles generally provided people with lifelong immunity, while the vaccine requires revaccination throughout life. In their white paper, "The evidence & science support vaccine exemptions," the Informed Consent Action Network (ICAN) states that "Eliminating our ecological relationship with measles has had serious consequences that upend the assumed risk/reward of eliminating measles."

The ICAN white paper features studies showing that those who have not had natural measles infection will have higher rates of cancer and heart disease. For example, the International Agency for Research on Cancer found that individuals who never had measles had a 66 percent increased rate of non-Hodgkin's lymphoma and a 333 percent increased rate of Hodgkin's lymphoma. Combined, these cancers killed almost twenty-one thousand Americans in 2018. Another study showed that individuals who never had measles had a 100 percent increased rate of ovarian cancer—which killed over fourteen thousand Americans in 2018. A twenty-two-year prospective study of over one hundred thousand individuals in Japan revealed that measles and mumps, especially in case of both infections, were associated with lower risks of mortality from atherosclerotic CVD (heart disease)—which killed over six hundred thousand Americans in 2018.18 Natural measles infection is also associated with a reduced risk of sebaceous skin diseases, degenerative diseases of the bone and cartilage, and Parkinson's disease.19

THE HEARINGS

On February 27, 2019, the U.S. House Energy and Commerce Subcommittee on Oversight and Investigations held a public hearing titled: "Confronting a growing public health threat: measles outbreaks in the U.S." and on March

The International Agency for Research on Cancer found that individuals who never had measles had a 66 percent increased rate of non-Hodgkin's lymphoma and a 333 percent increased rate of Hodgkin's lymphoma.

ERRATA

In the Letters section, on page 6 of the Winter 2018 issue, under the picture for the PROUD WINNERS OF THE 2018 ACTIVIST AWARD, Joy De La Ferrar should have been listed as Joy De Los Santos.

5, 2019 the Senate Health, Education, Labor & Pensions (HELP) Committee held a public hearing titled: "Vaccines save lives: what is driving preventable disease outbreaks?"

During each of the hearings, only vaccine promoters who endorse mandatory vaccination were invited to present their opinions. In the hearing on measles, Anthony Fauci, MD, director of the National Institute of Allergy and Infectious Diseases (NIAID) and Nancy Messonnier, MD, director of the National Center for Immunization and Respiratory Diseases (CDC), gave "expert" testimony. Sadly, two of the highest-ranking health officials in the United States either lied or proved grossly uninformed about the dangers of MMR vaccines.

When committee member Rep. Brett Guthrie (R-KY) asked whether measles vaccines could cause brain inflammation (encephalitis), Dr. Fauci responded "no" despite the fact that MMR manufacturers' package inserts clearly state that MMR vaccine can cause encephalitis and acute and chronic encephalopathy (brain dysfunction), and encephalitis is listed on the table that guides compensation for vaccine injuries. Dr. Fauci also declared: "Risks from vaccines are almost nonmeasurable." Perhaps he is unaware of the VAERS reporting system, but I do not think so. And when Rep. Guthrie asked a follow-up question about the effects of MMR vaccine on susceptible children with underlying health problems, Dr. Messonnier illogically reassured the committee that parents would know whether their child's brain was going to swell before getting MMR vaccine because doctors would tell them so!

VACCINATION RATES

In the second congressional hearing (HELP), John G. Boyle, CEO of the Immune Deficiency Foundation (whose benefactors are biopharmaceutical corporations), declared: "The current decline in vaccine usage is literally bringing back plagues of the past."

Really? The crazy thing is, it turns out that the media and our legislators are actually spreading a false narrative about vaccine compliance in America. While they blame outbreaks on "irresponsible" parents for not vaccinating their children against measles, the statistical data show that vaccination rates for MMR compliance are not falling. As J.B. Handley, vice chairman of Children's Health Defense, noted in his article, "CDC, check your data: MMR vaccination rates are not declining," the trend lines for MMR vaccination rates have been flat. It is worth repeating: vaccination rates have not gone down lately and the MMR vaccination rate has held steady for more than twenty years. The measles vaccine frenzy we are assailed with is nothing more than a way to tighten up exemption laws in every state (see Figure 3).²⁰

Both congressional hearings calling for the enforcement of mandatory vaccination were nothing short of a circus in which no opposing experts or scientific studies were allowed, including refusing to allow the testimony of Robert F. Kennedy, Jr., environmental activist and chairman of the board of the Children's Health Defense organization. Only Senator Rand Paul bravely voiced concern about mandates during the HELP Committee hearing.

CENSORSHIP

Also earlier this year, Congressman Adam Schiff (D-CA) sent letters to Google and Facebook asking their CEOs to censor information that discourages parents from vaccinating their children. Schiff wrote, "I was pleased to see YouTube's recent announcement that it will no longer recommend videos that violate its community guidelines, such as conspiracy theories or medically inaccurate videos, and encourage

CDC MMR Vaccination Coverage by Year— Where's the Drop?

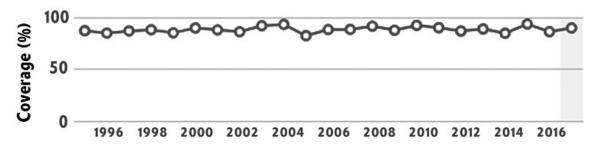


Figure 3. Year Source: childrenshealthdefense.org

further action to be taken related to vaccine misinformation."²¹

Schiff also sent a letter to Amazon's CEO Jeff Bezos, who responded by removing vaccine awareness books and videos, including my documentary, *The Greater Good*. Now I am not a lawyer, but should it not be illegal for a congressman to use his power to influence companies in order to further his political agenda? After all, Schiff is not a doctor, and he has campaign contribution ties to Life Technologies, now called Thermo Fisher Scientific. They supply vaccine manufacturers with vaccine ingredients like human embryo cell lines, calf serum, and monkey proteins.²² Schiff has also taken six hundred thousand dollars in campaign funding from "health care professionals."²³

The unfortunate reality is that vaccines will be a sixty-billion-dollar-per-year business for the pharmaceutical industry by 2020²⁴ and because of this, we will most likely continue to witness an onslaught of false information about measles and measles vaccines brought forth by uninformed media sources and legislators who receive incredible amounts of money from pharmaceutical companies.²⁵ The pharmaceutical industry spends over twenty-six million dollars annually in the United States on advertising, and, over the past decade, members of Congress from both parties have received about eightyone million dollars from sixty-eight pharmaceutical political action committees (PACs).26 With profits like these, it is no wonder that airtime for vaccine-awareness advocates is not allowed.

Can you imagine a doctor on television revealing the fact that MMR vaccine causes seizures in about one in six hundred forty children, five times the rate from measles, as well as thrombocytopenic purpura, chronic arthritis and brain damage?²⁷ Or how about the fact that the manufacturer's package insert says the possible effects of MMR vaccination on fetal development are unknown and that MMR vaccines have not been evaluated for carcinogenic or mutational potential, or potential to impair fertility?

UNAVOIDABLY UNSAFE

Make no mistake, there are plenty of doctors with reservations about vaccines. They are

just rarely able to make their voices heard. The Association of American Physicians and Surgeons (AAPS) strongly opposes federal interference in medical decisions, including mandated vaccines. They warn that the regulation of medical practice is a state function, not a federal one, and that governmental preemption of parents' or patients' decisions about accepting drugs or other medical interventions is a serious intrusion into individual liberty, autonomy and parental decisions about child-rearing. Simply put, when there is risk, there must be a choice, yet legislators are doing everything in their power to eliminate our option to choose.

Governmental corruption in regard to vaccines is not a new phenomenon. Not only are vaccines exempt from rigorous safety testing, including double-blind placebo-controlled studies, but also the National Childhood Vaccine Injury Act of 1986 effectively eliminated pharmaceutical company liability for injuries caused by vaccines. In other words, vaccines have never been properly studied (or regulated), and you cannot sue the manufacturer or your doctor when vaccines injure or kill. Instead, a plaintiff must go through what is called the Vaccine Injury Compensation Program (VICP), or "Vaccine Court," which is part of the U.S. Court of Federal Claims. It is in this court that a government-appointed judge called a Special Master solely decides whether or not a victim is to be compensated. Despite denying most claims, the VICP has paid out more than four billion dollars to vaccine-injured persons and families, including compensation for a known eighty-three children who regressed into autism after vaccination.²⁸

Add to this the fact that the U.S. House Committee on Government Reform issued a report which found that the "overwhelming majority of members" of the CDC and the FDA vaccine committees had conflicts of interest because of "substantial ties to the pharmaceutical industry." Take FDA Commissioner Scott Gottlieb for example, who resigned after only eighteen months in office. He not only has extensive financial ties to pharmaceutical and biotech companies, 29 but also was a partner at New Enterprise Associates, the company that funded the development of the disastrous birth control device called Essure, which tens of thousands of women say has damaged them for life. As recognized by the United States Supreme Court, vaccines are unavoidably unsafe, and yet we continue to hear the mantra that vaccines do not cause autism or other problems.

THE AUTISM CONNECTION

In support of this pro-vaccine view, a new Danish study, "Measles, mumps, rubella vaccination and autism: a nationwide cohort study," claims that there is no increased risk for autism after MMR vaccination. Handley makes an important point in his article, "New Danish MMR study shows autism rate of 1 in 100—CDC should rush to Denmark!" According to Handley, "It is too bad no one reads (or understands) the details about these studies that are both funded and researched by vaccine companies. This study was funded by the Novo Nordisk Foundation and research completed by Danish vaccine maker Statens Serum Institut."³⁰

Needless to say, the new Danish study is heavily flawed and biased. It does not prove that vaccines do not cause autism, which now affects one in thirty-six American children.³¹ In fact, the autism rate is rising at

such a fast pace that Stephanie Seneff, a senior research scientist at the Computer Science and Artificial Intelligence Laboratory of the Massachusetts Institute of Technology, estimates that one in two children (80 percent of the boys and 20 percent of the girls) born in 2032 will end up on the autism spectrum if the exponential growth trends continue.

Here in the United States, the Autism Science Foundation (ASF) serves as a platform for pro-vaccine spokesperson and vaccine inventor Dr. Paul Offit of Children's Hospital of Philadelphia (CHOP). The organization's website cites twenty-seven studies that they assert prove that vaccines and autism are unrelated. These studies are referenced time and time again when we hear the claim that "the science is settled." Thirteen of the studies look at the MMR-autism relationship, ten of the studies look at the mercury-autism relationship and four of the studies are "meta-analyses" of the aforementioned twenty-three mercury and MMR studies. These studies examine only one vaccine and one ingredient, yet children today are required to get eleven vaccines—most of which are injected on three to four occasions.

Furthermore, two authors, both affiliated with the CDC, have either led or been coauthors on a total of eight of the studies mentioned above. One is an embezzler who stole over one million dollars of CDC grant money and is listed as a "most wanted" fugitive. The other became a whistleblower due to scientific fraud he and his colleagues committed on a CDC study. Dr. William Thompson, the whistleblower, said he and his coauthors omitted statistically significant data that suggested that African American males who received the MMR vaccine before age thirty-six months were at an increased risk for autism. In order to bury their results, CDC scientists met in a private room and resolved to destroy all of the primary data and notes from Thompson's study. Because Thompson feared he was breaking the law, he kept proof of the data.³³

There is so much evidence of vaccine fraud, yet people continue to believe that the vaccine industry is impervious to corruption. Take for example, vaccine manufacturer Sanofi, which in multiple countries has been convicted of fraud involving bribing government officials and health providers. And Merck, which manufactures measles vaccines, is in court for lying about the efficacy of the mumps portion of the vaccine. They are also in court over their disastrous HPV Gardasil vaccine. And remember when thirty-eight thousand Americans died from Merck's drug Vioxx after they covered up the fact that it caused heart attacks?³⁴

Perhaps the greatest gift to the vaccine-awareness camp came when Dr. Stanley A. Plotkin, largely considered the highest-ranking authority in the world on vaccines, was deposed in a child custody case in January 2018. Reluctantly, but while under oath, Plotkin confirmed many of the negative aspects and dangers of vaccines. Plotkin confirmed the following: the use of human fetal tissue in the vaccine-making process; the toxic ingredients in vaccines; the deliberate lack of testing on the part of the pharmaceutical companies and the CDC; the use of toxic substances instead of inert placebos in studies; the fact that most vaccine studies record injuries reported only within four to five days from the date of injection; and the absence of governmental or pharmaceutical studies comparing the health outcomes of vaccinated and unvaccinated children.

Plotkin also stated that fetuses from psychiatric institutions were used and experimental vaccines were studied on orphans, yet he does not believe a person can have a valid philosophical or religious objection to vaccination.³⁵

We also have remarkable new information regarding another expert witness: Dr. Andrew Zimmerman, a respected pro-vaccine medical expert used by the federal government to debunk the vaccine-autism link, now says vaccines can cause autism after all. Zimmerman was the government's top expert and had testified that vaccines did not cause autism. But now Dr. Zimmerman claims that during the vaccine hearings in 2007, he privately told government lawyers that vaccines can and did cause autism in some children. This turnabout from the government's own chief medical expert stands to change everything about the vaccine-autism debate, assuming the public finds out.³⁶

THE RIGHT TO CHOICE

Because there can be no denying that manufacturer package inserts for childhood vaccines list over one hundred immune, neurological, and other chronic conditions that may occur post-vaccination, we must stop shaming parents for being "vaccine-hesitant." The media, health officials and legislators must stop propagating misinformation to benefit their pocketbooks. In fact, they must stop outright lying. An example of this is when the ABC affiliate in New York City shared health department statistics on January 30, 2019 showing that ninety-three of the one hundred and twenty-four people reported to have measles in Rockland County, New York (roughly three-fourths) were vaccinated—but after the story spread on social media, ABC altered the story and deleted the telling information.

It is worth taking the time to think about why officials are pushing so hard to eliminate vaccine exemptions when vaccine compliance among children is so high. Could it be that they are simply using fear to neutralize us for the next step—mandatory vaccinations for all adults? After all, there really is little more money to be made from children unless more vaccines are added to the childhood schedule or vaccination is made compulsory worldwide.

Let us remember that vaccines are neither 100 percent safe, nor 100 percent effective, and in many cases vaccine damage can be ruinous for individuals and their families. Vaccines are by no means the only available way to control the spread of disease. For example, many less developed countries have adopted the use of homeopathy, as it can be much safer, more effective and less expensive than pharmaceutical medicines. Considering the fact that pharmaceutical death is the number-one cause of unnatural death in the First World, perhaps we should try this method here at home. We will have to stand up for our rights, however, because special interest groups are already doing everything in their power to make homeopathy illegal.

The bottom line is that we as a society need to assert our rights of bodily autonomy before it is too late. If we do nothing, we may see an America in which people will be denied public transport, work or health insurance unless they are fully vaccinated with products that are neither properly tested nor regulated. I, for one, do not wish to live in a totalitarian country without basic liberties—and yet these liberties are disappearing as people call for jailing those who do not vaccinate and vaccine stakeholders continue to censor our views.

Kendall Nelson is a documentary filmmaker actively engaged in directing, producing and distributing media that matters. With over twenty years' experience in television and film, Nelson has made a lifelong commitment to bringing about awareness through her work. In addition to making movies, she is an advocate for the causes she cares most about including health freedom, simple living and the real food movement. She is also a proud member and board member of the International Women's Forum (IWF), which works to build better leadership locally and globally.

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Legislative Updates

FEDERAL POLICY UPDATE By Judith McGeary, Esq.

The Food & Drug Administration (FDA) Commissioner surprised the public with the announcement that he is resigning at the end of March. He had just recently hired senior staff, after tweeting two months before "I'm not leaving ... We've got a lot of important policy we'll advance this year." Gottlieb stated that he was leaving to spend more time with his family.

Unlike many of the current administration's appointments, Gottlieb was not across-the-board anti-regulation. He continued programs begun under the Obama Administration on nutrition labeling and sought to increase regulations for youth vaping tobacco use. While many in our community hoped that this administration would roll back the more burdensome provisions of the Food Safety Modernization Act (FSMA), Gottlieb took no such action.

Speaking of FSMA, are you watching your state agriculture department? FDA's preferred method for implementing FSMA is through cooperative agreements with state agriculture and health departments, in which the state agencies are the primary implementors and enforcers. All but four states (Wyoming, North and South Dakota and Illinois) have agreements with FDA.

The implementation of the Preventive Controls Rule, for food manufacturers and processors, is likely to be relatively straightforward, since these businesses are already subject to state regulation in most cases.

In contrast, implementation of the Produce Safety Rule is fraught with uncertainties, since this is the first time that the federal government will regulate how fruits and vegetables are grown and harvested. As we've covered in past issues of *Wise Traditions*, small-scale, direct-marketing farmers are exempt from the Produce Safety Rule's substantive requirements, although they do have to maintain records to be able to prove their qualified exemption. This exemption, often referred to as the Tester-Hagan

exemption in recognition of the two senators who championed it, is vital to the survival of small-scale farms, given that the costs of complying with the rule would otherwise cost more than the entire profit margin of many of these farms!

Many state agencies, however, have expressed hostility to the exemption for small farmers. In Texas, this took the form of trying to undermine the exemption through state-level regulations. In December, the Texas Department of Agriculture (TDA) issued a proposed regulation that would have required all farms, including exempt ones, to register with the agency and submit documentation to prove whether they were exempt. If a farmer failed to submit the required paperwork annually, then he or she would be subject to an inspection by the agency, to be conducted under the presumption that the Produce Safety Rule did apply to their farm—a presumption that would inevitably mean that the farm would be found in violation and face extensive fines. The proposed rule also created a new term, "egregious conditions," under which TDA claimed authority to come onto any farm at any time and halt sales.

The Farm and Ranch Freedom Alliance quickly rallied opposition to the proposed rule, starting with getting people to submit comments to the agencies and then contact their legislators—culminating in the introduction of a bill to limit the TDA's authority and prevent it from adding these requirements. The agency then stepped back and withdrew the rule.

The lesson? Watch what your state agencies are doing and be ready to speak up! WAPF and others fought hard for the Tester-Hagan exemption, and we must continue to defend it vigorously. As evidenced by TDA's withdrawal of its proposed rule, grassroots action can be effective—we just have to be alert and prepared.

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

BACK ISSUES OF Wise Traditions AND OTHER INFORMATIVE LITERATURE

Joel Salatin on the Politics of Food; Saving the Polish Countryside; Biological Farming; Glutathione in Raw Milk. Winter 2010 Sulfur Deficiency; The Importance of Salt; The Senomyx Scandal; Why We Crave; Raw Milk Safety. Summer 2011 Vitamin & Mineral Synergies; Bacon; Protect Against Tooth Decay with a High-fat Diet; Kombucha. Fall 2012 Winter 2012 Vitamin A Synergies; The Story of Zinc; Natural Skin Cream; Slovenian Soups and Stews; Soy Infant Formula. Our Broken Food Supply; The Marketing of Crisco; GMOs in Europe; Insights of a Meat Processor; Natto. Summer 2013 Fall 2013 GMO Dangers; Roundup Dangers: Culinary Traditions in Romania; The Battle for the People's Milk. Winter 2013 Beyond Cholesterol; Cancer as a Healing Strategy; Grain Traditions in Russia; Push to Pasteurize Breast Milk. Spring 2014 Dr. Price's Scientific Approach; Weston Price and the Fluoridationists; Cows and Climate; Economics of Raw Milk. Summer 2014 Nutrition for the Elderly; A New Look at Alzheimer's Disease; In Defense of Wheat; Dangers of Vegetable Oils. Fall 2014 What Causes Heart Attacks? The Myogenic Theory of Heart Disease; Thrombi in Heart Disease. Winter 2014 Effects of Smart Phones on the Blood; Dangers of Smart Meters; Protection Against EMR; U.S. Dietary Guidelines. Spring 2015 Cleansing Myths and Dangers; Toxicity and Chronic Illness; Gentle Detoxification; Great Nutrition Pioneers. Summer 2015 Vaccination Dangers Issue. Fall 2015 The Scandal of Infant Formula; Vitamin D in Cod Liver Oil; Cod Liver Oil Controversy; Fermented Fish Foods. Winter 2015 Water Issue: The Fourth Phase of Water; Sewage in a Glass; Water Stressors; Teaching WAPF to College Students. Spring 2016 Folic Acid and Glyphosate; Why We Need Saturated Fats; Cod Liver Oil Testing; Flint, Michigan Cautionary Tale. Summer 2016 Vitamin A; Healthy Fertility; Recovery from the Pill; The Concussion Epidemic; EMR and the ADHD Child. Fall 2016 Recovery from a Low-Carb Diet; Why We Need Carbs; Salt; Nutritional Yeast; Big Box Stores; Addictions. Men's Health; Protein Powders; Fueling the Modern Athlete; Restoring Male Fertility; Glyphosate in Collagen. Winter 2016 Type 2 Diabetes; Couch Potato or Marathon Runner?; Weight Loss; Costa Rica; Moving Heavy Loads; MSG. Spring 2017 Cholesterol Sulfate and the Heart; Vitamin D Dilemmas; Five Obstacles to Cure; The Adrenal-Heart Connection. Summer 2017 Why Do We Get Cancer; Support for Pediatric Cancer; The Tijuana Clinics; GCMaF and Raw Milk; Black Salve. Fall 2017 Winter 2017 The HPA Axis; A Primer on the Thyroid; Recovery from Bioidentical Hormones; WAPF in Peru. Spring 2018 Mercury Issue: Mercury as Anti-Nutrient; The Thimerosal Travesty; Poisoning Our Children; The Cutler Protocol. Summer 2018 Treating GERD; Gallbladder Health; Herbal Bitters; Hidden Histamine Problems; Constipation. Fall 2018 Seniors on Drugs; Chronic Hyperinsulinemia; Dangers of Daily Aspirin Use; Incontinence; Nepal. Winter 2018 Glyphosate and Non-Hodgkin's Lymphoma; Dangers of Sunscreens; Chronic Disease and Vaccines.

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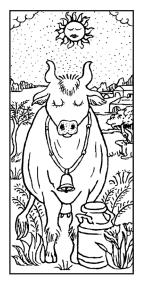
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A Campaign for Real Milk

BRUCELLOSIS PROPAGANDA

By Pete Kennedy, Esq.

Various media have been waging one of the bigger anti-raw milk propaganda campaigns in memory through their reporting on a recent individual case of brucellosis (also known as undulant fever) attributed to raw milk consumption. The media are using the case, the third individual incident of brucellosis blamed on raw milk consumption in the past year and a half, to warn the public that people are putting their health in jeopardy if they don't consume milk that is pasteurized. The illnesses occurred in Texas in August 2017, New Jersey in October 2017, and New York in November 2018, with the latest illness blamed on Miller's Biodiversity Farm of Quarryville, Pennsylvania; there is currently a quarantine in effect prohibiting the farm from distributing raw dairy products. A cow that tested positive for brucella has been removed from the dairy herd.

The media have been taking their cues from press releases issued by public health departments, namely the Centers for Disease Control (CDC), which have been giving the advice to pasteurize all milk. However, the solution to avoid getting brucellosis is far different from what public health officials and the media are telling you. In the words of one healthcare professional, "For public health officials to issue public notices that the solution to this avoidable problem is to pasteurize all milk is astonishing."

BRUCELLOSIS FACTS

First, the three cases of brucellosis are the only known cases attributed to raw milk consumption over the past twenty years. Brucellosis is a systemic disease in cattle and humans that is caused by the bacteria *Brucella abortus*. At one time the disease in cows caused severe reductions in offspring and was a problem for the cattle industry. A national eradication cam-

paign was launched in the 1950s and according to USDA statistics, the number of cattle or bison herds affected by brucellosis in the U.S. has been less than ten every year from 2003 onward.¹

The eradication program's success has led to a huge decline in the number of brucellosis cases in humans; estimates are about one hundred cases of human brucellosis per year in this country.² In the U.S., this is mainly an occupational disease with most of the rare cases of brucellosis occurring in people who attended the birth of an infected cow and then became infected during handling of the birth tissues and fluids ^{3,4}

In an infected dairy cow, the *Brucella abortus* pathogen can proliferate in the mammary glands and then enter the milk. The pathogen can pass to humans when drinking the infected milk, but as mentioned the cases of brucellosis attributed to drinking raw milk in the U.S. are extremely rare.

A lab test called "milk ring test" is the traditional and commonly used method to screen dairy herds to detect any cows with brucellosis; the test is performed on the herd's milk to check for the rare presence of brucella antibodies.

Two vaccines against brucellosis have been developed for calves: the S19 vaccine and the RB51 vaccine. The S19 vaccine is effective, but it has the disadvantage of causing testing for antibodies to become positive. The vaccine can make it difficult to distinguish between a vaccinated cow and an infected cow. The RB51 vaccine does not cause the antibody testing of cows to become positive, but another problem arises with its use.

The RB51 vaccine must be administered to calves before they become fertile; a side effect is that, if a cow is given the RB51 vaccine when

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pregnant, it may actually cause an infection with the vaccine strain of brucella in the vaccinated cow. It is, therefore, possible that if the RB51 vaccine isn't given strictly according to the protocol, the vaccinated cow may become infected and may shed the pathogen (that is, the RB51 strain of brucella) into the milk.

Public health officials have found in all three cases of illness from brucellosis attributed to raw milk consumption, the strain of *Brucella abortus* discovered was the RB51 vaccine strain. In fact, in November 2017, the Pennsylvania Department of Agriculture sent a letter to licensed raw milk producers in the state advising them to stop immunizing cows with the RB51 vaccine.⁵

So the solution to preventing brucellosis in raw milk is not for producers to pasteurize the milk but rather to either stop giving their herd the RB51 vaccine or to make sure their vets give the calves the vaccine before the calves become fertile. Worth noting, too, is that hundreds of people drank raw milk produced by the herds responsible for the three cases of brucellosis and, as far as is known, no one else became sick.

MEDIA FEAR-MONGERING

In the meantime, the media fear-mongering continues. The latest case of brucellosis attributed to raw milk consumption dates back to November 2018, but to read the stories in the media, you would think it had just been discovered. CDC press releases on this latest case dated January 23, 2019, and February 11, 2019, are providing the impetus for the flood of media reports.

Has the anti-raw-milk agenda ever gotten so much mileage from three illnesses?

A fear-mongering statement from the February 11 CDC press release that the media have parroted is, "the CDC and state health officials are investigating potential exposures, to brucella strain RB51 in 19 states, connected to consuming raw (unpasteurized) milk from Miller's Biodiversity Farm in Quarryville, Pennsylvania." (The farm allegedly distributed raw milk to people in the nineteen states listed later in the release.) Being exposed to a pathogen is far different than being sickened by it; we are exposed to various pathogenic bacteria such as

listeria and E. coli in the environment every day.

One headline screamed, "Deadly disease caused by raw milk has already put 19 U.S. states on high alert." There have been no deaths from brucellosis attributed to raw milk consumption since the eradication program succeeded in substantially eliminating the incidence of the disease and possibly even long before then.

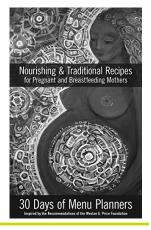
The public health agencies and their allies in the press have been misleading the public long enough on raw milk and brucellosis. It's time for fear and hysteria to give way to science and common sense.

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Nourishing & Traditional Recipes for Pregnant & Breastfeeding Mothers: 30 Days of Menu Planners inspired by the recommendations of the Weston A. Price Foundation by Joanna Steven and others. Proceeds from the book will benefit the Weston A. Price Foundation. Available as a Kindle book on Amazon.



RAW MILK UPDATES by Pete Kennedy, Esq.

CANADA - RAW MILK ENFORCEMENT MOVES TO ALBERTA

Raw milk enforcement actions continue in Canada; this time, it's Alberta. The Crown has brought three charges against Innisfail farmer David Rand for alleged violations of Alberta's dairy law: the unlicensed production or processing of dairy products, selling raw milk and "obstructing, hindering or impeding an inspector in carrying out their duties" under the Alberta Dairy Industry Act. A trial will likely take place this fall; each of the charges carries a maximum twenty-five thousand dollar fine. (For those who would like to support Rand, a GoFundMe campaign has been set up at ca.gofundme.com/dairy-freedom.)

In addition to the charges, the Alberta Health Services (AHS) has issued a "notice of closure" to Rand ordering him to "cease and desist the distribution, transport, processing or sale of unpasteurized milk or unpasteurized milk products." One of the grounds for the order was that "distributing, transporting, processing or selling unpasteurized milk products" was in violation of an Alberta health regulation stating, "no person shall create, commit or maintain a nuisance." Alberta Agriculture and Forestry (AAF) issued a second order to Rand, a "notice of seizure or detention" requiring that all milking equipment and any dairy products, including all future production, remain on Rand's farm.

The charges and the orders against Rand stem from a November 7, 2018, raid on Rand's farm and a supposed raw milk distribution site in Red Deer, Alberta, by officials from both AAF and AHS as well as the Royal Canadian Mounted Police (RCMP). The officials conducted the raid at both locations without any warrant.

The law in Alberta, as in all provinces of Canada, prohibits any sale of raw milk; there is a federal ban in the country as well. The ban has served as a protection racket for the dairy industry, but some of the farmers making up the industry might want to consider obtaining another outlet for their milk. The Canadian quota system has been held as a model for the struggling U.S. dairy industry, but there has been a tremendous decline in the number of Canadian dairies, falling from nearly one hundred forty thousand in 1960 to fewer than twelve thousand today according to *The Globe and Mail*.¹

In Ontario, there is an ongoing court case where twenty-one Ontario farmers and consumers have filed in a Toronto superior court a constitutional challenge to the province's ban on raw milk sales and distribution.² In 2010 an Ontario court ruled in a case the Crown had brought against Michael Schmidt for illegally selling raw dairy, stating that there was a legal distinction between the public and private distribution of food and that informed consumers can waive the protection of public health laws. That ruling was reversed on appeal; raw milk proponents could use a similar decision in the country that is the most oppressive in the world when it comes to enforcement against raw milk sales and distribution.

Supporters of raw milk access in Canada may go to the educational Facebook page for Farm-Fresh-Milk (be sure to include the hyphens). The intention is to show that raw milk needs to be on the policy platform of every party. There is also a website with a petition for Canadians to have the right to obtain fresh milk produced by local farms; to endorse "We Choose Fresh," go to farmfreshmilk.ca/wechoosefresh.

- 1. Barrie McKenna, "Canada's dairy industry is a rich, closed club," *The Globe and Mail*, 25 June 2015 (updated 15 May 2018), theglobeandmail.com/news/politics/canadas-dairy-industry-is-a-rich-closed-club/article25124114/
- 2. Pete Kennedy, "Farmers & consumers challenge raw milk ban." RealMilk.com, 19 February 2018, realmilk.com/farmers-consumers-file-constitutional-challenge-ontario-raw-milk-ban/

NORTH CAROLINA – HERDSHARES UNDER ATTACK

The North Carolina Department of Agriculture and Consumer Services (NCDA), the North Carolina Farm Bureau and the state's dairy industry are working to repeal a four-month-old law legalizing herdshare agreements. It is not known whether they have been able to find a legislator willing to sponsor such a freedom-robbing bill. (See *Wise Traditions* Winter 2019 issue, "North Carolina – Herd Share Ban Lifted" for background.)

A herdshare agreement is a private contractual arrangement in which someone purchases an ownership interest in a dairy animal (or herd of dairy animals) and pays a fee to a farmer for boarding, caring for and milking the animals. The 2018 North Carolina Farm Bill contained a provision stating, "nothing. . . shall prohibit the dispensing of raw milk or raw milk products for personal use or consumption to, or the acquisition of raw milk or raw milk products for personal use or consumption by an independent or partial owner of a cow, goat, or other lactating animal."

NCDA Commissioner Steve Troxler isn't waiting for a change in the law to begin restricting herdshares. The department has issued a directive prohibiting dairies from delivering raw milk to shareowners at state-run farmers markets. There is nothing in the herdshare law, or any other law, that gives NCDA this authority.

The dairy industry's push to repeal the herdshare law is coming at a time when many of the state's Grade A dairy farms are either going out of business or barely hanging on. The distribution of raw milk through herdshare agreements can help save some of these dairies; the state's dairy farms need all the help they can get. Between April 2017 and April 2018, North Carolina lost a staggering 24 percent of its Grade A dairies, dropping from one hundred ninety-two to one hundred forty-six. For the past four years, conventional dairies have been receiving a price for their milk that is well below the cost of production—a trend that shows no signs of going away.

The strategy for those trying to repeal the herdshare law will be to play the fear card trying to convince legislators that raw milk is a major health threat, especially to children. When the recent deadly foodborne illness outbreaks involving foods such as romaine lettuce, ice cream and cantaloupe are taken into consideration, there is a double standard in banning raw milk sales for human consumption in North Carolina (raw milk sales are legal for pet consumption). In spite of the efforts of CDC and FDA to make it seem otherwise, there have been no deaths legitimately attributed to raw milk consumption since the current CDC foodborne illness database was established in 1998. According to a recent study, the number of illnesses attributed to raw milk consumption in the U.S. has actually gone *down* as demand and consumption have increased.² Reports are that herdshare farmers that ask the state-run labs to test raw milk to help assure safety have been turned down.

The dairy industry leaders might also play the fear card with the state's Grade A dairies, warning them that one outbreak blamed on raw milk could damage the conventional industry. The evidence shows otherwise—that the price of pasteurized milk and the demand for it aren't affected by a foodborne illness outbreak blamed on raw milk consumption. If the Farm Bureau, the dairy industry and NCDA are successful in repealing herdshares, at least some of the Grade A dairies will be without a potential lifeline that could keep their operations going in the face of the low prices they are receiving for their milk intended for pasteurization. Raw milk produced for pasteurization and raw milk produced for direct consumption are mostly not in competition; if North Carolina raw milk consumers can't get raw milk in the state, most will not drink pasteurized milk but will look outside the state for raw milk sources.

The Grade A dairies and many other farms can benefit from the herdshare law; raw milk is often the draw that leads to sales of other farm products such as meat, poultry, eggs and produce. The herdshare law can help the small farm sector in the state, enabling the start-up of micro-dairies. Michele Presnell, the state representative for the 118th District, noted that sixty years ago there were around fifty Grade A dairies and one hundred fifty other dairies in her home county of Yancey and today she knows of none. Reviving the dairy sector through herdshares can keep more of the food dollar in the community. The herdshare law can make raw milk the centerpiece of a small diversified farm. In neighboring Tennessee, where herdshare agreements have been legal for about ten years, shareholder dairies have thrived; it is estimated that there are around three hundred herdshare programs operating in Tennessee.

If the effort to repeal the herdshare law is successful, the 2004 law expressly banning herdshares goes back on the books, and the state will continue to lose business to South Carolina where the sale of raw milk is legal. Over the years, this ban has resulted in millions of dollars of lost revenue for the state of North Carolina. There never should have been a herdshare ban in the first place; to say that someone with an ownership interest in a dairy animal can't get milk from the animal unless it is boarded on the owner's premises is a basic denial of property rights. For those who believe in property rights, freedom of food choice and the right of dairy farmers to make a living, keeping the herdshare law intact is a fight worth taking on.

- 1. North Carolina General Assembly, Session Law 2018-113 (Senate Bill 711), Section 15.2, June 27, 2018. Retrieved October 9, 2018 from ncleg.net/Sessions/2017/Bills/Senate/HTML/S711v8.html.
- 2. 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. bae5a0fd685616839c9cf857792730d1.

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

CORRECTION: In the Winter 2018 issue of *Wise Traditions*, we inadvertantly omitted a reference for a recent study on raw milk safety. The reference is the same as the #2 reference on this page (see above).

Healthy Baby Gallery



Four-year-old Moses Gabriel continues to thrive on a traditional foods diet. His round head and face have allowed for generous dental arches (according to his biological dentist, who promotes a traditional foods diet). This is amazing considering that Moses is a carrier of the common MTHFR genetic mutation. A regular intake of grass-fed meats, whole goat yogurt, salmon roe, kombucha, pastured eggs and A2 butter contribute greatly to the vibrancy and health of this smart, fun and engaging young person who is often mistaken for being older because of his unusual vocabulary, stature and large head circumference. Meeting and interacting with new people of all ages adds to his amazing disposition—thanks to the WAPF information available to his mother years prior to conception, and the grace of God.

Evie (a little over four and one-half years old) is with her baby sister Madeline (thirteen months). Both were born naturally, without medical intervention. After birth with a midwife, Maddie rested on her mom's chest and took to nursing easily. During pregnancy, mom had fermented cod liver oil (FCLO) and pastured products every day. In the beginning, mom didn't like the taste of raw milk, but after the first trimester, she enjoyed it through her pregnancy. She also ate fermented veggies, pastured meats, liver paté and took liver supplements. Madeline licked FCLO from her mom's finger very early on and takes it by spoon now. The very first food for both girls was pastured egg yolk. Both absolutely love sardines, dried anchovies, pastured meats, raw milk, raw kefir, fish eggs, fermented veggies and home-made ice cream. They both are thriving and happy! We are so thankful for meeting Christine Decker, ND (unfortunately not among us anymore) who told us about WAPF and traditional diets. Without this meaningful coincidence, we wouldn't be where we are now! Thank God and all at WAPF for everything!



NEW 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.

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FAYETTEVILLE, ARKANSAS, CHAPTER

The chapter offers many free workshops. Here, Brandon Weston is teaching a popular class on "Foraging Ozark Medicinal Herbs." He also gives classes on how to make herbal tinctures, extracts, balms and salves. Other workshops cover fermentation (veggies, kefir, kombucha); sourdough bread; bone broth; cheese-making with raw milk; growing shiitake, oyster and lion's mane mushrooms; seed propagation; epigenetics and lifestyle choices that affect health; and cleaning indoor air with house plants.



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COLORADO SPRINGS CHAPTER

The chapter's first dinner was a great success! The amazing local foods menu provided by attendees included homemade wines, raw grass-fed cheese, French onion soup with homemade beef broth, einkorn sourdough bread with lots of butter, three different vegetable ferments, grass-fed beef roast, braised pastured pork jowls, tallow-fried butternut squash, and apple crisp and cherry pie with whipped cream for dessert. The only thing better than the food was the company!



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TRADITIONAL FOODS WORKSHOP, OREGON

Jay Uth of Olde Moon Farm (Silverton, OR) graciously hosted a workshop and demonstrated shaping a loaf of classic artisan sourdough bread. Participants also made nutrient-packed millet and corn flour sourdough waffles with spiced cider syrup—with fresh millet flour, fully nixtamalized corn flour, rounded out with sprouted precooked lentils and harmonized by huckleberry-derived wild yeast. Chapter leader Elizabeth Voth also demonstrated harvesting wild yeast from diverse fruits to make fresh sourdough starter.



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NORTHERN PLAINS SUSTAINABLE AG CONFERENCE



The much-visited WAPF booth at the Food and Farming Northern Plains Sustainable Ag conference in Fargo resulted in seven new members. The red hat on display at the booth (*not* politically motivated) proudly proclaims, "Make America GRAZE again!"



Booth visitors were encouraged to find the "factory egg" in the egg quilt (made by Georgette Sutera, as a gift)—they all correctly pointed out the anemic yellow one in a sea of orange yolks!

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

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http://meetup.com/Welcome-WAPF-N-Baltimore-County-CHAPTER

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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, chapter handbook and PowerPoint presentations.

LOCAL CHAPTER LISTSERVE

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

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OZAUKEE/WASHINGTON COUNTIES, WISCONSIN

Chapter leaders Susan Wichman and Laurie Meyer ran a booth at the WI Gluten Free Expo in West Bend, Wisconsin, in October, eliciting lots of interest!

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Olds: Rick Kohut (403) 507-5890, rick@healthstreet.ca

Peace Country: Peter & Mary Lundgard (780) 338-2934 plundgard@telus.net & Levke Eggers (780) 568-3805,

levke@telusplanet.net

BC Burnaby-New West: Marianne Lightfoot (604) 420-6185 maryan24@telus.net

Chilliwack: Anna Bonde (604) 819-4101 anna mvm@telus.net

Duncan: Andrea Larsen (778) 422-2286 info@andrealarsenrncp.com

Vancouver: Sonya McLeod (604) 677-7742 LMhomeopath@gmail.com

http://facebook.com/westonapricefoundationvancouverbcchapter/

http://groups.yahoo.com/neo/groups/WAPFVancouver/info, http://chapters.westonaprice.org/vancouverbc/

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NS Annapolis Valley: Shirley Scharfe (902) 847-1736 shirley1736@gmail.com

ON Grey-Bruce: Michael& Elisa VanderHout Schmidt (519) 369-1678 glencoltonfarm@gmail.com

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Robert@clintondentistry.com, http://wapfkingston.org

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Toronto (Downtown): Patricia Meyer Watt (416) 653-7112 TorontoWAPF@gmail.com

SK Regina: Sandra Brandt (306) 359-1732 brandt.s@sasktel.net http://WAPFRegina.wordpress.com

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

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Coyhaique: Ann Oldham Michael (541) 883-2263 pacificorim@gmail.com & Ema Morales 56 67 24 52 88, emacibel@gmail.com

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http://www.wapfwellington.org.nz

Auckland, North & West: Alison Ellett +09 420-8548 alison@wapf-auckland.co.nz http://wapf-auckland.co.nz/ Coromandel Peninsula: Caroline Marshall (027) 438-4654 me@carolinemarshall.nz & Carl Storey 027 355-1701, carlstorey@xtra.co.nz

Gisborne East Coast: Bridget Scully kiwilampo@gmail.com bridgetscully@gmail.com & William Lane http://kiwilampo@gmail.com

Palmerston North: Susan Galea (646) 324-8586 dekmatt@ihug.co.nz http://www.realmilk.co.nz South Canterbury: Carol Keelty +03 6866 277 bckeelty@outlook.com & Inez Wilson inezmwilson@xtra.co.nz

NZ Resource List: Deb Gully deb@frot.co.nz http://www.diet.net.nz

NORWAY

Hedmark (Stange): Sindre Vaernes sindre.vaernes@gmail.com & Tom Olsen 4847 1030

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http://meetup.com/westonaprice-london Phil Ridley, westonaprice.london@gmail.com

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https://www.facebook.com/groups/336421596766813/

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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 Grassfed. 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

FL

Pineshine Farms – We raise grass-fed, grass-finished beef and pasture raised chicken and eggs! Our animals are free from vaccines, antibiotics and hormones. We offer **national shipping** and local pick-up. Please visit our website pineshinefarms.com or send a note to info@pineshinefarms.com.

IΑ

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

100% grass-fed raw butter, cheese, and other dairy products, **will ship.** Also available in Indiana only: 100% grass-fed beef, veal and whey/skim fed pork. Check out our online store for other local products available at https://thefarmconnection.grazecart.com. Alan & Mary Yegerlehner, Clay City, Indiana (812) 939-3027.

Spring River Dairy (Fry Farms Co-op) has raw milk and milk products including 5 raw milk cheeses from healthy Jersey cows grazed on organically managed pasture and hay. Available to herd-share members. Delivery to Fort Wayne and Columbia City. Fry Farms Co-op (260) 704-0132.

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.

Nick's Organic Farm. Grass-fed beef (no grain ever), free range eggs, pastured chicken and turkey. Liver, organ meats, and bones. Organic poultry feed. Pick up in Potomac or Buckeystown. Our livestock are rotated to fresh pastures on our fertile organic soils and receive organic feed, no hormones, antibiotics, or animal parts. We raise our cows 100% grass-fed. We raise our hay, raise and grind our own grain into poultry feed and process our poultry. Quality organic products since 1979. (301) 983-2167, nicksorganicfarm@comcast.net, nicksorganicfarm.com.

M

Provision Family Farm of Big Rapids – Pastured pork, chicken, beef and lamb sold from farm or delivered monthly to your home from Grand Rapids to Cadillac; Muskegon to Mt Pleasant. No GMOs, no soy and no chemicals. Come visit the farm! White Cloud, MI. (231) 689-0457, provisionfamilyfarms@gmail.com, provisionfamilyfarms.com/shop-the-farm.html.

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.

MO

Fruitful Hills. Grass-fed raw milk, cheese, butter, etc. Raw goat's milk. Pastured pork, chicken, turkey and eggs. Grass-fed beef. Local raw honey. Fermented veggies. Our summer and winter CSA offers fresh organically raised vegetables. Dropsites in select areas. (660) 938-4291.

NY

Raw milk, cheese, butter, etc. from 100% grass-fed Jersey cows. 100% grass-fed beef and lamb. Pastured pork, chicken and turkey (soy-free options available). Fermented veggies and more! Have dropsites in select areas or **can ship**. Call for details. Pleasant Pastures (717) 768-3437.

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

OH

Heritage Devon beef, 100% grass-fed, no antibiotics, no growth hormones. Selling full cow, 1/2 cow or individual cuts from my ranch in St. Leon, Indiana (5 miles off I-74) or at "Lettuce Eat Well Farmers Market" in Cheviot, Ohio (western suburb of Cincinnati, OH – lewfm.org) first Friday of every month. Also pastured pork, 100% antibiotic free, fed minimum amount of non-GMO grain, 100% outdoors on pasture and woods. Pigs use small huts for shelter and farrowing. All meats USDA inspected. To see how we raise our beef and pork plus important health links visit our website abundantgreenpastures. com. For more information call 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 twelve delivery sites in Cincinnati. Farm and contact address is: 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.

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.

RAW CHEESES made from milk from our herd of 100% grass-fed cows on our organically

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managed farms. Prices start at \$5.25/lb. **WE SHIP**. Oberholtzer at Hilltop Meadow Farm. (570) 345-3305.

Thousand Hills Grazing (in Central PA) is taking orders for nutrient dense pastured poultry (soy free and non-GMO) and 100% grass-fed beef moved daily to fresh pasture. Contact Ben and Cassie Seppanen at (717) 636-0299 or visit thousandhillsgrazing. com for more information.

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 forage-based rabbits. Near Staunton. Some delivery available. Call (540) 885-3590 or (540) 887-8194.

Raw milk, cheese, butter, etc. from 100% grass-fed Jersey cows. 100% grass-fed beef and lamb. Pastured pork, chicken and turkey (soy-free options available). Fermented veggies and more! Have dropsites in select areas or **can ship**. Call for details. Pleasant Pastures (717) 768-3437.

۷I

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

Diamond S Ranch specializes in raw A2 milk from our 100% grassfed Jersey & Brown Swiss cows. Also offers grassfed beef, free range eggs, kombucha, sourdough bread, fermented veggies & more. For more information and check what's available at diamondsretreat. com. Wyoming delivery (307) 272-5334, text only.

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

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.

FRONTYARD FARM'S FARM-INSPIRED SOAPS. Connecting you with Virginia's pasture-raised farms through our lard and tallow soaps. Scented with essential oils. Absolutely no synthetic colorants, fragrances, soy, or palm. Great for gifts and everyday use. frontyardfarmva.com, frontyardfarm. etsy.com, and @frontyardfarm va!

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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.

DONATIONS

Please help us bring a service dog home to our autistic daughter. A traditional diet reduced her gut inflammation—this dog will reduce her high anxiety so she can thrive. Donate directly or commission a drawing for our cause: theaccidental octopus.com/about-1/.

THE URBAN PRAIRIE COMMUNITY KITCHEN will be a model for reinventing the school kitchen. UP Community Kitchen will serve nutrient dense foods to its school population and also the surrounding community. In order to accomplish this dream we are hoping to raise \$16,000 which will allow us to complete the kitchen and begin our mission of serving WAPF-style food. Join our kitchen family with your contribution and be a part of a new wave of school kitchens! https://www.crowdrise.com/o/en/campaign/urban-prairie-waldorf-school-illinois/urbanprairie?modified=1

DVDS

DVD "Nourishing Our Children" recently launched a DVD that may be used for one's self-education or to present to an audience. You will learn how to nourish rather than merely feed your family. nourishingourchildren.org/DVD-Wise.html Free shipping!

EMPLOYMENT OPPORTUNITIES

DIAMOND S RANCH is seeking a ranch couple or individual to be the production manager at our micro dairy & ranch store. Duties include but are not limited to: morning milkings, product production, keeping our customers up to date & sale records management. Resumes to gkrob324@gmail.com.

PERMACULTURE FARM near Tampa FL seeking farming partners. We grow vegetables (in dirt), perennials, and manage a small herd of water buffalo for milk and meat. 54 acres with wetlands and pasture, small orchard, building, equipment, solar systems, housing, and our interests are community, sustainable living, promoting the Weston A. Price Foundation, regenerative farming, ecology, social activism, etc. We are a older couple that want to continue farming. Contact Jon at (813) 708-3179 or e-mail ecofarmfl@yahoo.com.

We are seeking a middle aged couple to move into our log home and care for our small herd of dairy cattle. Knowledge of organic farming, animals and cheese making helpful. Does this look like something you could enjoy? Come give it a try! – Commit to 6 months or longer

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if both couples find a good fit. Couple mid 60's due to health reasons need a sabbatical from our new and fast growing A2 raw milk micro-dairy in Wyoming. For more information send email w/ resume diamondsretreat@gmail.com; diamondsretreat.com.

HEALING ARTS

DIAGNOSIS+NUTRITION HEALTH COACH TRAINING for health care professionals and the general public; this "no pressures" integrative program is available online and in-person. Learn diagnosis techniques to create the best diet/lifestyle program for yourself and others. John Kozinski MEA, (413) 623-5925 macrobiotoic.com.

VIROQUA NUTRITION COUNSELING is a traditional foods-based practice in Southwest Wisconsin. Laura Poe, RD is a holistic dietitian, culinary instructor and WAPF member.In-person or distance consultations available. Email Laura at laurapoerd@gmail. com for more information or to schedule an appointment. Initial consults are \$100, \$75 for follow-ups.

HOMES & LAND SALE

4-BED FARMHOUSE HOMESTEAD W409 Foundry Rd, New Holstein, WI 53061 on 2.5 acres; more acreage available! 165K. Contact Emily Matthews 920-286-0570 RE/MAX Universal Realty, 614 Broadway, Sheboygan Falls, WI 53085. Office (920) 208-9500, sheboygan tothemax.com.

BUSINESS AND FARM IN OREGON LOOK-ING FOR A BUYER AND OR INVESTORS. The farm is a turn key operation. It has a 30 cow 30+ heifer herdshare dairy, with over 100 members. Includes cheese room, greenhouse, underground fodder container and green room, smaller greenhouse, and orchard that haven't been completely developed for revenue. 30 head of ewes and their lambs for milking on one side of the parlor. 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.

HISTORIC HOUSE and property for sale, walking distance to Sally Fallon's P A Bowen Farmstead and farmstore selling raw milk and pasture-raised products. 5 bdr, 5 bath, 78 acres, \$775,000. 16002 Doctor Bowen Rd, Brandywine, MD. Phone: (443) 256-3773.

RETREAT

Join Angelika Thusius for a Kentro Body Balance retreat in Greece, Hydra – an enchanting island without cars. Integrating the practical, pleasurable Kentro movements with your activities resolves pain, restoring a healthy back. Discover vitalizing comfort and ease! Aug.30 - Sept.2 KentroBody Balance.com

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with Swiss Native Judith Mudrak

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Many WAPers age 7 to 86 have already done this trip—since 2006!!!

Downpayment due by Saturday, March 23, 2019 For further details on inland fee (2055.00)

Please contact:

Judith Mudrak at reversemydisease@gmail.com or (609) 859-3828 EST.

TRAVEL/LODGING

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.

NEW FILM

Autoimmune documentary in post production seeks funding or investors. This film tells the stories of those who kept searching for an answer to their challenge and are now lighting the path of healing for others. Contact: Gabe (310) 779-2816 goldenfilmproductions.com/in-production.

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.

WAPF RESEARCH

ONGOING PROJECTS SHARING THE BENEFITS OF A WAPF DIET FOR GROW-ING CHILDREN: Johanna Keefe, PhD, RN, GAPS/P, has completed her doctoral research through the California Institute of Integral Studies (CIIS) revealing, though in-depth interviews, the lived experience of mothers as they describe their lifestyle following a real food diet based on the principles of the WAPF. Please consider contributing to her post-doctoral project to collect a more robust sample of mothers who are finding positive outcomes over time for their children and teenagers on a traditional diet. You can begin by offering your story to the research blog growingsuccessstories.org, which may serve to seed other doctoral studies, and also contribute to her forthcoming project: a published photo-essay leading to an uplifting film to inform and inspire our next generation of parents. If you would like to find out how to contribute to these projects, please contact Johanna through email at jmkeefe@endicott.edu or by phone at (978) 290-0266.

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Abraham Lincoln



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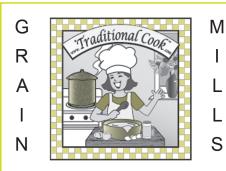


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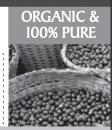
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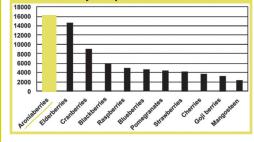
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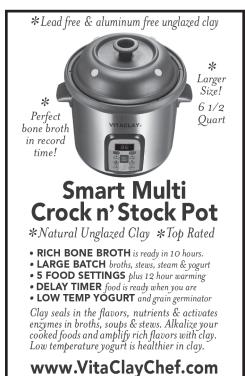
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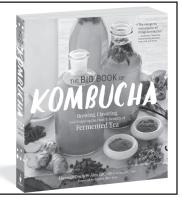
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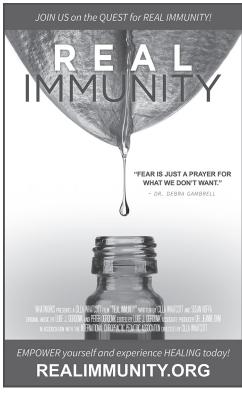
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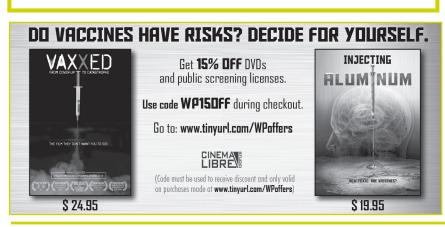


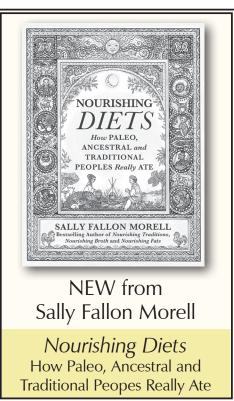




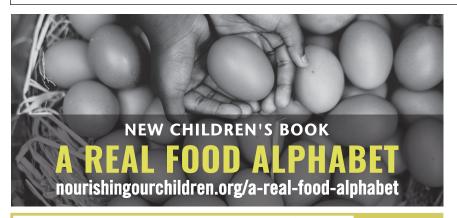


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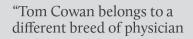
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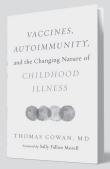


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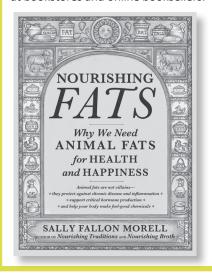
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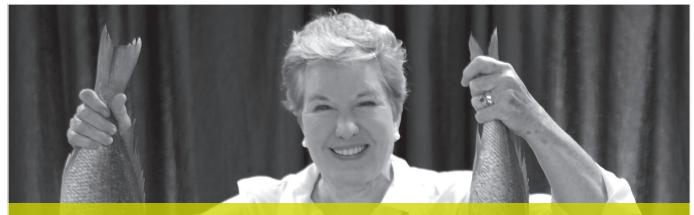




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