

IN FOOD, FARMING AND THE HEALING ARTS A PUBLICATION OF



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President's Message

A definition of insanity, attributed to Albert Einstein, is "doing the same thing over and over again and expecting different results." For decades now, the Diet Dictocrats have preached the gospel of lowfat, low-salt, high-carbohydrate diets, which Americans have followed, eating less meat and fewer eggs, more refined carbohydrates and more low-salt and lowfat foods. And during this period, Americans have gotten sicker, fatter and more unhappy.

The new 2010 USDA Dietary Guidelines urge more of the same lower amounts of saturated fat, restriction on cholesterol intake and severe restriction of salt intake, and more "plant-based" diets—but no restriction on sugar. Surely these recommendations constitute a kind of collective insanity, especially as they are inflicted on growing children participating in school lunch programs.

The myth that good foods (eggs, meat, butter, whole milk, cheese, meat fats and salt) are bad and that bad foods (refined carbohydrates, high-fiber foods, reduced-fat foods, soy-based substitutes) are good has now become so ingrained in our culture that many people feel guilty when they indulge in the pleasure of a juicy steak or a cheese omelet. Journalists describe eating lard, for example, as a "guilty pleasure."

Our efforts at the Weston A. Price Foundation this year will focus on myth-busting—showing the lack of science, indeed the lack of sanity, in the government's dietary strictures; demonstrating how diets that restrict components that our bodies actually need lead to overindulgence in empty processed foods. To this end we organized a press conference to protest the new 2010 dietary guidelines and to introduce our new *Healthy 4 Life* booklet, which contains simple guidelines and recipes based on four food groups, one of which is healthy fats. The event has received a lot of attention on the internet and good feedback to the Foundation. To view the press conference, visit westonaprice. org and click on the link posted on the home page.

The theme for this year's conference is Mythbusters—we have put together a line-up of experts to bring down the myths attached to salt, fat, cholesterol, soy, vegetarianism and sweeteners. We will also have tracks and lectures on Recovery, Nutrition, Farming, Cooking, Metabolism and Children's Health. Your favorite speakers will be there along with many new ones.

Wise Traditions is becoming the nation's premier nutrition conference, one that not only talks about healthy foods but also demonstrates what healthy eating is all about in the delicious meals served.

So mark your calendars! The conference begins most auspiciously on 11-11-11, and will be held in Dallas, Texas. See page 33 for details and watch the website as more information is posted.

A PHYSICIAN DISCOVERS WAPF

This is first of all a message of gratitude. I am forty-six years old, an MD practicing in San Francisco. In 2007, I hurt my foot when I tried to run a few steps. For a year I walked with pain in every step. My arch in fact had fallen by 50 percent. Of course being a sports medicine doctor, I assumed I had badly strained a ligament and just waited for it to heal; it didn't. In 2008 I got an MRI which documented a fracture in the navicular bone, the keystone of the medial arch. Physical therapy didn't work so the podiatrist wanted to put me in orthotics and start a bone growth stimulator. All these interventions he said were unlikely to work and most likely I would need surgery within a year.

Finally, I thought to myself, why on earth are my ligaments stronger than my bones? What is my vitamin D level? Ouch, it was only twelve. This explained the majority of the awful symptoms I had suffered for the preceding years. So I went to the web, searched vitamin D and found the WAPF website. I also found that WAPF was holding its conference in San Francisco in a week.

Then I went to my local medical library and pulled the 1930s copy of *Nutrition and Physical Degeneration* off the shelf and read every word. I went to the conference and it changed my life. I had been vegetarian for way too many years. (Ironically, I received my Nutritional Science degree from UC Berkeley, in 1987.) The vegetarianism explained why I could not get pregnant. I saw Thomas Cowan, MD, and began my recovery. Also, through you, I discovered Three Stone Hearth as a source for healthy food.

Also, I began to test vitamin D levels, serum ferritin, lipids and glucose levels in my patients with pain and joint problems. I began to see a huge difference in recovery using a WAPF-style protocol. Finally, for my tough patients, I sent them to Dr. Cowan.



Daughter of Lee Wolfer has egg yolk on her beautiful face!

But the biggest gift of all was the health of my adopted daughter, Amelie. Fortunately, I was blessed with a baby healthy from birth—but I knew she needed more. For the last ten months I have combined donated breastmilk with your infant formula. She is absolutely thriving, truly like the babies in Weston Price's original book. Everyone comments on her healthy appearance and good-natured personality. I get our milk from a local cowshare. She was weaned to egg yolks and liver paté.

Remarkably, what I learned from the Foundation has continued to change my life, the lives of family and friends and more and more patients. With respect to patients, one of them has just identified the high-vitamin cod liver oil and high-vitamin butter oil, as well as vitamin D supplements as the reason for his improved libido.

There is absolutely no way I would have enough energy to be a single mom at forty-six years old without the Weston A. Price Foundation and Three Stone Hearth.

> Lee R. Wolfer, MD San Francisco, California

THE CRISCO OF INDIA

I'm going to India next month to speak about ghee at an International Ayurveda and Yoga conference where I will be educating people about the dangers of industrial fats and oils.

The use of partially hydrogenated fat is widespread in India. The popular brand is called Dalda. This is the Crisco of India. It is promoted as a cheap and healthy ghee replacement and this product is primarily responsible for giving real ghee a bad name. Fortunately my mother never used it, even though I would have eaten it while eating away from home.

Here is a link where this company "proudly" mentions that they brought partially hydrogenated fat to India from Denmark: www.daldaindia.com/ heritage.html.

It is ironic that Denmark became the first country to ban *trans* fats, in 2003, whereas the use of *trans* fats is widespread in India. The *trans* fat standard that the industry in India follows was originally set by Denmark, which permits up to 2 percent of *trans* fats in cooking oils. A research and advocacy organization, Centre for Science and Environment (CSE), based in India, tested thirty samples of cooking oil available

in the market. They found out that the oils contained very high levels of *trans* fats—up to 23 percent of the weight of the oil. Such cooking oils are sold to the public at a fraction of the cost of pure ghee.

It seems that even the vegetable oil industry recognizes the importance of fat-soluble vitamins and is jumping on the bandwagon. Bunge Ltd., based in New York, is the ten billion dollar multinational company that owns the Dalda brand in India. Bunge now fortifies its vegetable oils with vitamins A and D.

Sandeep Agarwal Lawrenceville, New Jersey

WHIPPED EGG WHITES?

Thanks to Chris Masterjohn for the scoop on raw milk and glutathione (Winter 2010). I believe that to render raw egg whites digestible for top glutathione production one should whip them very well by hand. This is made easier and faster by adding salt to taste and ascorbic acid powder (a pinch or two per egg white). Then add the yolk back and whip it well again. The mixture will be creamy and very tasty. Molasses or another natural sweetener you like can be added, or the "cream" can be used in other raw dishes, like fruit or vegetable salad, or added at the table to a cooked dish. Or just have it as a side. This treatment renders the white digestible by incorporating digestive enzymes from the air-the same happy healthy aerobic yeasts and enzymes that make sourdough bread. The ascorbic acid and salt also aid digestion.

> James Sesame State College, Pennsylvania

*Chris Masterjohn replies: This is an in-*4

teresting idea, but should be considered unlikely to have the desired effect unless supported by experimental results. The incorporation of airborne microbes without allowing time for fermentation seems unlikely to contribute to digest*ibility. The whipping process itself will* contribute to the denaturation and fragmentation of the proteins, which may contribute to digestibility, but this fragmentation combined with the addition of oxygen that occurs during whipping is likely to destroy the glutathione-boosting properties of the egg white. It is possible that the addition of acid may protect against these effects, but how much acid is required and just how protective the effect might be must be confirmed experimentally before any conclusions can be made.

FOOD FOR THOUGHT

I love this publication and the Foundation; thanks for all you do. Here are a couple of comments from an organic want-to-be sustainable farmer. First, in the Fall, 2010 issue of Wise Traditions, the article about magnesium deficiency: even in well managed organic farms, deficiencies of elements like magnesium often occur, and this affects the plant productivity (size, color and appearance). So we add small amounts of magnesium—as non-organic farms do-to supplement our gardens. My point is that if you buy healthy-looking produce there should not be any kind of major deficiencies of this element. True, our soils are in big trouble, and it's not just the farmer, but our unsustainable agrarian system of farming that keeps seven billion of us alive. We need to face the real questions of human population versus environment.

I also wonder about GMOs and the amount of time and energy the Foundation spends on the topic. True, I'm not a fan of Monsanto, and corporate greed in general, but genetic engineering is here to stay. I feel it's a necessary evil considering the dire predicament our natural world is facing. Anything we can do to reduce carbon emissions should be thoroughly examined, and be acceptable based on scientific facts. We need to understand the consequences of each American burning the average equivalent of about sixty barrels of oil each year. In addition to some genetic engineering in plants, I think we need to modify genes in our heads to make us dislike war, greed and hatred, and instead make us kind and caring of all humanity and our natural world. What is the worth of our personal health on a rapidly declining unhealthy planet?

> Jon Butts Plant City, Florida

It is unclear how the use of genetically engineered plants, which result in lower crop yields and require herbicides produced and transported using copious amounts of oil would result in any improvement in the environment or general health of the population. And only a healthy population can solve the problems of our unhealthy planet.

A THEORY

One of my neighbors just passed away from stomach cancer at age sixtyseven, a real loss. He was a very nice and decent person who wanted people to come together—-but his eating habits were very bad and he held onto some grudges with two neighbors whom he would not forgive. In the end it did him

in. When I looked down at him in the casket, I realized so clearly that we must take care of ourselves and each other.

In the eight years that I have lived in this area, nine neighbors have died here of cancer. Ironically, the older the people are, the better they seem to be doing. I have a theory that people born here in Canada before the pasteurization of milk will nearly always outlive those born after mandatory pasteurization, which occurred in 1934. Raw milk is far better for our health than we realize.

One thing that has been a godsend besides raw milk and fermented drinks is what I call my adrenal mineral tonic: one tablespoon of Celtic sea salt with one teaspoon of Redmond Clay, mixed in artesian water, warmed gently. Nothing has been better for killing my hay fever. Weston Price mentions eating clay in his book—the primitives have followed the custom of Mother Nature's obedient animals in eating clay and dirt. Joseph Ouimet

Scarborough, Canada

REPORT FROM CZECHOSLOVAKIA

My wife has a new blog, in the Czech language (http://zubeni.posterous.com/—zubeni means "toothy one") where she's sharing traditional recipes as well as basic texts from Weston A. Price's book. She'd love to translate the whole book to Czech but it's a big book with currently little interest and no funding as yet. She's doing this to help motivate her to study the material again for a presentation she'll be doing about Price's wonderful nutritional research at a university next year.

My second love in life, after my wife, is our Jersey cow, which we bought

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inspired by Price's great book. We were so lucky to stumble across these books just before we considered conceiving our first child six years ago, and now our latest young one is six months old. For five or six years now, we've had a small family farm and homestead, and it's great to hear you talking positively



A Czechoslovakian cherub, nourished with raw milk.

about non-vegetarian diets. It's difficult not to see faces of people differently after reading Price's book, and difficult to observe and then keep silent.

We have a website, www.mowingwithease.com or in czech http:// kosimesnadno.cz/-both redirect to the same pages which are in both English and Czech. It shows how we feed our two cows, two horses and donkey with hay cut by a scythe on our five hectares of meadows. Of course we didn't start off as big-we had three goats in the first year and gradually moved to larger models over the years. We run courses during the mowing season, seeing around eighty people per year, and we sell real high quality Austrian scythes and accessories. More importantly, we provide the know-how to empower people in the satisfying sport of mowing and making hay with hand tools. This year we had an Australian couple from www.allsun. com.au/ who were our oldest and most inspiring mowers yet.

> Neil Dudman, Mladocov, Czech Republic

MORE BITTERS SOURCES

Thank you for the article on bitters in the latest Wise Traditions (Winter, 2010)! I believe this can be the missing ingredient for some who have difficulties with digestion, even if they are on a sound, traditional diet. As a long-time bitters user, I would like to add two more sources of bitters available in the U.S., which I have found mild, but effective: Uriel Pharmacy's "Chicory Ginger Digestive Bitters" (it comes in two sizes) has a noticeable, but gentle effect, and I enjoy the flavor; Uriel Pharmacy and Gaia Herbs' sell "Sweetish Bitters Elixir" (it has many more ingredients than the previous one). The websites are gaiaherbs.com and urielpharmacy.com.

Thank you for all your good work in educating and standing up for traditional, healthy ways of eating!

> Ingun Schneider, San Francisco, California

AUTISM AND CHILD SPACING

An article called "Autism Risk Factor Studied" in the January 10, 2011 *Milwaukee Sentinel*, noted that childhood autism is more frequent in children born too soon after the previous child.

The article failed to note that we have a horrific rise in maternal and child health problems over the last twenty years. Autism is just a part of these growing problems of complicated pregnancies and c-sections, congenital defects, allergies, infections, diabetes,

cancer, metabolic disorders and on and on. This growing trend will bring our nation much suffering and bankruptcy if we do not put this right.

This study does point out one of the key reasons for these growing health problems. Most of our young people are not well enough nourished to conceive, give birth and raise healthy children. When they put further stress on this marginal nutrition by conceiving children before they have restored their nutritional status from the first birth, they are likely to have problems with the next child. Autism is just one of many problems found in closely conceived children.

Traditional peoples around the world recognized the pitfalls of conceiving children closer than three years. They also knew which foods were needed to provide for a healthy future generation. Animal foods rich in cholesterol such as liver, eggs, butter from spring grasses and seafood were key ingredients in every traditional culture. Roy Ozanne, MD, HMD

Langley, Washington

UPDATE ON PYROLURIA

I have been responding by email, as much as possible, to those who continue to contact me regarding my article on copper-zinc imbalance (Spring 2007). I continue to make improvements. For example, the difficulty of doing sustained work on the computer is somewhat lessened. From my experience and the feedback I have received, I believe that pyroluria is widespread among those with chronic fatigue. I continue to communicate with Theresa Vernon and learn from her developing viewpoint derived from a busy and expanding practice. I can confirm her observations with my own. We are finding copper-zinc problems and especially vitamin B_6 deficiency in those with stress, chronic illness and GAPS-type problems, usually as an immediate need. Treatment usually helps other baffling difficulties. If these are simply stress-related, they clear up readily, but those with pyroluria require more intensive work. I can confirm from my own experience that pyroluria requires continuing high amounts of zinc and vitamin B_6 , extra magnesium and manganese. Extreme susceptability to stress remains a problem.

Theresa has much technical information regarding this condition and can speak in more detail, especially in light of distinguishing stress-deficiency from pyroluria, which she generally confirms empirically. Visit her website www. tvernonlac.com. You can also check on yahoo groups for the list on Pyrroluria (British spelling), which regularly discusses the technical sides of this.

> Laurie Warner Oxnard, California

FERMENTATION TALES

Julie Incerti's letter (Winter 2010) about longer soaking of oats has prompted me to share two stories of my own food evolution. A couple of months ago I learned that a friend was claiming an improvement in digestibility and nourishment by doing a several-day salt fermentation on her breakfast oats. I revisited an oat article you published, which cited oats as containing mega amounts of phytic acid best neutralized by sprouting or fermentation rather than soaking. I decided to give it a try and have been eating fermented oatmeal since. It sits well with me—a little honey deals well with the sourness—and also with my wife who could not gain substantial energy from other forms of oatmeal.

Here's my method: on Tuesday I put two cups of freshly rolled oats, two teaspoons of salt, a little whey and one-third cup of last week's oats into a half-gallon jar. I add water to well above the oats, stir, and let it sit in the kitchen until the following Monday, when I cook it in more water.

On another topic, I was inspired by Chris Masterjohn's article on Activator X (Spring 2007) to research making natto. In that article natto was cited as containing an astonishing amount of vitamin K2, which, besides performing many other useful functions, works in harmony with vitamins A and D throughout our bodies. The first step in pursuing this project was to overcome my soybean phobia-natto is a fermented soy product. But since I use miso and soy sauce, why not natto? I got organic beans to insure they were non-GMO and using a procedure I got off the internet (www.gaia21.net/ natto), have made three batches so far. Each batch produced ten cup-size jars, which I froze until ready for use. I now eat a tablespoon of natto along with my morning cod liver oil. Natto is certainly an acquired taste, but one that I have become quite comfortable with. Suffice it to say that I have a high tolerance for "healthy tastes."

> Delmar Straub Clinton, Washington

A WAPF YEAR

It's the beginning of a new year—a time to reflect, summarize and review what has happened and what lies ahead.

The summary below showing the major foods consumed by our family this past year came out of this process, and I feel it is a good reflection on what it practically means to eat a nutrient-dense, whole foods diet.

We are a family of five (give or take!) and most nights I try to cook eight to ten servings. This provides for unannounced extra company that we may have for dinner, leftovers for a couple of lunches or snacks for the boys! We live in Northern California in a town of approximately one hundred thousand, and despite being in a decidedly urban area, we have wonderful access to many farms within a fifty-mile radius.

My husband is a school teacher and our food costs are high—we pay six dollars a dozen for pastured eggs and our grass-fed meats average seven dollars a pound. We rarely eat out but this is no longer seen as a disadvantage as we have come to appreciate the true deliciousness of real whole food at home. My kitchen, aka "the bio-terrorist zone," is always filled with growing or brewing items. Our vegetables come in the form of a weekly CSA (Community Supported Agriculture) box and we purchase fresh local seasonal fruit directly from local farms and farmers markets.

To put what it means to eat this way into perspective against the average American diet, consider the following:

- Each man, woman and child in America eats an average of forty-six slices (twenty-three pounds) of pizza a year.
- Americans consume, on average, fifty-three pounds of bread per year.
- Average American intake of added sugars is thirty-two teaspoons a day.
- The new USDA nutrition recommendations currently state: "Oils are not a food group but you need some for good health. Get oils from fish, nuts and liquid oils such as corn oil, soybean oil and canola oil.

Are we "there" yet? I don't think you ever really get "there" (wherever that may be)—it's a constant journey of education and development of skills that continue to feed and sustain us along the way. With the Weston A. Price Foundation alongside our family as we continue this journey, I am comforted by the fact that my kids have a solid fundamental base for achieving and maintaining true health in their lives. And my husband and I, Lord willing, will be able to continue to be around to be a part of it all! Kirsty Rayburn

Northern California

WHEY NOT THE WAY WITH CHICKENS

As a small scale poultry raiser for the last thirty years, I have read with enjoyment the various articles in Wise Traditions encouraging your readers to try poultry raising, and I have scanned eagerly for new ideas to try with my own birds. The title of Matt Rales' article, "Chickens are Omnivores," especially caught my attention (Summer 2010). I can second his account of cannibalism and picking problems with meat-free feed. This has been a continuous problem for my birds ever since the "mad cow" scare took meat scrap out of poultry feed. Predators have always seriously limited the amount of free ranging possible, even in the sixmonth grazing season (a generous time estimate). Presently my laying birds

FOODS CONSUMED BY A FAMILY OF FIVE IN A WAPF YEAR

FOOD N	MONTHLY	YEARLY	FOOD MC	NTHLY	YEARLY	FOOD	MONTHLY	YEARLY
Ghee Coconut Oil Butter Lard Cream Raw Goat Milk Cheese Eggs Beef Lamb Chickens Salmon Bacon	42 oz .75 gal 15 lb 1.25 lb 12 pt 12 gal 6 lb 28 doz 37.5 lb .5 lamb 3 1.5 filets 4.5 lb	4 gal 10 gal 180 lb 15 lb 144 pt 144 gal 72 lb 336 doz 2.5 sides 6 lambs 36 18 filets 54 lb	Sourdough loaves Steel Cut Oats Almond Flour Coconut Flour Shredded Coconu Walnuts Pecans Cashews Almonds Raisins Mixed Berries (froz Blueberries (frozer Apples	4lb 5 lb 4 lb 1.25 lb 6 lb 4 lb 5 lb 6 lb 3 lb ren) 12 lb	 36 loaves 50 lb 60 lb 48 lb 15 lb 72 lb 48 lb 60 lb 72 lb 40 lb 144 lb 72 lb 200 lb 	Sea Salt Maple Syrup Honey Cane Sugar Fermented ve Beet Kvass Raw Miso	1.5 lb .75 gal .5 gal .5 lb .5 gal .5 gal .5 gal	20 lb 9 gal 6 gal 6 lb 8 gal 6 lb

are getting certified organic soy-free feed supplemented with fresh greens, grit, oyster shell and the local slaughter plant's "pet food." I feed one cup "pet food" plus one heaping teaspoon kelp to thirty-four birds per day. Twice the amount of meat would be even better. At bedtime they get mixed organic wheat and cracked corn. Sometimes in the bitterest cold (it can get down to minus forty degrees here) I give them a hot mash, which they gobble up.

With this background I naturally paid special attention to Matt Rales' "Soybean Alternatives" side bar, but was dismayed to see that whey was recommended as being "protein and mineral rich." Whey is not a good source of protein. Anyone who makes cheese will testify that you need a very large quantity of whey to get a decent amount of ricotta. (By the way, you'll never find "raw milk ricotta" because ricotta is made by almost boiling whey with a bit of vinegar to precipitate out the last bits of protein.) The fourth edition of Henry and Morrison's Feeds and Feeding (1922) lists the percentage protein of skim milk (centrifugal separation, not hand skimmed) as three to eight percent; whey registers less than one percent protein.

Years ago a friend of mine tried raising Barred Rock pullets on whey and grain. They were stunted, sickly and most died before coming into lay. Whey may be all right to moisten mash, but it certainly will not suffice as the sole protein for chickens. They simply can't consume enough to get adequate protein. If you're going to feed it to birds so as not to waste it, better count it as water, and figure the low-level nutrients are a bonus. I have no information as to whether or not the lactobacilli in whey are a benefit to poultry.

By the way, your readers may want to be careful about salvaging road-killed deer. Here in Canada, if the Ministry of Natural Resources catches anyone with a deer and no license, there can be nasty consequences.

> P. A. Hunter Burnstown, Ontario, Canada

MEDITERRANEAN DIET MYTHS

The Mediterranean diet or the way of eating of the Mediterranean countries such as Italy, Spain, France and Greece, is often cited for its health benefits. I was born and raised in Italy but I have travelled extensively and also lived in all those countries so I am very familiar with their traditions and their food.

It is often stated that in the Mediterranean countries people are healthy because they eat a diet that is low in fat, with plenty of grains and olive oil. Nothing can be further from the truth. France has as main foods bone broth, butter and cheese, Greece has a large use of full-fat dairy, Spain has a wide selection of raw cheese, cured hams of all types and meat prepared in all ways, with butter and whole eggs used in abundance. Organ meats are often consumed in all those countries as well.

When it comes to Italy, people think of bread and pasta which are certainly part of our culture but not as much as people think. The Italian diet is actually a very high-fat diet. Organ meats are frequently consumed; you can eat brain, liver, spleen, tongue, kidney, thyroid, adrenals, eyes and testicles, while the bone broths of all types are very common. Some of the seafood and red meat are eaten raw or air dried. There is a wide selection of olives, cheese, nuts, legumes and cured hams. There are so many varieties of cheese that stores called "la casa del formaggio" (the house of cheese) sell only cheese of all types.

Italy is divided in twenty-one regions and in each one there are different characteristics. In the south or on the coast, where the weather is very similar to that of Miami, we find less dairy but more seafood, including plenty of soups made with fish bones, and of course pasta and rice. If we move more toward the center of the country, you would find more legumes, meat and a larger use of dairy. In this part of Italy you will find many farms which have grass-fed animals and provide raw dairy foods.

In the north of Italy, the diet tends to be very high in fat and raw dairy. In my city, Genova, which is by the sea but in the north, one of the staple dishes is focaccia al formaggio, which is a thin flat bread with plenty of butter and cheese inside. Another characteristic dish is trenette al pesto, which is a short homemade pasta with pesto sauce. Genova is where pesto was born; originally there was also an order of knights called "the knights of pesto." Pesto was traditionally made with basil, pinenuts, sea salt, extra virgin olive oil, garlic, remesheia (a local cheese) and pecorino sardo cheese. When you serve it, you need to add butter and parmesan cheese.

Moving into the Alps, in many towns you cannot even find pasteurized milk, and they have an extremely high-fat diet. Here people are extremely active, they either ski, climb, walk or just move; the only overweight people that you would see here are the tourists. When you wake up in the morning, you can go to the farmer for fresh raw milk

still warm and pastured eggs. The milk here is extremely rich and tasty, I have never found better. One of the staple dishes is polenta alla valdostana, which is polenta (corn) flour which sits in water and whey for one week, in a wood vessel. When it's ready, they cook it with tons of butter and fontina cheese. Farmers in this region have told me that they tried to use pasteurized whole milk or to mix pasteurized whole milk with raw milk to make their cheese and it did not work. I wonder how they can make the cheese sold in the supermarkets.

The typical breakfast in the Alps includes sourdough bread with butter (in the summer they also put wild berries on it), grilled sausages, grilled wurstel (smoked sausage), speck (similar to bacon), eggs, raw milk, cheese, cream and yogurt. It is a huge breakfast but remember that you also exercise a lot in the mountains. When they serve you breakfast, they give you a twenty-pound piece of raw butter on a wooden board. The butter is almost orange, not even dark yellow. And apart from sourdough bread and polenta, you will not find any other grain-based food-no nuts, no legumes and fruit such as raspberries and wild berries only in the summer.

In the most modernized cities in Italy you can find many of the unhealthy foods, like the food that people consume here in the U.S., but for the most part in the Alps and in many small towns, people still consume traditional foods. If you would like more information about the Mediterranean diet or where to go while visiting Italy, Spain or France, send an email to shantihcoro@gmail. com.

Shantih Coro, CN, Chapter Leader Miami, Florida

FOLLY OF FOOD QUESTIONNAIRES

For many years, I've participated in the Nurses' Health Study II. I've been in many of the sub-studies. The current one is the Lifestyle Validation Study. Its purpose is to determine the best way to measure and analyze diet and physical activity in large cohorts. It is paid for by the NIH-NCI.

I was elated to be asked to be part of this study. What an opportunity to teach a few things about proper nutrition! For example, I commented on many problems in the food questionnaire, including:

- 1. No distinction between pastured and CAFO animal products.
- 2. No raw milk included in a long list of milk types.
- 3. Lumping plain yogurt with artificially sweetened yogurt!
- 4. The "never, or less than once a month" category. So, for example, not eating any soy goes in the same category as each kind of berry. I eat lots of kinds of berries, but each kind comes out to less than once a month.
- 5. Oatmeal and bran are lumped together.
- 6. No bacon grease under fats.
- Artificially sweetened products are classed with "otherwise sweetened" products.

I just completed a seven-day dietary record for which I had to measure everything I consumed. (A scale was provided.) The questionnaire also asked for all cooking methods. You should see the sample record they provided! It looks like a big ad for processed food. I felt sick just reading it. Makes me wonder whether the food industry is paying for this. My record included:

- 1. Milk, raw, whole from Jersey cows.
- 2. Oatmeal, soaked overnight with whey, topped with raw cream or raw butter.
- 3. Roasted chicken, pastured, smeared with butter, with the skin.
- 4. Brown rice cooked in the chicken drippings.
- 5. Meats that have not been trimmed of the fat.
- 6. Eggs almost every day, including one eggnog with raw yolks.
- 7. Kombucha.
- 8. Homemade raw yogurt.

The homemade yogurt really impressed my study contact. "You make your own yogurt?! You're the first one I've talked to who does that."

This record went to the Nutrition Coordinating Center in Minnesota. I told my study contact that I really do eat this way every day, and that I do not eat any cookies, pies, candy, etc. And no white flour, white sugar, or processed foods.

I am so grateful for all that you teach and all the books you recommend. One of those books led me to a proper diagnosis of low thyroid function, despite normal labs. I just began treatment for this. Since beginning WAPF nutrition in 2008, and later going low carb-high fat, I've gained twenty-five pounds, which I do not need. This does not give a good impression of this diet, but I'm sticking with it. I hope that getting thyroid treatment turns that and other health problems around.

Name Withheld

Sally Fallon Morell and Mary Enig take on the Diet Dictocrats

VACCINE PR CAMPAIGN

The new year began with a well coordinated campaign against vaccine safety activists, with articles lambasting critics in the Washington Post and New York Times. With front page headlines, the British Medical Journal published an editorial written by a freelance journalist alleging "elaborate fraud" by gastroenterologist Andrew Wakefield-who found the measles virus in the guts of autistic children, thus linking the condition with vaccinations-even though other scientists had made similar findings. CNN spent an unprecedented thirtythree minutes of uninterrupted coverage reporting on the British Medical Journal editorial, even though it contained nothing new except an array of allegations. This media onslaught was coordinated with the launch of two new books, Paul Offit's Deadly Choices: How the Anti-vaccine Movement Threatens Us All and Seth Mnookin's Panic Virus about the same topic and then followed with coordinated TV appearances by Bill Gates and Paul Offit on Jon Stewart's "The Daily Show" and Stephen Colbert's "The Colbert Report." In addition, Salon.com retracted Robert F. Kennedy Jr.'s 2005 article, "Deadly Immunity." A January article in the New England Journal of Medicine, "The Age-Old Struggle against the Antivaccinationists," described those who oppose vaccines as "simply ignorant about science (or 'innumerate'-unable to understand and incorporate concepts of risk and probability into science-grounded decision making) to a radical fringe element who use deliberate mistruths, intimidation, falsified data and threats of violence in efforts to prevent the use of vaccines and silence critics."-a wonderful example of the pot calling the kettle black (New England Journal of Medicine, January 13, 2011, 97-99). This massive propaganda campaign coincided with an international meeting held in Montego Bay, Jamaica January 3-8 to discuss current vaccine science and policy safety concerns. Delegates from around the world included senior scientists and physicians, editors of scientific journals, experts in vaccine regulation, social science and health policy, consumer child health advocates, legal experts and members of the media. The meeting was held in response to acknowledged significant increases in immune and inflammatory diseases in children and adults ranging from asthma and neurodevelopmental disorders to the emergence of previously rare but serious autoimmune health conditions during the past three decades. The concern

of delegates paralleled those of 89 percent of recently polled parents in the U.S., who place vaccine safety as their number one medical research priority, while health consumers in other developed countries are also questioning vaccine science and policy. Representatives of federal agencies responsible for vaccine regulation, promotion, and safety declined to attend even though they were invited over two months prior to the meeting-enough time for them to organize an vaccination media campaign. (For more information about speakers and presentations, visit www.vaccinesafetyconference.com.) Just recently, new evidence has emerged showing a financial arrangement between Merck and the British Medical Journal and The Lancet whereby these publications provide "educational services" for Merck, which manufactures the measles, mumps and rubella vaccine. This financial arrangement at the very least constitutes a serious conflict of interest and at the worst renders them virtual mouthpieces for Merck corporate policy, not the prestigious independent peer-reviewed journals they purport to be.

SIMPLISTIC

Tufts nutrition professor Alice Lichtenstein has sided with the food processing industry throughout her career. In a recent press release, Lichtenstein declares that it is fine to reformulate real foods like meat and milk into lowfat versions "because you are focusing specifically on taking out saturated fat. But for other products such as cookies and brownies, it's not that useful." In other words, it's okay for consumers to consume lots of industrial fats and oils in baked goods, but not the natural fats in cheese and meat. When the industry removes the fat from processed foods, they usually need to replace it with refined carbohydrates—manufacturers are also looking into replacing fat with protein. "Lowfat" is too simplistic a message, says Lichtenstein. Reformulation of high-fat foods is not always appropriate (www.foodnavigator.com, February 18, 2011).

BATTLING BUTTER

Small changes in consumer eating habits can add up to large headaches for the food industry. The MasterChef series in Australia, which has aired many recipes featuring copious amounts of butter, led to a 9.3 percent increase in the sale of butter in 2009 and the Diet Dictocrats are not happy. "Mas-

terChef could be slowly killing off its audience," warned the Australian Heart Foundation. The agency is pleading with chefs, magazine editors and celebrity cooks to use margarine in their recipes instead of butter. "When we ask people what's the reason for using butter," says Susan Anderson, healthy weight director for the Heart Foundation, "they say it's because that's what the recipe says." Butter is bad, she says, because it contains more saturated fat, more salt and more trans fat than margarine-thus tarring the natural and healthy includes thirty-one refuge units across eight midwestern states, twenty-five refuge units in twelve southeastern states and an unspecified number in the Rocky Mountain region. This follows USDA's decision to plow ahead with deregulation of GE Roundup Ready alfalfa despite being informed of serious health concerns in the first genetically engineered perennial crop.

trans fats in butter with the black brush of industrial trans fats. "Simply using margarine instead of butter on your toast could eliminate almost 3 kg of saturated fat from your diet in a year," Anderson said (The Daily Telegraph, September 26, 2010).

GUILTY PLEASURES?

Elizabeth Buhler, the oldest Canadian, recently died just before her 112th birthday. Born in Ukraine in 1899, she emigrated to Canada with her husband where they worked a Manitoba farm. News reports credit her long life to her cheerful, positive attitude and "a deep desire to help others." But she obviously consumed farm food most of her life and continued to the end in some "guilty pleasures," including one that concerned her



So many dietary myths out there! The Weston A. Price Foundation will confront the myths that cholesterol, saturated fat and salt are bad, and that high fructose corn syrup and genetically modified foods are safe, at Wise Traditions 2011.

doctors-she ate lard. "Lard is always bad," said her doctors.

GOVERNMENT PUSH FOR GE CROPS

The Obama administration has endorsed genetically engineered agriculture on more than fifty national wildlife refuges, according to Public Employees for Environmental Responsibility (PEER). The new plan is designed to insulate refuges from environmental court challenges in the wake of a lawsuit recently won by PEER and other groups which halted GE agriculture in all Northeastern refuges. The plan

GRIM WARNING

Meanwhile, Don Huber, a veteran soil scientist from Purdue University, has written a letter to U.S. Agriculture Secretary Tom Vilsack warning of a newly identified pathogen linked to the herbicide Roundup that might be implicated in livestock fertility problems, as well as diseased corn and soybean crops. Huber coordinates the Emergent Diseases and Pathogens Committee of the American Phytopathological Society as part of the USDA National Plant Disease Recovery System. According to Huber, the "electron microscopic pathogen appears to significantly impact the health of plants, animals and probably human beings" and likely is connected to glyphosate, the major ingredient in Roundup. Huber described the pathogen

as appearing to be a micro-fungal organism found in high concentrations in Roundup Ready soybean meal and corn, distiller's meal, fermentation feed products, pig stomach contents, and pig and cattle placentas. He said laboratory tests have confirmed the presence of the organism in a wide variety of livestock that have experienced spontaneous abortions and infertility. "The pathogen may explain the escalating frequency of infertility and spontaneous abortions over the past few years in US cattle, dairy, swine, and horse operations. These include recent reports of infertility rates in dairy heif-

ers of over 20 percent, and spontaneous abortions in cattle as high as 45 percent. . . We have veterinarians very concerned about enough animals, just replacement animals, for our beef and dairy herds."

MAD SOY DISEASE

"Mad Soy Disease" has been spreading in Brazil, causing yield losses of up to 4 percent, most notably in the states of Mato Grosso, Tocantins and Goias. The prime suspect for spreading the disease is a black mite found in stubble when soybean is grown in no-till, Roundup Ready-dependent production systems. The disease delays the maturation of infected plants indefinitely; the plants remain green until they eventually rot in the field. Pods that do form are abnormal, with fewer beans (www.i-sis-.org.uk/madSoyDiseaseStrikesB razil, php). Brazil has 24 million hectares planted in soybeans, three-quarters of which are genetically engineered. Scientists are scrambling for a pesticide to solve the problem, ignoring the real solution, which is pasture-based meat production. Poor results of the Brazil soy crop are undoubtedly a factor in soaring food commodities prices, although you are unlikely to read about this in the major newspapers.

PLANNED DESTRUCTION

The idea is so horrendous, one cannot imagine anyone taking it seriously. But in early January, George Lundberg, MD, editor of MedPage Today wrote a serious opinion piece entitled "Should We Put Statins in the Water Supply?" This follows a call, in May 2008, by renowned cardiologist Professor Mahendra Varma, for adding statins to drinking water. This in the teeth of a new Cochrane review, which examined data from fourteen different drugs trials involving thirty-four thousand subjects and found evidence of "short-term memory loss, depression and mood swings," in statin takers, which in the past had been deliberately undervalued by the drug companies funding the research. Statins have also been linked to greater risk of liver dysfunction, acute kidney failure, cataracts and muscle damage. Statins in drinking water would be imbibed by young women of childbearing age making them at greater risk of spontaneous abortions or producing offspring with abnormalities. Cholesterol-lowering drugs in drinking water would bring us closer to the Brave New World described by Aldous Huxley: "There will be, in the next generation or so, a pharmacological method of making people love their servitude, and producing dictatorship without tears, so to speak, producing a kind of painless concentration camp for entire societies, so that people will in fact have their liberties taken away from them, but will rather enjoy it, because they will be distracted from any desire to rebel by propaganda or brainwashing, or brainwashing enhanced by pharmacological methods." Fortunately, you can't fool all the people all of the time.

WAPF ON THE INTERNET

WEBSITE: Our new website design is launched, and the online ordering page is working! Thank you for your patience while we made the time-consuming changes. You can now join, renew, donate, and order materials on line.

TWITTER: Visit our Twitter page at https://twitter.com/WestonAPrice

FACEBOOK: Visit our Facebook page at www.facebook.com/pages/Weston-A-Price-Foundation/58956225915, or go to www.facebook.com and search for Weston A. Price.

BLOGS: Visit the timely blogs of Chris Masterjohn and Kaayla T. Daniel, PhD at www.westonaprice.org/blogs.html.

NEWS ITEMS: Interesting WAPF-oriented news items, blogs or websites can be submitted to Kimberly Hartke, WAPF Publicist, who coordiates our social media. If you think an item would be of interest to our facebook and twitter fans, email the link to press@westonaprice.org. Please mention that you are a WAPF member when you do so. This way, you can become involved in helping us make our pages more valuable by suggesting things for us to post.

FIGHT BAC ATTACK?

A key part of the U.S. government's "Fight Bac" campaign involves the use of anti-bacterial soaps-dispensers can be found in schools, offices and airports. Some hotels even supply packets of antibacterial wipes for guests to use before touching the telephone! But the FDA has acknowledged that the antibacterial chemical triclosan, used in these soaps, is no more effective than regular soap and water at preventing infections. The agency also expressed concern about the development of antibiotic resistance from using antibacterial products and triclosan's potential long-term health effects. What's more, animal studies have shown that triclosan can interfere with hormones critical for normal development and function of the brain and reproductive system, resulting in altered behavior, learning disabilities or infertility. Not limited to antibacterial soaps, triclosan can be found in some body washes, shaving creams, powders, makeup, toothpastes and other products (http://www.commondreams.org/newswire/2010/04/08-5). FDA has said it will be moving forward on additional regulatory action in the future, but gave no indication of that it would abandon its "Fight Bac" campaign in favor promoting superfoods that build natural immunity, like raw milk and cod liver oil.

REFORMULATION WOES

As fear of saturated fat sinks ever deeper into the collective consciousness, a meta-analysis of prospective studies published in the American Journal of Clinical Nutrition (Jamuary, 2010) found no significant evidence for concluding that dietary saturated fat is associated with an increased risk of heart disease or coronary vascular disease. This finding has not deterred food manufacturers from their continued efforts to replace saturated fats in food products, even when the lowfat alternatives are more expensive. According to a food industry report, since 2005, United Biscuits of the UK has renovated its snacks and biscuit recipes to reduce the levels of saturated fat, a project that has cost about twenty million pounds. Efforts to reduce saturated fat profiles has centered on switching to "healthier" oils such as sunflower oil instead of palm oil. This has given the industry the desired results in snack foods but a desirable result, low in saturated fat, for biscuits was "significantly more challenging." Nestle has worked at reducing overall fat content of its products; the company aims to work for "a global saturated fat reduction policy" in which "food and beverage products containing high levels of fat and/or saturated fat will be required to undergo a reduction in these nutrients." (FoodNavigator.com, February 21, 2011).

DIET FOR VIOLENCE

The new dietary guidelines translate into severe restriction of fats, especially saturated fat, in school lunches, but no restrictions on sweeteners. Children receive highly sweetened breakfast cereal, sugar-laden baked goods, fruit in heavy syrup and flavored milks-which contain as much sugar as soft drinks, usually in the form of high fructose corn syrup. A study out of the U.K. indicates just what we can expect from feeding children this way. The Cardiff University study involving over seventeen thousand people found that ten-yearolds who ate sweets and chocolates daily were significantly more likely to have a violence conviction by age thirty-four. The study found that 69 percent of the participants who were violent at the age of thirty-four had eaten sweets and chocolate nearly every day during childhood, compared to 42 percent who were nonviolent. The link between sugar consumption and later aggression remained even after controlling for other factors, such as parenting behavior, the area where the child lived, and not having educational qualifications after the age of sixteen. According to Dr. Simon Moore, study head, "Our favored explanation is that giving children sweets and chocolate regularly may stop them learning how to wait to obtain something they want." A better explanation is that regular consumption of sweets leads to undernourishment of the areas of the brain involved in impulse control (http:// news.bbc.co.uk/2/hi/health/8281147.stm).

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.

Nonalcoholic Fatty Liver Disease A Silent Epidemic of Nutritional Imbalance

By Chris Masterjohn

ver seventy million Americans may have nonalcoholic fatty liver disease.¹ The disease begins with the accumulation of fat within the cells of the liver, but can progress to inflammation, the development of scar tissue, and in some cases death from liver failure or cancer.²⁻⁴ Simple accumulation of fat within the liver generally proceeds without producing any overt symptoms, but it is not necessarily harmless. The liver regulates blood glucose and blood cholesterol levels, plays a critical role in burning fat for fuel, helps eliminate excess nitrogen, contributes to the metabolism of endocrine hormones, stores vitamin A, protects against infections, and detoxifies drugs and environmental toxins.

Any type of damage to the liver is thus likely to impact whole-body health. Indeed, fatty liver disease increases the risk of cardiovascular disease three-fold in men, fourteen-fold in women, and seven- to ten-fold in type-one diabetics.⁵⁻⁶ Fatty liver is thus a dangerous silent epidemic, and as we will see, it is likely caused by the overabundance of calorie-rich, nutrient-poor refined foods and the banishment of traditional sources of choline like liver and egg yolks from the modern American menu.

RELATION TO OBESITY, DIABETES, AND INSULIN RESISTANCE

Samuel Zelman, a medical doctor from Topeka, Kansas, published the first human case series connecting fatty liver disease to obesity in 1952.⁷ Zelman decided to examine a group of obese patients for fatty liver after observing the disease in a hospital aide who drank twenty or more bottles of Coca-Cola per day. This obscene amount of soda provided 1,600 calories of sugar and the caloric equivalent of a pint or more of whisky per day. Obese people were so hard to find at the time that it took Zelman a full year and a half to find twenty obese people who were not alcoholics. All of his subjects showed some degree of liver damage, and about half had a significant degree of fatty liver disease.

Zelman knew that fatty liver occurred in the earliest animal models of obesity involving genetics or surgical damage to the hypothalamus,⁸⁻⁹ and suggested that hypothalamic damage, biological inheritance, and "psychological factors" contributed to obesity in humans. He proposed that obesity increased the caloric requirement and led to cravings for energy-dense, nutrientpoor foods that increased the need for choline and B vitamins. These foods then overloaded the liver with energy but failed to provide the nutrients needed to process that energy, resulting in fatty liver.

Zelman's obese subjects universally preferred a diet rich in carbohydrate and fat but poor in protein. The one exception was a man who "related a fantastic story of fondness for the ingestion of huge beefsteaks," but Zelman distrusted his story because the man's psychiatrist had accused him of being a pathological liar. Zelman prescribed a diet containing "as much protein as possible," emphasizing beef liver, lean fish, and lowfat dairy products such as skim milk and cottage cheese, as well as extra B vitamins and choline.

Zelman was likely on the right track when he identified nutrient density as an important component of a therapeutic diet, but his opposition to both fat and carbohydrate likely contributed to his regimen's ultimate lack of success. He reported "as much difficulty and discouragement in dealing with the craving for carbohydrate- and fat-rich foods manifested by the obese as with the craving for alcohol of the chronic alcoholic." Only two of his twenty subjects lost weight. He retested them for fatty liver and found some improvement, but he never reported completely successful resolution of obesity in any of his patients and consequently failed to document the success of his program in treating fatty liver.

Although type-one diabetes is much less common than obesity, it had been connected to fatty liver disease as early as 1784¹⁰ and the resolution of diabetic fatty liver was an early objective of insulin therapy.11 Physicians identified the connection between alcohol consumption and fatty liver disease in the 1830s,¹² however, and in the middle of the twentieth century the connection to obesity and diabetes was lost from mainstream consciousness as alcohol came to be seen as the exclusive cause of the disease. At least as early as the 1970s, this exclusive association of fatty liver with alcoholism had become so ingrained that physicians simply accused their patients of lying if they presented with fatty liver but denied drinking alcohol.13

In 1980, Jurgen Ludwig and other physicians from the Mayo Clinic produced a report of twenty patients with nonalcoholic fatty liver disease.13 Ninety percent of the patients were obese, 35 percent had heart disease, 30 percent had gall bladder problems, and 25 percent had type-two diabetes. These physicians coined the term "nonalcoholic steatohepatitis," to describe the disease and abbreviated it "NASH." The creation of a specific term for the nonalcoholic manifestation of the disease promoted greater awareness of this form, facilitated the organization of an entire research field devoted to its study, prevented doctors from accusing patients of lying about their alcohol intake, and, in the words of the Mayo Clinic physicians themselves, spared doctors "the embarrassment (or worse) that may result from the ensuing verbal exchanges."

Since the Ludwig group's landmark paper, numerous studies have confirmed the relation between fatty liver, obesity and diabetes. Autopsy¹⁴⁻¹⁵ and ultrasound¹⁶⁻¹⁷ studies have shown that rates of fatty liver are five- to fifteen-fold greater in obese individuals than in lean individuals and that the disease is present in up to three quarters of obese people. Similar studies have shown that Although type-one diabetes is much less common than obesity, it had been connected to fatty liver disease as early as 1784 and the resolution of diabetic fatty liver was an early objective of insulin therapy.

THE FUNCTIONS OF THE LIVER

The liver is the largest gland in the human body, accounting for about 2.5 percent of total bodyweight; it plays a large number of roles in promoting the health of the entire body. The liver regulates blood glucose and cholesterol levels, contributes to fat-burning, helps eliminate excess nitrogen, filters pathogens and particulate matter that would otherwise enter the bloodstream, detoxifies drugs and environmental toxins, and promotes the elimination of toxic chemicals and metals from the body.

The liver is divided into four lobes, which include the left and right lobes as well as two smaller lobes called the quadrate and caudate lobes. Just under the right lobe lies the gall bladder, which acts as a reservoir that holds up to two to three tablespoons of bile. The blood supply to the liver is unique in that it comes from two sources. Blood that is rich in nutrients but relatively poor in oxygen flows from the stomach and intestine to the liver through the portal vein. This constitutes 60 to 70 percent of the blood that reaches the liver. Oxygen-rich blood from the lungs flows to the liver through the hepatic artery, which constitutes the remainder. These vessels infuse the liver tissue with blood through a network of large, irregular capillaries called sinusoids, until the blood finally leaves the liver through the central vein.

Almost 95 percent of the cells in the liver are hepatocytes, which carry out the basic metabolic functions of the liver. The lining of the sinusoid itself is composed of sinusoidal endothelial cells, which are separated by small gaps that allow the passage of nutrients from the sinusoid to the hepatocytes. Several other cell types abide within the sinusoids, including stellate cells, Kupffer cells and a small number of pit cells. Stellate cells store vitamin A and lay down materials of the extracellular matrix such as collagen. Kupffer cells and pit cells are both members of the immune system. Kupffer cells are macrophages that function to remove bacteria and their byproducts, viruses, and undesirable particulate matter from the blood. Pit cells are natural killer cells that form a defense against viruses and tumors.

In the fasting state, or when eating a high-fat, low-carbohydrate diet, we derive much of our energy from fats. The liver is responsible for converting fats into ketones and sending them into the blood so that other tissues may use them for energy. The liver also processes amino acids into glucose and disposes of excess nitrogen left over from this process as ammonia. In the fed state, however, and especially when we have eaten carbohydrates, insulin causes our liver to stop making ketones and glucose and to synthesize triglycerides instead, package them into very low-density lipoproteins (VLDLs), and send them into the bloodstream. When humans become insulin resistant, however, these processes go awry. The liver continues to synthesize triglycerides in response to insulin, but stops suppressing the synthesis of glucose. As a result, blood glucose levels rise, and the pancreas must secrete extra insulin to keep them under control. This extra insulin causes the liver to make even more triglycerides. The end result is poor control of blood glucose and elevated blood triglycerides.

The liver closely ties together the regulation of blood lipids with the production of bile. Although the liver produces less than a sixth of the body's cholesterol, it is the primary organ that expresses the LDL receptor, which takes up cholesterol-rich LDL particles from the blood. This not only lowers the cholesterol concentration in the blood, but also protects delicate components of the LDL particle from oxidation by ensuring that the particle is taken into cells before its stores of antioxidants run out. The liver then breaks down LDL particles and uses the cholesterol within them to synthesize bile acids, which promote the absorption of fat-soluble nutrients in the intestine. Thyroid hormone accelerates this process by signaling to the liver that the body is in a state of abundance and thus directing it to increase its expression of the LDL receptor, while many natural plant substances accelerate this process by causing the excretion of bile acids and causing the liver to divert more cholesterol into bile acid production.

Contrary to the popular misconception that the liver "stores toxins," its actual function is to process toxins into forms that can be more easily excreted. It mixes these processed toxins into the bile, together with toxic metals, glutathione, and many other substances before sending the bile out into the intestine. Glutathione protects the intestines from oxidative damage and is efficiently reabsorbed. We excrete most toxins that are packaged into the bile through either the feces or urine, but there are some "poorly behaved toxins" that constitute exceptions. For example, methyl mercury and arsenic are efficiently reabsorbed and circulate through the body repeatedly. Diclofenac, a non-steroidal anti-inflammatory drug (NSAID), uses its excretion into the bile as an opportunity to cause intestinal damage. By and large, however, the excretion of toxic drugs, metals, and environmental chemicals into bile means their safe elimination from the body.

The liver plays many other important roles, including the metabolism of steroid hormones and the partial activation of vitamin D to 25-hydroxycholecalciferol or 25(OH)D. It should be clear from these many roles that damage to the liver of any form could potentially contribute to the development of many other diseases. Thus, ensuring proper liver function is imperative to supporting whole-body health.

REFERENCES: Luxon, BA. Anatomy and Physiology of the Liver and Biliary Tree. In: Bacon BR and Di Bisceglie AM, eds. Liver Disease: Diagnosis and Management. Philadelphia, PA: Churchill Livingstone (2000) pp. 3-15.; Jaeschke H. Toxic Responses of the Liver. In: Klaassen CD, ed. Cassarett and Doull's Toxicology: The Basic Science of Poisons: 7th Edition. New York, NY: McGraw-Hill Proffessional (2008) pp. 557-582.

45 percent of type-one diabetics and 70-85 percent of type-two diabetics have fatty liver.^{6, 18-19} Moreover, even in the absence of diabetes and obesity, those with the lowest insulin sensitivity have the highest accumulation of liver fat.²⁰

Since nonalcoholic fatty liver disease was rarely diagnosed before 1980¹³ and since even today most people with fatty liver are probably not diagnosed,²¹ there is no way to track its prevalence over time. The prevalence of diagnosed diabetes in the United States, however, has increased from five to eight percent since 1988,²² and the prevalence of obesity has increased from about 15 percent to 35 percent since 1960.²³ Given the high prevalence of fatty liver in obese and diabetic populations, we have likely experienced the emergence of a silent epidemic of fatty liver disease as the prevalence of obesity and diabetes has grown over the last few decades to reach epidemic proportions.

DIAGNOSING FATTY LIVER DISEASE

Biopsy, ultrasound and magnetic resonance spectroscopy (MRS) are all legitimate methods of diagnosing fatty liver,6, 16-19, 21, 24-25 although ultrasound can sometimes fail to detect moderate cases of fat accumulation. Even though physicians often refer patients to biopsy when they have elevated liver enzymes,²⁴ nearly 80 percent of patients with fatty liver have normal levels of these enzymes.²¹ In fact, in ten women who recently developed liver problems on an experimental diet low in choline, nine developed fatty liver but only one developed elevated liver enzymes.²⁶ Fatty liver should therefore be suspected on the basis of obesity, diabetes and insulin resistance rather than elevated liver enzymes.

FATTY LIVER AS A NUTRITIONAL IMBALANCE

A well-functioning liver supports our health in many different ways (see sidebar, page 16). It is therefore deeply concerning that fatty liver is an independent risk factor for cardiovascular disease,⁵⁻⁶ as this would suggest that the disease may in fact compromise liver function and contribute to other degenerative diseases. Learning how to prevent and treat fatty liver, then, is critical.

In order to understand how our livers get

fat, we must first realize that fatty liver disease occurs in two distinct stages (see sidebar, page 18, for more detail). In the first, called simple steatosis, fat accumulates within the cells of the liver. In the second stage, inflammation, the proliferation of fibrous connective tissue (fibrosis), and eventually the formation of scar tissue (cirrhosis) ensue. In modern terminology, "nonalcoholic fatty liver disease (NAFLD)" refers to the full range of these disease states, while "NASH" refers only to the inflammatory stage.²⁷

A number of experimental diets are currently used to study nonalcoholic fatty liver disease in laboratory animals, including diets high in fat, high in fructose, or deficient in choline and methionine. None of these models fully resembles the human situation, probably because they all emphasize single factors carried to extremes, whereas the human situation reflects a combination of several contributing factors (see sidebar, page 19).

The totality of the evidence suggests that the initial accumulation of fat in the liver is triggered by nutritional imbalance. As Zelman suggested in the 1950s, fatty liver seems to occur as a result of too much energy flowing through the liver without sufficient nutrients to process it. The accumulation of delicate fats, especially polyunsaturated fatty acids (PUFAs), increases the vulnerability of the liver to oxidative and inflammatory insults in the form of infections, toxins, or poor metabolism. These insults launch the progression from the first stage of simple fat accumulation to the second stage of inflammation.

The key culprits, then, are nutrient-poor refined foods, choline deficiency and polyunsaturated oils. The interaction between these factors can be seen by turning to the history of the development of animal models for fatty liver disease.

THE ROLE OF REFINED FOODS

In 1924, George Burr joined the laboratory of Herbert Evans, where Evans and Katherine Scott Bishop had recently discovered vitamin E.⁶⁶ Evans and Bishop were having trouble reproducing their vitamin E-deficient diet, and Burr helped them develop a highly purified diet based The key culprits, then, are nutrientpoor refined foods, choline deficiency and polyunsaturated oils. on casein and sucrose. The new diet produced a deficiency that vitamin E could not cure, which Burr and his wife Mildred later identified as essential fatty acid (EFA) deficiency.⁶⁷⁻⁶⁸ Observing the fact that the annual per capita consumption of sugar in the United States had tripled over the preceding decades from 38 pounds to 115 pounds, Clarence Martin Jackson conducted a comprehensive analysis of the anatomy and tissue characteristics of rats fed Burr's EFA-sufficient, 80 percent sucrose control diet.⁶⁹ He compared them to rats fed 45 percent sucrose or 45 percent starch. Neither the 45 percent sucrose diet nor the 45 percent starch diet produced fatty liver, but the 80 percent sucrose diet produced moderate to severe cases of the disease. He noted that the liberal provision of cod liver oil, dried yeast and wheat germ satisfied the nutritional needs of the rats in all treatment groups, and that smaller amounts of sucrose may contribute to fatty liver in humans consuming nutritionally deficient diets. Indeed, dietary protein, methionine, and

choline were later shown to protect against sucrose-induced fatty liver.¹²

In 1977, the American Institute of Nutrition (AIN), the principal professional organization for nutritional research scientists in the United States, developed standards for cereal-based, purified and chemically defined rodent diets.⁷⁰ The purpose of the purified and chemically defined diets was to standardize diets between studies, so that toxicologists could easily make comparisons between one study and another. The days of cod liver oil, yeast and wheat germ were over. The days of purified vitamin and mineral mixes were now ushered in.

The AIN initially designated the purified diet as "AIN-76," but they increased the vitamin K concentration ten-fold three years later in response to reports of excessive bleeding.⁷¹ They designated the new diet "AIN-76A." Both of these diets were 50 percent sucrose and 15 percent starch, much lower in sucrose content than the diet that Jackson had used to induce fatty liver just a few decades earlier. Nevertheless, reports quickly began to surface of fatty liver developing spontaneously in rodents fed the AIN-76A diet.⁷² Reducing the concentration of sucrose from 50 percent to 20 percent resolved the fatty liver. Because of this and several other adverse metabolic effects of sucrose, the AIN released a new diet in 1993 and reduced the sucrose content to 10 percent, with the remainder of the carbohydrate supplied by cornstarch and a small amount of dextrinized cornstarch to aid in pelleting.⁷³⁻⁷⁴ As a result of many other problems that

THE "TWO-HIT" HYPOTHESIS OF NONALCOHOLIC FATTY LIVER DISEASE

The fact that some people who develop simple accumulation of fat in their livers, called steatosis, never develop the inflammatory form of fatty liver, called NASH,²⁸ led to the "two-hit hypothesis."²⁹ This hypothesis considers steatosis to represent the results of a "first hit" that may itself be relatively benign, but nevertheless increases the vulnerability of the liver to a "second hit" in the form of oxidative or inflammatory insults that trigger the progression to NASH.

This concept is supported by studies showing, for example, that genetically obese laboratory animals develop steatosis, but only develop strong evidence of NASH if they are treated with an inflammatory bacterial byproduct called endotoxin.³⁰ Vitamin E, a fat-soluble antioxidant, is able to block this effect,³¹ showing the close relationship between inflammation and oxidative stress.

The "first hit" is likely caused by increased synthesis of fat from carbohydrate,³²⁻³³ increased release of free fatty acids from fat stores into the blood stream,³⁴ decreased burning of fat for fuel,³⁵ and impaired export of triglycerides from the liver.³⁶ These all lead to the accumulation of fat in the liver. The "second hit" involves the oxidative destruction of this fat, called lipid peroxidation.^{31, 37} The mere accumulation of oxidizable fat within the liver itself may increase the risk of lipid peroxidation.³⁶ Impairment of mitochondrial function,³⁹⁻⁴² spillover of fatty acids from mitochondria to other sites of fat-burning that burn fat in a much "dirtier" way,⁴³⁻⁴⁴ and inflammation³⁰ further contribute to the development of NASH. Although some studies have failed to document progression from steatosis to NASH,²⁸ others have documented a high rate of progression.² A study published last year tracked people with steatosis for three years.² A little less than half either stayed the same or got better, but almost 40 percent developed borderline NASH and over 20 percent developed full-fledged NASH.

Simple steatosis may not be as benign as it appears. Among type-one diabetics in one study, those with steatosis were seven- to ten-fold more likely to have cardiovascular disease (CVD), and steatosis correlated with CVD independently of traditional risk factors.⁶ Another study tracked apparently healthy Japanese for five years.⁵ Those with steatosis at the beginning of the study were almost four times more likely than those without steatosis to develop CVD by the end of the study. When the researchers looked at the effect in men and women separately, the risk was increased three-fold in men and fourteen-fold in women. Remarkably, when they combined fatty liver into a statistical analysis with "metabolic syndrome"—a hodge-podge of symptoms including abdominal obesity, high blood pressure, elevated fasting glucose, elevated triglycerides, and low HDL-cholesterol—only fatty liver significantly predicted the risk of CVD. These studies do not prove cause and effect, but they do suggest the possibility that fatty liver deranges whole-body metabolism and contributes to negative health effects far beyond the boundaries of the liver itself.

had surfaced with the diets, the AIN also increased the amount of vitamins E, K and B_{12} , increased the calcium-to-phosphorus ratio, substituted soy oil for corn oil, and added various trace minerals not yet known to be essential.

Why did sucrose prove so much more harmful in the context of the purified AIN-76 diet than it did when Jackson provided it in combination with cod liver oil, yeast, and wheat germ? In all likelihood, the provision of these unrefined foods supplied a wide variety of interacting vitamins, minerals, and other nutritional substances that aided in the metabolism of the sugar, helping the liver to burn it for energy, store much of the excess as glycogen, and export any fat made from it into the bloodstream. We will never know the exact nutritional composition of Jackson's diet. We do know from other studies, however, that supplying extra choline in the diet provides powerful protection against fatty liver, whether induced by sugar, alcohol, or fat.

THE ROLE OF CHOLINE

The discovery that choline could prevent the accumulation of fat in the liver was a byproduct of the seminal animal research conducted during the 1920s and 1930s showing that type-one diabetes was a disease of insulin deficiency. Physiologists first identified the role of insulin deficiency in type-one diabetes by studying the disease in dogs. In 1889 they produced diabetes by simply taking out the whole pancreas from these dogs and, after scrambling for a couple decades to identify the active component, they cured the diabetes with insulin in the early 1920s.⁷⁵

ANIMAL MODELS OF FATTY LIVER DISEASE

Researchers use a number of experimental diets to induce fatty liver in animal models, but none of them perfectly replicates the disease as it occurs in humans.

HIGH-FAT DIETS: Rats consuming about 45 percent fat from coconut oil or butter do not develop steatosis even after fourteen weeks.⁴⁵ Diets composed of 60 percent fat made mostly from lard cause steatosis to develop within eight weeks, but produce little evidence of NASH.⁴⁶ Diets containing 70 percent fat made mostly from corn oil administered by gavage,⁴⁷ intragastrically,⁴⁸⁻⁴⁹ or in liquid form⁵⁰ induce clear evidence of NASH. In fact, a corn oil-based liquid diet will induce NASH in as little as three weeks.⁵⁰ It is difficult to directly compare these studies because of the obvious differences in study design, but they do seem to suggest that corn oil is particularly noxious. Indeed, in nutrient-deficient and alcoholic models of fatty liver, replacement of corn oil with beef fat, cocoa butter or medium-chain triglycerides proves protective.⁵¹⁻⁵³ Substitution of palm oil for fish oil also proves protective in the alcoholic model.⁵⁴ High-fat diet models of fatty liver disease resemble the human situation in that they induce obesity,⁴⁶ insulin resistance,⁵⁰ and the spillover of fatty acids from the mitochondria to other sites where the fatty acids burn much "dirtier."⁵⁰ Their emphasis on polyunsaturated oils, moreover, resembles the great increase in linoleic acid and slight decrease in saturated fat that has occurred in American diets as the epidemic of fatty liver has emerged⁵⁵⁻⁵⁶ and the higher intake of omega-6 fatty acids found in NASH patients.⁵⁷ These diets, however, are so high in fat that they suppress the synthesis of fat from carbohydrate, which is actually elevated in humans with fatty liver disease.³³

HIGH-FRUCTOSE DIETS: Diets containing 60 percent fructose cause increased blood triglycerides, insulin resistance, and steatosis in mice within five weeks.⁵⁸ Over the course of 16 weeks, diets containing 30 percent glucose and 30 percent fructose will even induce mild inflammation.⁵⁹ These models resemble the human situation in that synthesis of fat from carbohydrate is increased, and resemble the 30 percent increase in total fructose that has occurred since the introduction of high-fructose corn syrup⁶⁰ as well as the statistical association between sweetened soft drinks and fatty liver.⁶¹⁻⁶² These diets, however, fail to induce obesity. They are very ineffective at inducing NASH, and what little inflammation does occur primarily occurs where blood enters through the portal vein,⁵⁹ while in humans inflammation tends to occur where blood exits through the central vein.¹³

METHIONINE- AND CHOLINE-DEFICIENT (MCD) DIETS: Severe deficiency of methionine and choline impairs the ability of the liver to export triglycerides into the blood stream, which also occurs in humans.³⁶ The deficiencies are so severe, however, that they induce weight loss instead of obesity. Although they make the liver insulin resistant, they actually increase whole-body insulin sensitivity.⁶³⁻⁶⁴ Nevertheless, MCD diets are useful for demonstrating the combined effects of different models. MCD diets are not just deficient in methionine and choline. They are usually loaded with sugar and corn oil as well. Fructose, as a component of sucrose, is required for the development of steatosis,⁶⁵ while corn oil is required for the progression to NASH.³⁷ Unlike the model using fructose alone, the inflammation occurs in a pattern consistent with human fatty liver.³⁷ The experimental model that would most closely resemble the human situation would be a combination of sugar, polyunsaturated fat, and a much more moderate form of choline deficiency.

Although cured of diabetes, the insulintreated dogs nevertheless developed severe fatty liver degeneration and ultimately died of liver failure. Adding raw pancreas to their diet, which was composed of lean meat and sucrose, cured the problem. As researchers attempted to discover what it was in raw pancreas that cured the disease, they found in the early 1930s that egg yolk lecithin, which is abundant in choline, could cure it.⁷⁶ Then they found that choline alone could cure it.⁷⁷

It later turned out that the dogs became deficient in choline and methionine without a pancreas because they were not producing the digestive enzymes needed to free up those nutrients from the foods they were eating. Thus, simply providing them with the digestive enzyme trypsin could cure the fatty liver.⁷⁸

In 1932 a group of researchers decided to replicate the fatty liver seen in the dogs in a nondiabetic rat model. What better way to stuff their livers with fat? Feed them fat! It seemed simple enough and it did indeed work. Although they had trouble reproducing the fatty liver with different colonies of rats or during the summer heat, they produced fatty liver in certain colonies of rats during the winter by replacing 40 percent of their ordinary cereal-based diet with beef drippings. Choline-rich lecithin derived from egg yolk or beef liver or simply choline itself cured the disease.⁷⁹⁻⁸⁰ Another group of researchers, however, tried to replicate this experiment in a group of rats who were consuming sufficient protein to maximize growth.⁸¹ They thus fed them 40 percent beef drippings but replaced another 20 percent of their cereal grains with the milk protein casein. This experiment failed miserably (Figure 1a). The researchers suspected that the casein might have been the problem, and they were indeed correct: on a choline-free, 40 percent beef dripping diet, reducing the casein from 20 to 5 percent doubled the level of fat in the liver (Figure 1b).⁸²

We now know that choline is necessary to produce a phospholipid called phosphatidylcholine. This is a critical component of the VLDL particle, which we need to make in order to export fats from our livers. The amino acid methionine can act as a precursor to choline. Thus, the combined deficiency of choline and methionine will severely impair our abilities to package up the fats in our livers and to send them out into the bloodstream.⁸³ This explains why casein was so effective at preventing fatty liver: it provided the rats with methionine that they could use to make choline.

Similarly, in 1949 a group of researchers showed that sucrose and ethanol had equal potential to cause fatty liver, and that increases in dietary protein, extra methionine and extra choline could each completely protect against this effect.¹² Over fifty years later, in our own decade, researchers have shown that choline deficiency likewise causes fatty liver in humans.⁸⁴

Thus, choline eventually proved capable of preventing fatty liver regardless of whether it was induced by feeding sugar, fat, or alcohol. These studies suggested that virtually any form of energy delivered to the liver can cause the accumulation of fat, so long as key nutrients needed to metabolize that energy—such as choline—were missing.

THE ROLE OF POLYUNSATURATED OILS

The initial experiments showing the protective effect of casein suggested that long-chain saturated fats might be more problematic than un-

FIGURE 1. A. When rats were fed 20 percent casein, none of the different fats tested brought the level of fat in the livers above normal. B. When the amount of casein was reduced, fatty liver ensued. From references 81 and 82.



saturated fats or medium-chain fats (Figure 2a). As it turns out, saturated fats actually increase the need for choline slightly more than polyunsaturated fats (Figure 2b).⁸⁵ Why this happens is unclear, but it may be that the body is quick to burn polyunsaturated fats for energy, since having them hang around is so dangerous. After all, if they hang around, they are likely to contribute to oxidative damage.

There is some experimental evidence suggesting that polyunsaturated fats may impair the export of fats from the liver by facilitating oxidative damage of the proteins involved.⁸⁶ This evidence comes from isolated cells and live animals injected with fatty acids. Substituting coconut oil for corn oil prevents steatosis in some,⁵² but not all,³⁷ studies using choline-deficient diets. Polyunsaturated oils are probably most likely to contribute to the accumulation of liver fat when combined with other factors that favor oxidative stress such as alcohol abuse, iron overload, toxin exposure, and poor metabolism.

There is much stronger evidence that polyunsaturated oils are responsible for the progression from simple steatosis to NASH.³⁷ Substitution of carbohydrate, coconut oil or beef tallow for corn oil all prevent the oxidative damage and inflammation that results from methionine and choline deficiency during this stage of the disease.³⁷ High-fat diets, moreover, only cause overt NASH when they are based on corn oil (see sidebar, page 19). These effects may result from a high intake of total PUFA, or may result from a high ratio of omega-6 to omega-3 fatty acids. Both of these factors are likely to play a role.

A COMBINATION OF FACTORS

As nonalcoholic fatty liver disease has emerged over the last several decades, refined foods have become commonplace. Liver has virtually disappeared from the American menu, and eggs have fallen victim to the anti-cholesterol campaign. These foods are the principal sources of choline

(see Table 1, page 22). Total fructose intake has increased 30 percent, and intakes of linoleic acid, the major omega-6 PUFA, have doubled.^{56, 60} It is likely that all these factors have conspired to produce the current epidemic.

Each of the experimental diets often used to induce fatty liver in laboratory animals—diets high in fat, high in fructose, or deficient in choline and methionine—fail to completely capture the picture of human fatty liver disease. When these factors are combined, however, the picture begins to emerge (see sidebar, page 19).

The requirement for choline and the propensity to develop fatty liver is influenced by a person's genetics and background diet. Diets rich in fat or fructose will require more choline than diets rich in starch. Vitamin B_6 , folate, vitamin B_{12} and betaine (a nutrient found most abundantly in spinach and to a lesser extent in wheat and beets) all reduce the requirement for choline. A person's ability to make choline out of the amino acid methionine depends on his genetics, and preliminary studies suggest that Asians are better able to make this conversion than Caucasians.⁸⁷⁻⁹¹

Many other nutritional, metabolic, and lifestyle factors are likely to play a role in fatty liver as well, by influencing the liver's ability to store carbohydrates as glycogen and to burn carbohydrates and fats for fuel. Thus, while there

FIGURE 2. Left: Predominantly unsaturated or medium-chained fats produced less steatosis than predominantly long-chain saturated fats. Right: A diet containing 30 percent butter produced a choline requirement that was 30 percent higher than a diet containing 30 percent corn oil when fed to rats. From references 81 and 85.



are special roles for including egg yolks, liver, other organ meats, and spinach in the diet, as well as avoiding polyunsaturated oils and refined foods—especially sugar—there is likely to be a wide range of different diets that can promote liver health. What they all have in common is that they are ancestral diets, rich in nutrientdense foods that we are well-adapted to, rather than the displacing foods of modern commerce. The emergence of fatty liver as a silent epidemic in the modern era is a call to nourish our livers with age-old traditional wisdom as we pursue the vibrant health of our ancestors.

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REFERENCES

- 1. Angulo P. Obesity and nonalcoholic fatty liver disease. *Nutr Rev.* Jun 2007;65(6 Pt 2):S57-63.
- Wong VW, Wong GL, Choi PC, et al. Disease progression of non-alcoholic fatty liver disease: a prospective study with paired liver biopsies at 3 years. *Gut.* Jul 2010;59(7):969-974.
- 3. Powell EE, Cooksley WG, Hanson R, Searle J, Halliday JW, Powell LW. The natural history of nonalcoholic steatohepatitis: a follow-up study of forty-two patients for up to 21 years. *Hepatology*. Jan 1990;11(1):74-80.
- 4. Lee RG. Nonalcoholic steatohepatitis: a study of 49 patients. *Hum Pathol*. Jun 1989;20(6):594-598.
- 5. Hamaguchi M, Kojima T, Takeda N, et al. Nonalcoholic

fatty liver disease is a novel predictor of cardiovascular disease. *World J Gastroenterol.* Mar 14 2007;13(10):1579-1584.

- 6. Targher G, Bertolini L, Padovani R, et al. Prevalence of non-alcoholic fatty liver disease and its association with cardiovascular disease in patients with type 1 diabetes. *J Hepatol.* Oct 2010;53(4):713-718.
- Zelman S. The liver in obesity. AMA Arch Intern Med. Aug 1952;90(2):141-156.
- Brobeck JR, Tepperman J, Long CNH. Experimental Hypothalamic Hyperphagia in the Albino Rat. *Yale J Biol Med.* 1943;15(6):831-853.
- Fenton PF, Chase HB. Effect of Diet on Obesity of Yellow Mice in Inbred Lines. Proc Soc Exp Biol Med. 1951;77(420-2).
- Rabinowitch IM. Relationship Between Impairment of Liver Function and Premature Development of Arteriosclerosis in Diabetes Mellitus. Can Med Assoc J. 1948;58(6):547-556.
- Root HF. Protamine Insulin in the Treatment of Diabetes Mellitus. *Trans Am Clin Climatol Assoc.* 1936;52:40-51.
- 12. Best CH, Hartroft WS, Lucas CC, Ridout JH. Liver Damage Produced by Feeding Alcohol or Sugar and Its Prevention by Choline. *Br Med J.* 1949;2(4635):1001-1006.
- Ludwig J, Viggiano TR, McGill DB, Oh BJ. Nonalcoholic steatohepatitis: Mayo Clinic experiences with a hitherto unnamed disease. *Mayo Clin Proc.* Jul 1980;55(7):434-438.
- Schwimmer JB, Deutsch R, Kahen T, Lavine JE, Stanley C, Behling C. Prevalence of fatty liver in children and adolescents. *Pediatrics*. Oct 2006;118(4):1388-1393.
- 15. Wanless IR, Lentz JS. Fatty liver hepatitis (steatohepatitis) and obesity: an autopsy study with analysis of risk factors. *Hepatology*. Nov 1990;12(5):1106-1110.
- Bellentani S, Saccoccio G, Masutti F, et al. Prevalence of and risk factors for hepatic steatosis in Northern Italy. Ann Intern Med. Jan 18 2000;132(2):112-117.
- 17. Nomura H, Kashiwagi S, Hayashi J, Kajiyama W, Tani S, Goto M. Prevalence of fatty liver in a general population of Okinawa, Japan. *Jpn J Med.* May 1988;27(2):142-149.
- Leite NC, Salles GF, Araujo AL, Villela-Nogueira CA, Cardoso CR. Prevalence and associated factors of non-alcoholic fatty liver disease in patients with type-2 diabetes mellitus. *Liver Int.* Jan 2009;29(1):113-119.
- Prashanth M, Ganesh HK, Vima MV, et al. Prevalence of nonalcoholic fatty liver disease in patients with type 2 diabetes mellitus. *J Assoc Physicians* India. Mar 2009;57:205-210.
- Seppala-Lindroos A, Vehkavaara S, Hakkinen AM, et al. Fat accumulation in the liver is associated with defects in insulin suppression of glucose production and serum free fatty acids independent of obesity in normal men. *J Clin Endocrinol Metab.* Jul 2002;87(7):3023-3028.
- 21. Browning JD, Szczepaniak LS, Dobbins R, et al. Prevalence of hepatic steatosis in an urban population in the United States: impact of ethnicity. *Hepatology*. Dec 2004;40(6):1387-1395.
- Cowie CC, Rust KF, Ford ES, et al. Full accounting of diabetes and pre-diabetes in the U.S. population in 1988-1994 and 2005-2006. *Diabetes Care*. Feb 2009;32(2):287-294.
- Ford ES, Li C, Zhao G, Tsai J. Trends in obesity and abdominal obesity among adults in the United States from 1999-2008. *Int J Obes* (Lond). Sep 7 2010.
- Daniel S, Ben-Menachem T, Vasudevan G, Ma CK, Blumenkehl M. Prospective evaluation of unexplained chronic liver transaminase abnormalities in asymptomatic and symptomatic patients. Am J Gastroenterol. Oct 1999;94(10):3010-3014.
- Szczepaniak LS, Nurenberg P, Leonard D, et al. Magnetic resonance spectroscopy to measure hepatic triglyceride content: prevalence of hepatic steatosis in the general population. *Am J Physiol Endocrinol Metab.* Feb 2005;288(2):E462-468.

TABLE 1. Choline in Selected Foods

Data taken from the USDA Database for Choline Content of Common Foods. http://www.nal.usda.gov/fnic/foodcomp/Data/Choline/Choline.pdf

Food	Food Choline (mg/100 g)		Food	Choline	e (mg/100 g)
Egg yolk, ra	W	682	Pistachios		72
Beef liver, p		418	Chicken, roaste	ed	66
	er, pan-fried	309	Salmon, dry he	eat	65
Whole egg		251	Cashews		61
	t, simmered	173	Pine nuts		56
Wheat gerr		152	Almonds		52
Bacon, pan		131	Macadamia nu	its	45
Mutton, roa		100	Brussels sprout	s, boiled	41
,	ard, simmere	d 82	Pecans		41
Shrimp, car		81	Broccoli, boile	d	40
Hamburger		81	Cauliflower, bo	oiled	39

- 26. Fischer LM, da Costa KA, Kwock L, Galanko J, Zeisel SH. Dietary choline requirements of women: effects of estrogen and genetic variation. Am J Clin Nutr. Nov 2010;92(5):1113-1119
- 27. Angulo P. Nonalcoholic fatty liver disease. N Engl J Med. Apr 18 2002;346(16):1221-1231.
- 28. Teli MR, James OF, Burt AD, Bennett MK, Day CP. The natural history of nonalcoholic fatty liver: a follow-up study. Hepatology. Dec 1995;22(6):1714-1719.
- 29. Day CP, James OF. Steatohepatitis: a tale of two "hits"? Gastroenterology. Apr 1998:114(4):842-845.
- 30. Yang SQ, Lin HZ, Lane MD, Clemens M, Diehl AM. Obesity increases sensitivity to endotoxin liver injury: implications for the pathogenesis of steatohepatitis. Proc Natl Acad Sci U S A. Mar 18 1997;94(6):2557-2562
- 31. Chung MY, Yeung SF, Park HJ, Volek JS, Bruno RS. Dietary alpha- and gamma-tocopherol supplementation attenuates lipopolysaccharide-induced oxidative stress and inflammatoryrelated responses in an obese mouse model of nonalcoholic steatohepatitis. J Nutr Biochem. Feb 4 2010.
- 32. Shimomura I, Bashmakov Y, Horton JD. Increased levels of nuclear SREBP-1c associated with fatty livers in two mouse models of diabetes mellitus. J Biol Chem. Oct 15 1999;274(42):30028-30032.
- 33. Diraison F, Moulin P, Beylot M. Contribution of hepatic de novo lipogenesis and reesterification of plasma non esterified fatty acids to plasma triglyceride synthesis during nonalcoholic fatty liver disease. Diabetes Metab. Nov 2003;29(5):478-485.
- Donnelly KL, Smith CI, Schwarzenberg SJ, Jessurun J, Boldt MD, Parks EJ. Sources of 34. fatty acids stored in liver and secreted via lipoproteins in patients with nonalcoholic fatty liver disease. J Clin Invest. May 2005;115(5):1343-1351.
- 35. Savage DB, Choi CS, Samuel VT, et al. Reversal of diet-induced hepatic steatosis and hepatic insulin resistance by antisense oligonucleotide inhibitors of acetyl-CoA carboxylases 1 and 2. J Clin Invest. Mar 2006;116(3):817-824.
- 36. Charlton M, Sreekumar R, Rasmussen D, Lindor K, Nair KS. Apolipoprotein synthesis in nonalcoholic steatohepatitis. Hepatology. Apr 2002;35(4):898-904.
- 37. Lee GS, Yan JS, Ng RK, Kakar S, Maher JJ. Polyunsaturated fat in the methionine-cholinedeficient diet influences hepatic inflammation but not hepatocellular injury. J Lipid Res. Aug 2007:48(8):1885-1896.
- Letteron P, Fromenty B, Terris B, Degott C, Pessayre D. Acute and chronic hepatic steatosis 38. lead to in vivo lipid peroxidation in mice. J Hepatol. Feb 1996:24(2):200-208.
- 39 Caldwell SH, Swerdlow RH, Khan EM, et al. Mitochondrial abnormalities in non-alcoholic steatohepatitis. J Hepatol. Sep 1999;31(3):430-434.
- Cortez-Pinto H, Chatham J, Chacko VP, Arnold C, Rashid A, Diehl AM. Alterations in 40. liver ATP homeostasis in human nonalcoholic steatohepatitis: a pilot study. JAMA. Nov 3 1999:282(17):1659-1664.
- Perez-Carreras M, Del Hoyo P, Martin MA, et al. Defective hepatic mitochondrial respira-41. tory chain in patients with nonalcoholic steatohepatitis. *Hepatology*. Oct 2003;38(4):999-1007.
- 42. Sanyal AJ, Campbell-Sargent C, Mirshahi F, et al. Nonalcoholic steatohepatitis: association of insulin resistance and mitochondrial abnormalities. Gastroenterology. Apr 2001:120(5):1183-1192
- 43. Weltman MD, Farrell GC, Hall P, Ingelman-Sundberg M, Liddle C. Hepatic cytochrome P450 2E1 is increased in patients with nonalcoholic steatohepatitis. Hepatology. Jan 1998:27(1):128-133.
- 44. Weltman MD, Farrell GC, Liddle C. Increased hepatocyte CYP2E1 expression in a rat nutritional model of hepatic steatosis with inflammation. Gastroenterology. Dec 1996:111(6):1645-1653
- 45. Romestaing C, Piquet MA, Bedu E, et al. Long term highly saturated fat diet does not induce NASH in Wistar rats. Nutr Metab (Lond). 2007;4:4.
- 46. Kirpich IA, Gobejishvili LN, Homme MB, et al. Integrated hepatic transcriptome and proteome analysis of mice with high-fat diet-induced nonalcoholic fatty liver disease. J Nutr Biochem, Mar 19 2010.
- 47. Zou Y, Li J, Lu C, et al. High-fat emulsion-induced rat model of nonalcoholic steatohepatitis. Life Sci. Aug 8 2006;79(11):1100-1107.
- 48. Deng QG, She H, Cheng JH, et al. Steatohepatitis induced by intragastric overfeeding in mice. Hepatology. Oct 2005;42(4):905-914.
- Baumgardner JN, Shankar K, Hennings L, Badger TM, Ronis MJ. A new model for 49 nonalcoholic steatohepatitis in the rat utilizing total enteral nutrition to overfeed a highpolyunsaturated fat diet. Am J Physiol Gastrointest Liver Physiol, Jan 2008;294(1):G27-38.
- 50. Lieber CS, Leo MA, Mak KM, et al. Model of nonalcoholic steatohepatitis. Am J Clin Nutr. Mar 2004:79(3):502-509
- 51. Ronis MJ, Korourian S, Zipperman M, Hakkak R, Badger TM. Dietary saturated fat reduces alcoholic hepatotoxicity in rats by altering fatty acid metabolism and membrane composition. J Nutr. Apr 2004;134(4):904-912.
- Rivera CA, Gaskin L, Allman M, et al. Toll-like receptor-2 deficiency enhances non-52 alcoholic steatohepatitis. BMC Gastroenterol. 2010;10:52.

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- 53. You M. Considine RV. Leone TC. Kelly DP. Crabb DW. Role of adiponectin in the protective action of dietary saturated fat against alcoholic fatty liver in mice. Hepatology. Sep 2005;42(3):568-577.
- 54. Nanji AA, Sadrzadeh SM, Yang EK, Fogt F, Meydani M, Dannenberg AJ. Dietary saturated fatty acids: a novel treatment for alcoholic liver disease. Gastroenterology. Aug 1995;109(2):547-554.
- 55. Stephen AM, Wald NJ. Trends in individual consumption of dietary fat in the United States, 1920-1984. Am J Clin Nutr. Sep 1990;52(3):457-469.
- 56. Kim SY, Breslow RA, Ahn J, Salem N, Jr. Alcohol consumption and fatty acid intakes in the 2001-2002 National Health and Nutrition Examination Survey. Alcohol Clin Exp Res. Aug 2007;31(8):1407-1414.
- 57. Cortez-Pinto H, Jesus L, Barros H, Lopes C, Moura MC, Camilo ME. How different is the dietary pattern in non-alcoholic steatohepatitis patients? Clin Nutr. Oct 2006:25(5):816-823.
- 58. Ackerman Z, Oron-Herman M, Grozovski M, et al. Fructose-induced fatty liver disease: hepatic effects of blood pressure and plasma triglyceride reduction. Hypertension. May 2005:45(5):1012-1018.
- Sanchez-Lozada LG, Mu W, Roncal C, et al. Comparison 59. of free fructose and glucose to sucrose in the ability to cause fatty liver. Eur J Nutr. Feb 2010;49(1):1-9.
- 60. Bray GA, Nielsen SJ, Popkin BM. Consumption of highfructose corn syrup in beverages may play a role in the epidemic of obesity. Am J Clin Nutr. Apr 2004;79(4):537-543
- Assy N, Nasser G, Kamayse I, et al. Soft drink consump-61. tion linked with fatty liver in the absence of traditional risk factors. Can J Gastroenterol. Oct 2008;22(10):811-816.
- 62. Ouvang X. Cirillo P. Sautin Y. et al. Fructose consumption as a risk factor for non-alcoholic fatty liver disease. J Hepatol. Jun 2008;48(6):993-999.
- 63. Rinella ME, Elias MS, Smolak RR, Fu T, Borensztajn J, Green RM. Mechanisms of hepatic steatosis in mice fed a lipogenic methionine choline-deficient diet. J Lipid Res. May 2008;49(5):1068-1076.
- 64. Rinella ME. Green RM. The methionine-choline deficient dietary model of steatohepatitis does not exhibit insulin resistance. J Hepatol. Jan 2004;40(1):47-51.
- Pickens MK, Yan JS, Ng RK, et al. Dietary sucrose is 65. essential to the development of liver injury in the methionine-choline-deficient model of steatohepatitis. J Lipid Res. Oct 2009;50(10):2072-2082.
- 66 Holman RT. George O. Burr and the discovery of essential fatty acids. J Nutr. May 1988;118(5):535-540.
- 67. Burr GO, Burr MM. A New Deficiency Disease Produced by the Rigid Exclusion of Fat from the Diet. J Biol Chem. 1929.82(2).345-367
- 68. Burr GO, Burr MM. On the Nature and Role of the Fatty Acids Essential in Nutrition. J Biol Chem. 1930;86(2):587-621
- Jackson CM. The Effects of High Sugar Diets on the 69. Growth and Structure of the Rat. J Nutr. 1930;3:61-67.
- 70 Bieri JG, Stoewsand GS, Briggs GM, Phillips RW, Woodard JC, Knapka JJ. Report of the American Institute of Nutrition Ad Hoc Committee on Standards for Nutritional Studes. J Nutr. 1977;107:1340-1348
- 71. Bieri JG. Second Report of the ad hoc Committee on Standards for Nutrition Studies. J Nutr. 1980:110:1726.
- 72. Bacon BR, Park CH, Fowell EM, McLaren CE. Hepatic steatosis in rats fed diets with varying concentrations of sucrose. Fundam Appl Toxicol. Oct 1984;4(5):819-826.
- Reeves PG. Components of the AIN-93 diets as improve-73. ments in the AIN-76A diet. J Nutr. May 1997;127(5 Suppl):838S-841S.
- 74. Reeves PG, Nielsen FH, Fahey GC, Jr. AIN-93 purified

diets for laboratory rodents: final report of the American Institute of Nutrition ad hoc writing committee on the reformulation of the AIN-76A rodent diet. *J Nutr.* Nov 1993;123(11):1939-1951.

- 75. Banting FG. Diabetes and Insulin. Nobel Lecture. 1923.
- Hershey JM, Soskin S. Substitution of "lecithin" for raw pancreas in the diet of the depancreatized dog. *Am Physi*ological Soc. 1931;98:74-85.
- Kaplan A, Chaikoff IL. The Effect of Choline on the Lipid Metabolism of Blood and Liver in the Completely Depancreatized Dog Maintained With Insulin. J Biol Chem. 1937;120(2):647-657.
- Montgomery ML, Entenman C, Chaikoff IL, Feinberg H. Anti-fatty liver activity of crystalline trypsin in insulin-treated depancreatized dogs. *J Biol Chem.* Jul 1950;185(1):307-310.
- Best CH, Hershey JM, Huntsman ME. The effect of lecithine on fat deposition in the liver of the normal rat. J *Physiol.* 1932;75(1):56-66.
- Best CH, Huntsman ME. The effects of the components of lecithine upon deposition of fat in the liver. *J Physiol*. 1932;75(4):405-412.
- Channon HJ, Wilkinson H. The effect of various fats in the production of dietary fatty livers. *Biochem J*. 1936;30(6):1033-1039.

- Channon HJ, Wilkinson H. Protein and the dietary production of fatty livers. *Biochem J*. 1935;29(2):350-356.
- Yao ZM, Vance DE. The active synthesis of phosphatidylcholine is required for very low density lipoprotein secretion from rat hepatocytes. *J Biol Chem.* Feb 25 1988;263(6):2998-3004.
- Buchman AL, Ament ME, Sohel M, et al. Choline deficiency causes reversible hepatic abnormalities in patients receiving parenteral nutrition: proof of a human choline requirement: a placebo-controlled trial. JPEN J Parenter Enteral Nutr. Sep-Oct 2001;25(5):260-268.
- Benton DA, Elvehjem CA, Harper AE, Quiros-Perez F, Spivey HE. Effect of different dietary fats on choline requirement of rats. *Proc Soc Exp Biol Med.* Jan 1957;94(1):100-103.
- Pan M, Cederbaum AI, Zhang YL, Ginsberg HN, Williams KJ, Fisher EA. Lipid peroxidation and oxidant stress regulate hepatic apolipoprotein B degradation and VLDL production. J Clin Invest. May 2004;113(9):1277-1287.
- da Costa KA, Kozyreva OG, Song J, Galanko JA, Fischer LM, Zeisel SH. Common genetic polymorphisms affect the human requirement for the nutrient choline. *FASEB J*. Jul 2006;20(9):1336-1344.
- Dong H, Wang J, Li C, et al. The phosphatidylethanolamine N-methyltransferase gene V175M single nucleotide polymorphism confers the susceptibility to NASH in Japanese population. *J Hepatol.* May 2007;46(5):915-920.
- 89. Song J, da Costa KA, Fischer LM, et al. Polymorphism of the PEMT gene and susceptibility to nonalcoholic fatty liver disease (NAFLD). *FASEB J*. Aug 2005;19(10):1266-1271.
- 90. Xu X, Gammon MD, Zeisel SH, et al. Choline metabolism and risk of breast cancer in a population-based study. *FASEB J.* Jun 2008;22(6):2045-2052.
- Zhou YJ, Li YY, Nie YQ, et al. Influence of polygenetic polymorphisms on the susceptibility to non-alcoholic fatty liver disease of Chinese people. J Gastroenterol Hepatol. Apr 2010;25(4):772-777.

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Vitamin B₆ The Under-Appreciated Vitamin

By Pamela Schoenfeld, RD

The importance of vitamin B_6 is often overlooked in conventional medicine, except for cases of overt B_6 deficiency which doctors believe to be rare.¹ Although not widely recognized, poor vitamin B_6 status may be relatively common in individuals eating a Standard American Diet.² In the United States, a remarkably high number of adults—ninety percent of women and seventyone percent of men—consume diets that are deficient in vitamin B_6 using the Recommended Dietary Allowance (RDA) as a measure.³ Furthermore, according to recent national health data, many individuals have inadequate vitamin B_6 status despite meeting the RDA of B_6 from their diets.⁴

Individuals particularly at risk include women of reproductive age, especially those who are using or have used oral contraceptives, teenagers, and men and women over age sixty-five.⁴ Children and the elderly are more likely to have a deficiency of B_6 than of any other B vitamin.¹ It is important to emphasize that for many, simply consuming an intake of B_6 that meets the RDA will not ensure blood levels of vitamin B_6 in a healthy range.

The causes behind poor vitamin B_6 status are varied, including exposure to pollutants and use of medications that deplete vitamin B_6 , increased needs during rapid periods of growth and development, and chronic digestive disorders.¹ But a probable common cause for a poor status is a low intake of foods rich in highly bioavailable vitamin B_6 . This article will briefly summarize the biochemistry, metabolism, and dietary bioavailability of vitamin B_6 . We will explore the causes and effects of poor intakes and how a nourishing traditional diet can supply ample amounts of readily usable vitamin B₆. Clinical applications for supplemental vitamin B_6 will be explored, as well as the often unmet needs of expectant and lactating mothers.

FORMS OF B₆ AND BIOAVAILABILITY

Vitamin B_6 is a water-soluble vitamin that naturally exists in three main forms: pyridoxine (PN), pyridoxal (PL), and pyridoxamine (PM), often collectively termed "pyridoxine." It is more accurate to use "vitamin B_6 " or " B_6 " as the generic term, as will be done in this article.⁵ The abbreviations PN, PL, and PM will be used when referring specifically to one of the three main forms.

The overall bioavailability of vitamin B_c from an omnivorous mixed diet averages 75 percent, with a range estimated between 60 and 90 percent.⁶ Vitamin B₆ bioavailability is a function of the degree of entrapment in the nondigestible portion of the diet, the proportion of the glycosylated form—PNG—in the overall diet, and the body's metabolic conversion of B_c to functional coenzyme forms.^{5,7} PNG, or pyridoxine β-glucoside, is found almost exclusively in plant foods, comprising 5-80 percent of the total B₆ content of plant foods.⁸ PL and PM are found primarily in animal foods in non-conjugated forms (no glucosides) but usually with a phosphate group attached, then referred to as PLP and PMP. 9 An omnivorous diet contains about 15 percent of B_6 in the form of PNG, with the proportion of PNG in vegetarian diets higher, up to 50 percent of the total B_6 content. ^{8,10}

Vitamin B_6 is unstable to alkaline conditions, light, oxygen, and high temperatures. Therefore, much of the B_6 originally present in foods can be lost in processing: prolonged or high heating, canning and pressure cooking, milling of grains into refined flour, sterilization and freezing. This is especially true for the less stable PL/PLP and PM/PMP in animal foods.⁵ Significant losses can also occur rapidly in milk when it is exposed to light, even diffuse daylight or fluorescent light.¹¹

PNG in plant foods is the form most stable to food processing, but it is also the least bioavailable. Animal foods provide an overall higher bioavailability of vitamin B_6 —estimates range from 10 to 100 percent higher than plant foods—and will serve as superior sources of B_6 when they are eaten raw or cooked at lower temperatures and served in their own juices. Cooking in an acid medium (such as vinegar, lemon or tomato-based sauce) can help decrease the heat degradation of B_6 .¹²

Losses from the cooking of meat can be considerable: 30-40 percent is destroyed from boiling (more is lost if the broth is not consumed), and between 15-50 percent from roasting or broiling. Vitamin B_6 in fish seems to withstand the cooking processes better with losses of only between 10-20 percent, possibly due to reduced cooking times. Again, fish juices should be consumed with the flesh for best retention.

Most losses for cooked vegetables occur due to the leaching into the cooking liquid; this wasteful practice can increase the losses for vegetables from 5-15 percent to as high as 60 percent (the highest losses are attributed to the conversion of some of the PN in some vegetables to the more labile PL or PM).13 Baked vegetables fare very well, such as potatoes and sweet potatoes, which only lose about 5 percent of their vitamin B₆. ¹² Canning of foods results in losses of 20-30 percent with higher reports for meat, fish, and dairy; the milling of wheat results in losses of 80-90 percent and baking an additional 17 percent.14 The drying of meats retains a large majority of the B_6 , according to one published report.15

Most published research concludes that milk does not lose a significant amount of vitamin B_6 during the conventional pasteurization or homogenization processes, citing only about a 10 percent loss.^{14, 16, 17} However, in contrast to the more common microbiological assays (utilizing yeast) that have shown losses of B_6 from pasteurization to be inconsequential, bioassays

Significant losses of vitamin B₆ can occur rapidly in milk when it is exposed to light, even diffuse daylight or fluorescent light.

in rats have shown deleterious effects from milk pasteurization.

In the Randleigh Farm studies carried out between 1935 and 1940, rats were fed either pasteurized or unpasteurized milk alone. The rats fed pasteurized milk exhibited poor development and acrodynia compared to the rats that were fed raw milk and grew normally with healthy coats.⁵⁰

HISTORY

O F

Rat fed only raw milk from cows fed dry ice grass silage and grain.

Rats fed only pasteurized milk from cows fed dry ice grass silage. (acrodynia) are due to a deficiency of vitamin B_{0} .

absence of acrodynia

RANDLEIGH

have contributed to the worsening B₆ status in the women whose diets contained higher amounts of PNG. ¹⁰ The extent to which PNG opposes the utilization of the non-glycosylated forms is not well quantified and may be under-appreciated.

FARM

Notice

Hairless areas

Acrodynia is a pellagra-like skin disorder that causes hair loss in rats when their diets are deficient in B_6 . In fact, vitamin B_6 in a yeast extract was first described as the active "rat pellagra prevention factor" by Paul György in 1934.¹⁸ The rat acrodynia cure test was later replaced by the rat growth test, and then by microbiological assays.¹⁹ Currently, microbiological assays and high-performance

liquid chromatography remain in use for determining the vitamin B_6 content of foods.⁵

There is disagreement on the applicability of results obtained from rat bioassays to humans, as unlike humans, rats can absorb vitamin B₆ synthesized by gut bacteria.²⁰ On the other hand, for reasons that are not completely clear, microbiological assays may

not adequately assess B_6 bioavailability in humans. This could be due to the interrelationships of vitamin B_6 with other dietary factors such as heated proteins, along with the impact of soluble sugars on intestinal flora.²¹ In any case, it is widely acknowledged that the heat sterilization of milk results in B_6 losses of one-half to two-thirds, with additional losses during the subsequent storage period.^{14, 21} During the 1950s, several infants developed convulsions after being fed a commercially sterilized infant formula. The convulsions were resolved by the administration of vitamin B_6 .²¹ It is very important to avoid consuming evaporated milk and UHT, or ultra-high temperature processed milk as these products are sterilized and often have an extended shelf time.

PLANT SOURCES OF B₆

Researchers found that women who consumed mainly plant foods as their source of B_6 (PNG) excreted more B_6 in their stools, and experienced a decrease in B_6 status indicators after only eighteen days. These researchers recommended that "during the determination of Recommended Dietary Allowances, the reduced bioavailability of PNG and its presence in higher amounts *in some diets* should be considered," referring to vegetariantype diets which were becoming popular at the time.²² (Emphasis added.) Because a portion of dietary PNG is absorbed intact, and once absorbed exerts a weak opposing action on the other forms of B_6 in the body, this may



ABSORPTION AND UTILIZATION OF B

Plant foods vary considerably in the proportion of pyridoxine present in the free versus the glycosylated form. A few plant foods, such as banana and avocado, are low in glucosides (see Figure 1, page 28), and hence are better plant sources of B_6 ^{24, 25} Note that raw broccoli and cauliflower have very low levels of glycoside as compared to frozen; it is thought that raw enzyme

activity may release B₆ from glucosides, activity that is destroyed during processing.²⁵ All the more reason to eat your cruciferous vegetables lacto-fermented!

Vitamin B_c is absorbed in the small intestine, mostly in the free forms after the glycoside or phosphate groups are removed. As mentioned above, a portion of PNG is absorbed intact, and when consumed in high concentrations, the phosphorylated forms can also be absorbed intact. After absorption, some of the free forms are taken up by the red blood cells and bound to hemoglobin,⁹ but the majority of B₆ goes to the liver for conversion into the active form, pyridoxal-5-phosphate, or PLP (also called P-5-P). PLP is then released into the bloodstream, traveling to the rest of the body largely bound to the protein albumin. A small amount of PLP is retained by the liver for storage.9 Finally, B₆ enters the target tissues after removal of the phosphate group from the circulating PLP; muscle tissues store the majority of the body's B_6 .⁹ Because most vitamin B_6 metabolism occurs in the liver, individuals with liver disease are at high risk for B_6 deficiency.²⁶

It is important to emphasize the fact that the absorption and utilization of B_6 can vary greatly among individuals.8 There are a few factors that likely explain this variability. First, the activity of intestinal enzymes that split off glucosides from PNG (plant form) in order to facilitate absorption has been shown to vary with the intake of PNG.²⁷ Second, the intestinal absorption of both PNP and PMP (phosphorylated animal forms), as well as the final tissue uptake of circulating PLP requires a different enzyme that has zinc as a co-factor. Third, riboflavin, or vitamin B₂, is needed for the phosphorylation of all forms of absorbed B₆ to active PLP in the liver. Thus, poor intakes of zinc and/or riboflavin may exacerbate or lead to B₆ deficiencies. Diets that restrict meat, seafood, poultry, dairy or eggs, or diets that largely rely on improperly prepared grains, legumes and nuts that are high in mineral-binding phytates present a three-fold problem: they are low in riboflavin, low in bioavailable zinc, and they contain vitamin B₆ mainly in a form that is more difficult for the body to absorb and utilize.9

B₆ METABOLISM: ROLES IN THE BODY

Vitamin B_6 's chief function is to act on amino acids, the building blocks of protein, mostly to remove or transfer nitrogen, sulfur, or carbon-containing molecules. Overall, B_6 is important for protein metabolism, growth, and the nervous, endocrine, and immune systems. More than one hundred vitamin B_6 -dependent enzymes have been identified, mostly involved in amino acid metabolism: for oxygen transport via hemoglobin synthesis; in blood sugar regulation via conversion of stored carbohydrate to energy; in the development of the myelin sheath surrounding nerve cells; in the conversion of alphalinoleic acid to the essential long-chain fatty acid DHA;²⁸ and in the synthesis of neurotransmitters, phospholipids and sphingolipids, the vitamin niacin from tryptophan, and other vital metabolites.⁵ In addition to its role in enzyme reactions, B_6 appears to moderate the action of some steroid hormones such as the glucocorticoid hormones, which in turn influence the metabolism of protein, carbohydrate and lipids.^{5,9} B_6 also is a potent antioxidant, rivaling carotenoids and vitamin E in its ability to quench reactive oxidants in the body.²⁹

EFFECTS OF B₆ DEFICIENCY

Because vitamin B₆ plays several important roles in the body, a suboptimal intake or status will have many detrimental effects on health. The classically recognized effects of a vitamin B₆ deficiency are microcytic hypochromic anemia (small red blood cells with low levels of hemoglobin), dermatitis, glossitis (sore, inflamed tongue), depression, confusion, and convulsions. Hyperhomocysteinemia, or elevated levels of homocysteine in the blood, can also be due to marginal B₆ status, often seen in conjunction with low folate and/or vitamin B₁₂ intake.^{5,9} Hyperhomocysteinemia is thought to be a risk factor for cardiovascular disease and stroke. Yet studies have produced conflicting findings as to whether using supplements to lower homocysteine levels provides protection against these diseases. Blood vitamin B₆ levels are significantly decreased in diabetics and B_6 supplements have been shown to help with problems related to glucose intolerance.¹⁸ A recent population study showed that lower blood levels of B₆ are associated with higher levels of inflammation, oxidative stress, and poor blood sugar control.³⁰

Vitamin B₆ is important for protein metabolism, growth, and the nervous, endocrine, and immune systems.

FIGURE 1: Vitamin B₆ and percentage of glycoside form in selected plant foods.^{24,25} PLANT FOOD PORTION **B6 IN MG** PERCENT GLYCOSIDE 0.55 3 - 16% Banana 1 cup Avocado 3-1/2 oz 0.44 3% Broccoli, raw 3-1/2 oz 0.17 Not detectable Broccoli, frozen 3-1/2 oz 0.12 65% Cauliflower, raw 3-1/2 oz 0.16 5% 3-1/2 oz 82% Cauliflower, frozen 0.084 Almonds 3-1/2 oz 0.086 0%

TRADITIONAL DIETS AND B

Considering the widespread frequency of marginal intake of vitamin B_{6} , one has to wonder which limitations of the Western diet are behind this phenomenon. We have already discussed the roles of zinc and riboflavin and the limited bioavailability of B₆ from the majority of plantbased foods. Compounding that situation is the fact that B₆ is heat sensitive and is destroyed by either long cooking times, high temperatures, or both. As the best dietary sources of B₆ are animal foods, it is easy to surmise what is happening. Most, if not all, of the animal foods eaten today are heated thoroughly prior to consumption, mostly out of food safety concerns; many are consumed in a highly processed state—frozen, canned, or packaged for convenience. Traditional cultures always ate at least a portion of their animal foods in the raw or fermented state, and milk was rarely if ever heated beyond the relatively low temperatures needed to make cheese, yogurt, and other fermented milk products.

PREGNANT AND BREASTFEEDING WOMEN

For women who follow conventional dietary advice, pregnancy is often accompanied by the risk of several vitamin and mineral deficiencies, including vitamin B_6 and iron. Both are critical nutrients for the developing fetus; vitamin B_6 is essential for the proper development of the central nervous system.³¹ Most women will be counseled to increase their intake of iron-rich foods and/or given a prescription for an iron supplement to avoid or treat the anemia of pregnancy, but rarely is the same advice given concerning vitamin B_6 . This oversight is unfortunate since during the third trimester the mother's iron and B_6 levels often fall sharply, creating a situation where iron-deficiency anemia can be exacerbated by a concurrent vitamin B_6 deficiency anemia. Vitamin B_6 deficiency anemia can also occur in the absence of an iron deficiency.

The levels of PLP (active B_{c}) in umbilical cord blood are determined by the intake of B by the mother during pregnancy.³¹ In a study of 56 pregnant women diagnosed with anemia,²³ women who experienced no improvement in their anemia following iron supplementation improved with vitamin B_{c} supplementation.³² Anemia is a serious condition in pregnancy because it can adversely affect the mental development of the baby. Unfortunately, iron deficiency anemia is indistinguishable from vitamin B₆ deficiency anemia in the standard blood tests, as both are microcytic, hypochromic forms of anemia. The authors of this study noted that levels of protein in the blood were low in women with vitamin B₆ deficiency, suggesting that levels of serum albumin could help characterize this deficiency. They also observed that women with multiple pregnancies had a greater risk for vitamin B deficiency.

The content of vitamin B_6 in breast milk is likewise affected by the vitamin B_6 status of the mother. It appears that the body does not have a way to regulate the B_6 content of the milk when the mother's intake is low (as it does for some nutrients such as calcium), so mothers who do not eat sufficient B_6 -rich foods and do not make Vitamin B₆ is heat sensitive and is destroyed by either long cooking times, high temperatures, or both.

VITAMIN B₆: THE RECOMMENDED DAILY ALLOWANCES

Vitamin B_6 requirements are thought to be dependent on the amount of protein in the diet. A number of studies show that the higher the protein intake, the higher the need for B_6 .^{45,46} In fact, the previous RDAs set in 1989 were based on protein intake (0.016 mg vitamin B_6 per gram of protein). Thus the popular trend for high-protein diets is a dangerous one, potentially depleting levels of B_6 in the body, among other nutrients. All types of liver and poultry giblets are excellent sources of B_6 , further evidence that reinforces the inclusion of organ meats and seafood in the diet as a healthful traditional practice.

The current RDAs for adults are 1.3 mg per day for ages 19-51, 1.5 mg per day for females and 1.7 mg per day for males 51 and older, 1.9 mg per day for pregnant women, and 2.0 mg per day for lactating women.⁴⁷ The RDAs for B₆ are often inadequate to meet the body's needs.⁴ For example, the combined results from five different studies strongly indicate that the RDA for young women should be closer to 1.7 mg per day.⁴⁸ A group of researchers from Tufts University, the USDA and the National Institutes of Health recently concluded that "Vitamin B₆ intakes of 3 to 4.9 mg per day appear consistent with the definition of a Recommended Dietary Allowance for most Americans."⁴ Unfortunately, menu plans that follow the Dietary Guidelines for Americans typically provide less than 2.0 mg per day of B₆.^{6,49}

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up the shortfall by supplementing with B_6 will produce breast milk with inadequate levels of B_6 for their infants.³³ One group of researchers concludes that a minimum of 3.5 to 4.9 mg of vitamin B_6 equivalents (from diet and supplements) are needed to maintain saturated levels of B_6 in the mothers' breast milk, about double the RDA.³⁴ Irritability in the infant may be a sign of less than adequate vitamin B_6 status.³⁵

On a personal note, during my training with neonatal intensive care dietitians, they stated that they never counseled the mothers of premature infants on what to eat while pumping their breast milk for their precious babies. This is because, to paraphrase these dietitians, "A mother's milk is not affected by her diet; we just want to make sure they eat enough. They are under enough stress already." These poor babies—whose mothers aren't told that the quality of their milk is directly related to the quality of their diets—will suffer because conventional health practitioners continue to ignore this scientifically supported fact.

As stated earlier, many women of reproductive age in the United States have suboptimal B_6 status.⁴ Other investigations have yielded similar results. Women of reproductive age by and large are not even meeting the RDA for vitamin B_6 , and the RDA itself may not even be adequate for their babies' health or their own. A symptom of low vitamin B_6 status during pregnancy may be excessive morning sickness, which has been shown to be ameliorated by short-term vitamin B_6 supplementation.³⁶ However, caution must be exercised when considering dietary supplements and vitamins in levels above what is contained in nourishing traditional foods.

For women eating a traditional diet, foods such as liver, red meat, and other organ meats are sources of both iron and B_6 in highly usable forms for the body. These wise women will prepare for pregnancy and will space their children at least three years apart. These traditional practices can prevent deficiencies of vitamin B_6 and other nutrients during pregnancy and lactation, making the experience easier for the mother and giving each baby the optimal start on life.

SUPPLEMENTAL B₆

Considering the myriad biochemical reac-

Wise Traditions

tions that B_{c} facilitates in the body, it is not surprising that nutritionally oriented practitioners have reported significant improvements with B₄ supplementation in cases of premenstrual syndrome, estrogen overload, adverse effects of oral contraceptives, nausea and vomiting in pregnancy, depression, carpal tunnel syndrome, and asthma. Other possible uses for vitamin B₄ are treatment of acne, alcoholism, attention deficit disorder, autism spectrum disorder, MSG sensitivity reactions, general inflammation, and depression and other neurological disorders.¹ Treatment of these conditions with higher doses of supplemental B₆ is not recognized by conventional medicine,³⁷ and should be done under a qualified practitioner's care. Supplementation with doses above the upper tolerable intake level of 100 mg per day can lead to nerve damage in the arms and legs and possibly the spinal cord, usually reversible when supplementation is stopped.9 In addition, there is research suggesting that high doses of B_c can generate toxic photo-products as a result of UV irradiation.38

Pyridoxine hydrochloride (PNHCl) is the most common form of B₆ available in supplements. When compared with pyridoxal-5-phosphate (P-5-P) supplements, PNHCl requires an additional enzymatic step in the liver to be converted to the form utilizable by the body.^{5,39} Many practitioners recommend P-5-P supplements over PNHCl supplements for this reason¹ and because there have been more reports of adverse effects with use of high doses of pyridoxine.⁴⁰ However, in healthy individuals, bypassing this step using large doses of P-5-P may not be wise, as the liver serves as an important control to prevent excessive production of P-5-P.⁵

AUTISM SPECTRUM DISORDER

Individuals with Autism Spectrum Disorder (ASD) often do well with higher intakes of vitamin B_6 and other nutrients. According to William Shaw, PhD, one reason for this are the high levels of candida often found in their guts. The sugar arabinose, a byproduct of candida metabolism, competes with B_6 for the same enzyme sites, effectively blocking the action of this vitamin. Another reason is that high levels of compounds called kryptopyrroles might actually deplete B_6 in these individuals. Dr. Shaw feels pyridoxine

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supplements are more effective in these cases because to absorb P-5-P supplements in the gut, the body must remove the phosphate group. Some of the benefits for B_6 supplementation in autism are probably related to its action on neurotransmitter production and its ability to reduce oxalate levels, which often rise to high levels in ASD. Parents have reported many benefits from B_6 supplements including improvements in sleep, focus and concentration, language skills, and interest in learning, and reductions in hyperactivity, irritability, aggressive and self-injurious behaviors. Dr. Shaw also recommends supplementing with magnesium, as it is a cofactor for most of the biochemical actions of the vitamin B_6 coenzyme.⁴¹

Note that blood tests can be hard to interpret, as levels of total vitamin B_6 will be elevated and yet levels of PLP will be depressed in individuals with ASD, reflecting a low activity of the enzyme that converts B_6 to the active PLP.⁴² Again, supplementation should only be implemented under the supervision of a qualified practitioner.

TESTING FOR B₆ STATUS

To determine whether an individual has sufficient vitamin B_6 stores, a urine test measuring xanthurenic acid excretion following an oral dose of tryptophan is commonly used.⁹ A blood test for plasma PLP is considered the single best indicator of tissue B_6 stores; levels of 20nmol/L are generally considered adequate (DRIs).⁴⁷ All tests must be interpreted by a qualified practitioner as other factors besides B_6 deficiency can affect the results, including pregnancy and liver and bone disease.^{43, 44} Elevated levels of homocysteine in the blood may point to a B_6 deficiency as well, but the status of vitamin B_{12} and folate must be considered when evaluating this laboratory test.

IN CONCLUSION

Vitamin B_6 is an important vitamin that gets very little attention by most health practitioners. While the United States Department of Agriculture requires the enrichment of foods made from refined grains with vitamins B_1, B_2, B_3 , folic acid, and iron, there is no such requirement for vitamin B₆. The general public is thereby lured into a false sense of security in the belief that they can get all their vitamins from a government-recommended "balanced diet." Unfortunately this same diet is often high in processed foods, high in dietary phytates, excessive in protein that requires higher intakes of vitamin B₆, high in plant foods containing hard-to-absorb glycosylated B₆, and low in the full range of animal foods and properly processed plant foods that would supply adequate vitamin B₆. A true balanced diet would be based on the traditional foods that nourished humans for generations—ones that are naturally rich in bioavailable vitamins and minerals essential for good health and successful reproduction-including vitamin B_{c} .

FOODS RICH IN VITAMIN B ₆							
TYPE	FOOD A	AMOUNT	B_6 in MG	TYPE	FOOD AM	OUNT B ₆	in MG
Animal	Tuna, yellowfin	4 oz	1.17	Plant	Garbanzo beans	1/2 cup	0.57
	Beef liver	4 oz	1.16	Plant	Banana, raw	1 medium	0.43
Animal	Chicken liver	4 oz	0.85	Plant	Potato, baked, no skin	1 medium	0.34
Animal	Pork chops	4 oz	0.79	Plant	Potato, mashed	1/2 cup	0.26
Animal	Sockeye Salmon	4 oz	0.78	Plant	Sweet potato	1/2 cup	0.25
Animal	Halibut	4 oz	0.71	Plant	Brussel sprouts	1/2 cup	0.22
Animal	Beef steak	4 oz	0.71	Plant	Spinach, cooked, drained	1/2 cup	0.22
Animal	Turkey giblets	4 oz	0.67	Plant	Avocado, raw, sliced	1/2 cup	0.2
Animal	Turkey with skin	4 oz	0.52	Plant	Pinto beans	1/2 cup	0.19
Animal	Chicken giblets	4 oz	0.45	Plant	Buckwheat flour, dry	1/4 cup	0.17
Animal	Codfish, canned	4 oz	0.32	Plant	Red pepper, sweet, raw	1/2 pepper	0.17
Animal	Salami, beef & po	rk 2 oz	0.26	Plant	Lentils	1/2 cup	0.17
Animal	Cheese, feta	1 oz	0.12	Plant	Winter squash	1/2 cup	0.17
Animal	Crab, blue, canne	d 1/2 cup	0.1	Plant	Broccoli	1/2 cup	0.16
Animal	Milk, pasteurized	1 cup	0.1	Plant	Sauerkraut	1/2 cup	0.15
Animal	Cheese, cottage	1/2 cup	0.1	Plant	Green peas	1/2 cup	0.14
Animal	Cheese, Cheddar	2 oz	0.1	Plant	Brown rice	1/2 cup	0.14
				Plant	Cabbage, Chinese	1/2 cup	0.14
				Plant	Turnip or collard greens	1/2 cup	0.13
SOURCE: USDA National Nutrient Database for Standard Reference,			Plant	Sunflower seeds, shelled	1/8 cup	0.13	
Release 21. Content of Selected Foods per Common Measure, Vitamin B-6 (mg sorted by nutrient content). Available at http://www.nal.usda. gov/fnic/foodcomp/Data/SR21/nutrlist/sr21w415.pdf.			Plant	Prunes, stewed	2 oz	0.12	
			Plant	Summer squash	1/2 cup	0.12	
			Plant	Cauliflower, cooked	1/2 cup	0.11	

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REFERENCES

- Stargrove MB, Treasure J, McKee DL. Herb, Nutrient, and Drug Interactions: Clinical Implications and Therapeutic Strategies. St. Louis, Mo: Elsevier Mosby; 2008
- Azuma J, Kishi T, Williams RH, Folkers K. Apparent deficiency of vitamin B₆ in typical individuals who commonly serve as normal controls. *Res Commun Chem Pathol Pharmacol* 1976;14:343-366
- Kant AK, Block G. Dietary vitamin B₆ intake and food sources in the US population: NHANES II, 1976-1980. Am J Clin Nutr 1990;52:707-716
- Morris MS, Picciano MF, Jacques PF, Selhub J.Plasma pyridoxal 5'-phosphate in the US population: the National Health and Nutrition Examination Survey, 2003-2004. *Am J Clin Nutr*. 2008;87:1446-54
- Mackey AD, Davis SR, Gregory JF III. Vitamin B₆. In:Shils ME, Shike M, Ross AC, Caballero B, Cousins RJ, eds. *Modern Nutrition in Health and Disease*. Baltimore Md: Lippincott Williams & Wilkins; 2006:452-461
- Tarr JB, Tamura T, Stokstad ELR. Availability of vitamin B₆ and pantothenate in an average American diet in man. *Am J Clin Nutr.* 1981;34:1328-1337
- Gregory JF 3rd Bioavailability of vitamin B₆. Eur J Clin Nutr. 1997;51(Suppl 1):43S-48S
- Gregory JF 3rd, Trumbo PR, Bailey LB, Toth JP, Baumbartner TG, Cerda JJ. Bioavailablity of Pyridoxine-5'-β-D-glucoside determined in humans by stable-isotopic methods. J Nutr. 1991;121:177-186
- Gropper SS, Smith JL, Groff JL. Advanced Nutrition and Human Metabolism. 4th ed. Belmont, Ca:Thompson Wadsworth; 2005
- Gregory JF 3rd Nutritional properties and significance of vitamin glycosides. An Rev Nutr. 1998;18:277-296
- Rolls BA, Porter JWG. Some effects of processing and storage on nutritive value of milk and milk products. *Proc Nutr* Soc.1973;32:9-15
- Leskova E, et al. Vitamin losses: Retention during heat treatment and continual changes expressed by mathematical models. J Food Comp Anal. 2006;19:252-276
- USDA Table of Nutrient Retention Factors, Release 6 (2007). Available at http://www.ars.usda.gov/Services/docs. htm?docid=9448. Accessed 1-18-2011
- deMan JM. Principles of Food Chemistry. 3rd ed. Gaithersburg Md: Aspen Publishing;1999
- Schroeder HA. Losses of vitamins and trace minerals resulting from processing and preservation of foods. Am J Clin Nutr. 1971;24:562-573
- Rolls BA, Porter JW. Some effects of processing and storage on the nutritive value of milk and milk products. *Proc Nutr Soc.* 1973 May;32(1):9-15
- Miller GD, et al. Handbook of Dairy Foods and Nutrition. 2nd ed. New York, NY. CRC Press; 2000
- Mooney S, Leuendorf JE, Hendrickson C, Hellmann H. Vitamin B₆: A long known compound of surprising complexity. *Molecules*. 2009;14:329-351
- Woodring MJ, Storvick CA. Vitamin B₆ in milk: Review of literature. J Assoc Off Ag Chem. 1960;43:63-79
- 20. Gregory JF, Litherland SA. Efficacy of rat bioassay for the

- determination of biologically available vitamin B₆. J Nutr. 1986;116:87-97
- Tomarelli RM, Spence ER, Berhnart FW. Biological availability of vitamin B₆ of heated milk. JAg Food Chem.1955;3(4):338-341
- Hansen CM, Leklems JE, Miller LT. Vitamin B₆ status indicators decrease in women consuming a diet high in pyridoxine glucoside. J. Nutr. 1996;126: 2512-2518, 1996
- Schultz TD, Leklem JE. Vitamin B₆ status and bioavailablity in vegetarian women. Am J Clin Nutr. 1987;46:647-651
 - 4. Reynolds RD. Bioavailability of vitamin B₆ from plant foods. Am J Clin Nutr. 1988;48:863-867
- Kabir H, Leklem J, Miller LT. Measurement of glycosylated vitamin B₆ in foods. J Food Sci. 1983;48:1422-1425
- Labadarios D, Rossouw JE, McConnell JB, Davis M, Williams R. Vitamin B₆ deficiency in chronic liver disease: evidence for increased degradation of pyridoxal-5'-phosphate. *Gut.* 1977 Jan;18(1):23-7
- Nakano H, Gregory JF 3rd. Pyridoxine and pyridoxine-5'-beta-D-glucoside exert different effects on tissue B₆ vitamers but similar effects on beta-glucosidase activity in rats. J Nutr. 1995 Nov;125(11):2751-2762
- Tsuge H, Hotta N, Hayakawa T. Effects of vitamin B₆ on (n-3) polyunsaturated fatty acids and metabolism. J Nutr. 2000:130:333S-334S
- 29. Hellman H, Mooney S. Vitamin B₆: a molecule for human health? *Molecules*. 2010;15(1):442-459
- Shen J, Lai CQ, Mattei J, Ordovas JM, Tucker KL. Association of vitamin B₆ status with inflammation, oxidative stress, and chronic inflammatory conditions: the Boston Puerto Rican Health Study. *Am J Clin Nutr.* 2010;91(2):337-342
- Chang SJ, Kirksey A. Pyridoxine supplementation of lactating mothers: relation to maternal nutrition status and vitamin B₆ concentrations in milk. *Am J Clin Nutr.* 1990;51:826-831
- Hisano M, Suzuki R, Sago H, Murashima A, Yamaguchi K. Vitamin B₆ deficiency and anemia in pregnancy. *Eur J Clin Nutr.* 2010;64:221-223
- Chang SJ, Kirksey A; Kang-Yoon SA, Kirksey A, Giacoia GP, West KD. Vitamin B₆ adequacy in neonatal nutrition: associations with preterm delivery, type of feeding, and vitamin B₆ supplementation. Am J Clin Nutr. 1995;62:932-942
- Chang SJ, Kirksey A. Pyridoxine supplementation of lactating mothers: relation to maternal nutrition status and vitamin B₆ concentrations in milk. *Am J Clin Nutr.* 1990;51:826-831
- Boylan LM, Hart S, Porter KB, Driskell JA. Vitamin B, content of breast milk and neonatal behavioral functioning. J Am Diet Assoc. 2002;102:1433-1438
- Koren G, Clark S, Hankins GD, Caritis SN, Miodovnik M, Umans JG, Mattison DR. Effectiveness of delayed-release doxylamine and pyridoxine for nausea and vomiting of pregnancy: a randomized placebo controlled trial. *Am J Obstet Gynecol.* 2010 203(6):571
- National Institutes of Health Office of Dietary Supplements. Available at http://ods.od.nih.gov/ factsheets/vitaminb6/. Accessed 1-18-2011
- Maeda, T.; Taguchi, H.; Minami, H.; Sato, K.; Shiga, T.; Kosaka, H.; Yoshikawa, K. Vitamin B6 phototoxicity induced by UVA radiation. Arch. Dermatol. Res. 2000;292:562-567
- Kang-Yoon SA, Kirksey A, Giacoia GP, West KD. Vitamin B₆ adequacy in neonatal nutrition: associations with preterm delivery, type of feeding and vitamin B₆ supplementation. *Am J Clin Nutr.* 1995;62:932-942
- Clayton PT. B₆-responsive disorders: a model of vitamin dependency. J Inherit Metab Dis. 2006;29:317-326
- Shaw D. Autism: Beyond the Basics, Treating Autism Spectrum Disorders. Lenexa, KS: Great Plains Laboratory; 2009
- Adams JB, George F, Audhya T. Abnormally high plasma levels of vitamin b(6) in children with autism not taking supplements compared to controls not taking supplements. J Altern Complement Med. 2006;12(1):59-63
- Barnard HC, Kock JJ, Vermaak WJH, Potgieter GM. A new perspective in the assessment of vitamin B, nutritional status during pregnancy in humans. J. Nutr. 1987;117:1303-1306
- Anderson BB, O'Brien H, Griffin GE, Mollin KL. Hydrolysis of pyridoxal 5'-phosphate in plasma in conditions with raised alkaline phosphatase. *Gut.* 1980;21:192-194
- Canham JE, Baker EM, Harding RS, Sauberlich HE, Plough IC. Dietary protein-its relationship to vitamin B, requirement. Ann NY Acad Sci. 1969;166:16-29
- Ribya-Mercado JD, Russell RM, Sahyoun N, Morrow FD, Gershoff SN. Vitamin B₆ requirements of elderly men and women. J Nutr. 1991;121:1062-1074
- Food and Nutrition Board, Institute of Medicine. Vitamin B₆. In:Dietary Reference Intakes for Thiamin, Ribolflavin, Niacin, Vitamin B₆, Folate, Vitamin B₁₂, Pantothenic Acid, Biotin, and Choline. Washington DC: National Academy Press, 1998
- 48. Hansen CM, Shultz TD, Kwak HK, Memon HS, Leklem JE. Assessment of vitamin B₆ status in young women consuming a controlled diet containing four levels of vitamin B₆ provides an estimated average requirement and recommended dietary allowance. J Nutr. 2001;131:1777-1786
- Dollahite J, Franklin D, McNew R. Problems encountered in meeting the Recommended Dietary Allowances for menus designed according to the Dietary Guidelines for Americans. J Am Diet Assoc. 1995;95:341-344,347.
- 50. www.realmilk.com/documents/Randleigh.pdf.

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SPRING 2011

The USDA's Pyramid Scheme We Need a New Way to Define "Healthy"

by Adele Hite, MAT

Presentation at the Weston A. Price Foundation press conference on the USDA Dietary Guidelines, February 14, 2011.

am a PhD candidate in Nutrition Epidemiology at the University of North Carolina. I represent the Healthy Nation Coalition, a public health advocacy group dedicated to changing our definition of healthy food. But I also represent all those Americans who have tried to eat a healthy diet according to the USDA's definition and have become overweight, obese, and sick in the process. I was one of those people—obese and sick—when I ate according to the guidelines.

I went back to school because I worked at a Duke Clinic, where I met a lot of people just like me, people who were struggling with weight gain and poor health, trying to force their bodies to be well on a dietary pattern never proven to have specific health benefits. That's right, the recommended diet has not even been tested. We know that it has not been tested because the USDA makes this statement in the 2010 Dietary Guidelines document: "The [USDA] food patterns were developed to meet nutrient needs . . . while not exceeding calorie requirements. *Though they have not been specifically tested for health benefits* they are similar to the DASH research diet and consistent with most of the measures of adherence to Mediterranean-type eating patterns (emphasis added)."

The first USDA Dietary Guidelines for Americans were released in 1980. After sixteen years of following the recommended lowfat, grain-and-cereal based diet, I was sixty pounds overweight, fighting to get my body back. I ate less; I exercised more. I finally lost fifteen pounds. I was also hungry and tired and miserable—and what's worse, I couldn't lose any more weight without starving myself.

After a lot of research, I found—and the patients at the clinic found—that when we ate foods that the USDA had been telling us *not* to eat foods like eggs, broccoli with butter, greens with fatback, and even the occasional steak—we felt better, lost weight, and got healthier.

For the patients I met with type-2 diabetes, they could get their blood sugars under control and reverse their symptoms, instead of having the disease progress to loss of kidney function, eyesight, or even a limb. When they changed their diets to include fat and reduced the highlyprocessed grains and cereals that the Food Pyramid is built on, they were able to reduce or stop taking medication. They got better; they lost weight. It happened time and time again. And they wondered, as I did, why we've been told that the only way to be healthy is to follow the USDA guidelines, a diet that doesn't work for me, for them, nor for many Americans.

From the start, our dietary recommendations have been based as much on politics as on science. The first set of dietary goals was written by political staffers, not scientists or nutritionists.¹ They were based on the as-yet-unproven theory that reducing dietary fat would reduce heart disease, diabetes, and obesity.² They directed Americans to consume less fat and more carbohydrate.

These guidelines have remained remarkably consistent for the past thirty years and Americans have done their best to follow them. We have lowered our fat intake, and we have increased our carbohydrates (Figure 1). Since the first guidelines, the number of obese Americans has more than doubled (Figure 2); the number with type-2 diabetes has tripled.

The dramatic rise in obesity in America began in the early 1980s after the release of the first Dietary Guidelines for Americans, after which Americans gradually reduced the fat in their diets and consumed more carbohydrate foods.

How did this happen? The USDA blames our "obesogenic" environment.⁵ But the USDA creates the policies that control nearly every aspect

rise in obesity in America began in the early 1980s after the release of the first Dietary Guidelines for Americans. giving Americans the green light to consume large amounts of refined carbohydrate foods.

The dramatic



FIGURE 2: Dramatic Rise in Obesity among U.S. Adults (20-74 Years) Since Implementation of the USDA Dietary Guidelines.⁴



SPRING 2011

Wise Traditions

There are no consequences to the USDA if their guidelines don't work. But there are plenty of consequences to us. of our food environment. Its primary mandate is to increase consumer demand for U.S. agricultural products. The primary promotional tool for U.S. food products is the Dietary Guidelines in which USDA defines "healthy food." This definition of "healthy" shapes what consumers demand and what food industries provide.

Thanks to these policies, cheap grain and cereal-based foods are everywhere and are marketed as an important part of a healthy diet. During the past thirty years, the energy available from processed



Humans have an inherent preference for sugary and starchy foods. The mechanism that makes these foods addictive has recently been clarified.⁷ We are *not* addicted to fat and salt, which on their own have limited appeal. Could you eat a stick of butter by itself? Instead, we are addicted to the sugary, starchy foods that happen to come with fat and salt. Add some bread. Now how much butter can you eat?

Dietary sugars and starches cause our insulin to rise, which encourages fat storage

and prevents fat burning. Then we have no fuel: we're hungry, we're tired and we're addicted. Chronically elevated insulin is also an independent risk factor for diabetes, hypertension, and heart disease.⁸ Scientists

has increased by less than twenty calories (Figure 3).⁵

Since the calorie increase in our diet over the past thirty years has come almost entirely from grain-based foods, many nutrition experts now agree that it's not just how much we are eating, but what. They believe our lowfat diet recommendations have helped fuel our nation's health crisis.⁶ Yet the USDA has disregarded the current scientific evidence and expert opinion, insisting that "a healthy diet is high in carbohydrates."⁵ Why isn't it? know this. But when scientific evidence contradicts the USDA's definition of healthy, the USDA ignores the science—why shouldn't they? There is no one policing the policymakers. There are no consequences to the USDA if their guidelines don't work.

But there are plenty of consequences to us. This cannot be stated strongly enough: the Dietary Guidelines, because they are not based on objective scientific evidence, have caused, and will continue to cause, harm.

The 2010 Guidelines focus on counting



FIGURE 3: Changes in Food Consumption Patterns Since 1970).
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and vegetables-


and controlling calories, when science shows us that restrictive eating patterns in children and teenagers actually lead to an increased risk of obesity and other eating disorders.^{9,10} Many men and women all over America go hungry trying to compel their bodies to respond to a lowfat diet with increasingly lowered calories. Few of them will succeed. As a nation, we pay the price in rising health care costs, diminished quality of life, and the loss of loved ones. In the meantime, the USDA continues to tighten its grip on food and nutrition policy in America.

If we want to fix the obesity crisis, the USDA tells us, it's up to us: just eat less and move more. But that's not what the USDA really wants.

Due to their own policies, food prices and production at the farm level are both flat.¹¹ The only way to "grow" the agricultural sector is to increase processing. This is where the money is. Look closely at the "eat less" recommendations in the guidelines; they are a veiled promotion of foods the USDA want us to eat *more* of.

"Fear-the-fat" messages that are not based in science steer us away from minimally processed foods like eggs and meat. Instead, we are encour-

A TALE OF TWO BREAKFASTS

A breakfast of two eggs, sausage and cheese has the same amount of calories as the USDAapproved breakfast of oatmeal, fruit juice and soy yogurt, but contains no sugar and almost four times as much protein and costs half as much. Such a breakfast is demonized by government officials as containing too much cholesterol and saturated fat.

aged to buy enormously profitable, fortified and enriched products that are virtually devoid of nutrition until they are transformed by the miracles of modern chemistry to meet the USDA's definition of "healthy."

The Weston A. Price Foundation has helped educate the public on the importance of fats in the diet. The other two major calorie sources are protein and carbohydrate. Protein is crucial to good health.⁵ Carbohydrates are biologically unnecessary.¹²

That's the nutrition part; here's what's happening with actual food, as shown by the two breakfasts below.

The first breakfast contains eggs, sausage and cheese. The USDA says we should eat less of these foods. But this breakfast contains just the right amount of protein, no sugar, ten total ingredients (all of them pronounceable), and the whole meal costs less than a dollar. From a meal like this, a larger percentage of that dollar is getting back to the farmer, because less of it is going for packaging and processing.

The second breakfast is composed of the foods that the USDA says we should eat more of. It contains very little protein, over forty grams of sugar, and over forty ingredients. And it costs over two dollars, of which the farmer will see a very small percentage; most of it will go to the food manufacturers who package and process cheap grain and cereal products.

The USDA doesn't really want us to "eat less and move more." They want us to "eat less and *buy* more." The USDA-approved breakfast is "plant based" as the guidelines recommend, but filled with unpronounceable ingredients. Plant-based, lowfat "frankenfood" products are anything but natural.

HEALTHY BREA Calories	P	rotein	Sugar	Price/	Number of Ingredients
Sausage (one 1.5 oz patty)	170	12	0	0.50	5
Eggs (2)	140	12	0	0.22	1
Cheese (1/4 cup)	100	6	0	0.21	4
Total	410	30	0	\$0.93	10

UNHEA	LTHY BR Calories	Protein	Sugar	Price/	
Instant oatmeal (1 package)	160	0	7	0.37	17
Veg/Fruit Juice (1 8oz can)	100	0	23	0.93	11+
Soy yogurt (6 oz)	150	4	21	0.74	15
Total	410	8	44	\$2.04	43+

IN THE FACE OF CONTRADICTORY EVIDENCE REPORT OF THE 2010 DIETARY GUIDELINES ADVISORY COMMITTEE

An article by Adele Hite and others, published in the journal *Nutrition* (26(2010) 915-924), takes the 2010 Dietary Guidelines Advisory Committee (DGAC) to task for ignoring or misrepresenting evidence that exonerates saturated fats and shows high-carbohydrate diets may be to blame for the increasing rates of obesity and chronic disease in the U.S.. "Although appealing to an evidence-based methodology, the DGAC Report demonstrates several critical weaknesses, including use of an incomplete body of relevant science; inaccurately representing, interpreting or summarizing the literature; and drawing conclusions and/or making recommendations that do not reflect the limitations or controversies in the science. An objective assessment of evidence in the DGAC Report does not suggest a conclusive proscription against low-carbohydrate diets."

The report of Hite and others notes that over the last thirty years, as obesity rates have doubled, average daily calories from fatty foods like meats, eggs and nuts has increased only 20 calories per day, while average daily calories from flour and cereal products has increased by nearly twenty times that amount. In other words, the American diet has shifted in the direction recommended since the 1977 dietary goals to reduce overall fat and saturated fat in the diet. Total and saturated fat intakes have decreased as a percentage of calories whereas carbohydrate intake has increased.

The Committee created a Nutrition Evidence Library (NEL) in order to justify the latest Guidelines as "evidencebased." Yet the NEL contains evidence that is not consistent with DGAC conclusions. For example, several studies in the NEL demonstrate equivalent or increased weight loss on low-carbohydrate diets with similar caloric intake; and several studies in the NEL demonstrate equivalent or increased weight loss on low-carbohydrate diets that do not explicitly control calories or impose restrictive eating behaviors. In fact, 47 percent of the studies cited in the NEL demonstrate that low-carbohydrate or high-protein diets are more effective for weight loss.

Regarding the effects of saturated fats on cholesterol levels and rates of cardiovascular disease and type-two diabetes, the Committee stated that "strong evidence" indicates a positive association of saturated fats with these conditions. But the committee only included studies in the NEL that measured the effects of saturated fats in the presence of high levels of carbohydrates. Studies that looked at saturated fat consumption in low-carbohydrate diets were excluded. Most serious is the Committee's exclusion of a recent large meta-analysis, which found no substantial evidence linking saturated fat with an increased risk of heart disease.

The DGAC Report suggests that the replacement of saturated fats with monounsaturated or polyunsaturated fats invariably creates positive risk factor outcomes. Yet studies cited by the DGAC Report demonstrated increases in atherogenic lipoprotein levels, decreases in HDL-cholesterol and varied metabolic responses to lowered saturated fat in several population groups. The Committee cited a meta-analysis by Jakobsen and others as evidence of "a significant inverse association" with coronary events when substituting polyunsaturated oils for saturated fats. But the DGAC misrepresented the actual findings of the meta-analysis. The association was weak overall and significant only for women younger than sixty. For all men in the study and for women over the age of sixty, there was no significant association.

The DGAC Report also claims that lowfat diets are beneficial for diabetes; again, the studies cited only show the results of diets high in both carbohydrates and fats. No studies that looked at decreased carbohydrate intake for achieving blood sugar control were considered by the Committee.

One reason the Committee claims that decreasing carbohydrate intake is not advisable is that it would necessarily restrict fiber intake, although support for the benefits of fiber intake is limited and non-conclusive.

The DGAC Report also advises Americans to shift to more "plant-based" diets and "consume only moderate amounts of lean meats, poultry and eggs." Yet the Committee itself notes that evidence linking meat consumption with chronic disease is "moderate, limited, insufficient and inconsisent," and acknowledges that plant protein confers no specific health benefits and may in fact present nutritional inadequacies.

One of the greatest limitations of the DGAC Report is the recommendation to reduce salt consumption. Yet a Cochrane review concluded that "intensive interventions [involving salt reduction] unsuited to primary care or population prevention programs provide only minimal reductions in blood pressure during long-term trials."

The report of Hite and others concludes ". . . scientific evidence in favor of [DGAC] recommendations remains inconclusive, and we must consider the possibility that the 'potential for harmful effects' has in fact been realized." The prevalence of overweight and obesity in the U.S. has increased dramatically in the past three decades and the number of Americans diagnosed with type-two diabetes has tripled. Yet the DGAC insists that their recommendations for more of the same are completely supported by the science.

To read the full report, go to http://www.spfldcol.edu/homepage/dept.nsf/91C8B01CAAC804C0852577C9006A50 12/\$File/Hite_Nutrition_2010.pdf.

The massive monoculture crops from which these fake foods are made deplete our topsoil and poison our rivers with pesticide and fertilizer run-off. A tofu "hot dog" is not good for you, it's not good for the farmer, and it's not good for the environment. We know that the vegan movement, Oprah's Vegan Week, and Michal Pollan's "eat mostly plants" message are well-intended, but eating fewer animal products means eating more Monsanto products.

That said, we do not stand in opposition to either the food industry or to the humane treatment of animals. Both are crucial to the safe and adequate food supply that Americans deserve. But Americans also deserve to know the truth about nutrition. Our farmers deserve better support; our land deserves better care.

When the first Dietary Guidelines were created, our understanding of the relationship between nutrition, chronic disease, and the food environment was immature. We didn't know what would happen when we chose to commit ourselves to a single dietary approach directed by a single government agency. The agency then could not have predicted the explosion of food products with lower fat content and higher sugar, starches, and profit margins.

The agency could not have predicted the advances in science that would uncover not only the addiction-like process that compels us to gobble up these foods, nor could they have predicted the mechanisms that reveal how these foods can change the expression of our genetic material and predispose a generation of children to metabolic disorders, including obesity and diabetes.^{13,14} The agency could not have guessed that its recommendations would have especially devastating effects on minorities whom scientists believe may be genetically susceptible to diseases related to a diet high in processed grains and cereal products.^{15,16}

But now we know better. The influence of the Dietary Guidelines has now greatly surpassed the assumptions surrounding the original mandates that made the USDA the lead agency in the area of nutrition. The U.S. Dietary Guidelines have become a powerful policy tool with far-reaching consequences that not only affect the daily food choices of Americans and the personal health outcomes that result, but the health of our environment, our economy, and our future.

No government agency should be given such power with so few checks and balances. The USDA tells us that the Guidelines were created with complete transparency. But transparency doesn't help if the dice are loaded before the game begins.

As the Dietary Guidelines have grown in importance, they have outgrown their tenure at the USDA. What is needed now is an independent, authoritative body—perhaps an Office of Food and Nutrition Policy— that can coordinate the creation of our Dietary Guidelines with a full understanding and awareness of the complexity of human nutrition and its relationship to the environment, the economy, national security, and our future as a nation.

It's time to call this 30-year-long experiment on the people of America to a halt.

Echoing its most identifiable icon, the USDA's control of food policy is a pyramid scheme. And like all pyramid schemes, there is no benefit for the consumers and the farmers at the bottom. Only those at the top, the giants of the food industry, stand to profit from this system. It's time to knock this pyramid down and find a new home for the Dietary Guidelines.

The USDA is fond of characterizing Americans as having too much on their plates. This description applies more accurately to the USDA itself. We must ask the USDA to do what its 2010 Dietary Guidelines are insisting that all Americans do: to push away from the table and give up its control of the creation of the Guidelines.

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THE NON-SCIENCE OF THE 2010 USDA DIETARY GUIDELINES COMMITTEE

[E]vidence has begun to accumulate suggesting that a lower intake of carbohydrate may be better for cardiovascular health. Dr. Janet King, Chairwoman of the 2005 Dietary Guidelines Advisory Committee

... [L]owfat. high-carbohydrate diets may modify the metabolic profile in ways that are considered to be unfavorable with respect to chronic diseases such as coronary heart disease and diabetes. Institute of Food and Medicine 2005 Macronutrient Report

> Healthy diets are high in carbohydrates. USDA 2010 Dietary Advisory Committee Report

REFERENCES:

- Blackburn H. Interview with Mark Hegsted. "Washington—Dietary Guidelines." Accessed January 24, 2011. http://www.foodpolitics.com/wp-content/uploads/ Hegsted.pdf.
- Select Committee on Nutrition and Human Needs of the United States Senate. Dietary Goals for the United States. 2nd ed. Washington, DC: US Government Printing Office; 1977b.
- Centers for Disease Control and Prevention (CDC). Trends in intake of energy and macronutrients—United States, 1971-2000. Morbidity and Mortality Weekly Report. 2004 Feb 6;53(4):80-2.
- Centers for Disease Control and Prevention (CDC). National Center for Health Statistics, Division of National Health and Nutrition Examination Surveys. Prevalence of Overweight, Obesity, and Extreme Obesity Among Adults: United States, Trends 1976–1980 Through 2007–2008. Accessed February 1, 2011. http://www.cdc.gov/NCHS/data/hestat/obesity_adult_07_08/obesity_adult_07_08.pdf.
- United States Department of Agriculture. Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans 2010. Accessed July 15, 2010. http://www.cnpp.usda.gov/DGAs2010-DGACReport. htm.
- Jameson, M. "A Reversal on Carbs." Los Angeles Times. December 20, 2010. Accessed December 28, 2010. http://articles.latimes.com/2010/dec/20/health/la-he-

carbs-20101220

- 7. Lustig, Robert. "Sugar, Hormones, and Addiction." Presentation at the American Society for Bariatric Physicians, November 12, 2010.
- Reaven, Gerald M. Insulin resistance: the link between obesity and cardiovascular disease. *Endocrinology Metabolism Clinics of North America*. 2008 Sep; 37(3):581-601, vii-viii.
- 9. Haines J and Neumark-Sztainer D. Prevention of eating disorders and obesity: A consideration of shared risk factors. *Health Education Research* 2006, 21(6): 770-782.
- Field 2003 Field A, Austin SB, Taylor CB, Malspeis S, Rosner B, Rockett H, Gillman M, Colditz G. 2003. Relation Between Dieting and Weight Change Among Preadolescents and Adolescents. *Pediatrics* 2003; 112: 900-906.
- 11. Pyle, George. Raising Less Corn, More Hell: The Case for the Independent Farm and Against Industrial Food. New York: Public Affairs, 2005.
- 12. Report of the Panel on Macronutrients, Subcommittees on Upper Reference Levels of Nutrients and Interpretation and Uses of Dietary Reference Intakes, and the Standing Committee on the Scientific Evaluation of Dietary Reference Intakes. Dietary Reference Intakes for Energy, Carbohydrate, Fiber, Fat, Fatty Acids, Cholesterol, Protein, and Amino Acids (Macronutrients). Washington, DC: *The National Academies Press*. 2005.
- Smith J, Cianflone K, Biron S, Hould FS, Lebel S, Marceau S, et al. Effects of maternal surgical weight loss in mothers on intergenerational transmission of obesity. *Journal of Clinical Endocrinology and Metabolism*. 2009 Nov;94(11):4275-83.
- Bland J. An Emerging 21st Century Perspective on Obesity: Beyond the Dogma of the Calorie. American Society of Bariatric Physicians Western Regional Obesity Conference, Regional Obesity Course. April 16, 2010.
- Zamora D, Gordon-Larsen P, Jacobs DR Jr, Popkin BM. Diet quality and weight gain among black and white young adults: the Coronary Artery Risk Development in Young Adults (CARDIA) Study (1985-2005). *American Journal of Clinical Nutrition*. 2010 Oct;92(4):784-93.
- Hoffman RP. Metabolic Syndrome Racial Differences in Adolescents. *Current Diabetes Review* 2009 Nov;5(4):259-265.



EXPERTS CHALLENGE USDA DIETARY GUIDELINES AT PRESS CONFERENCE HOSTED BY WAPF

Top left: Adele Hite, MAT challenges the science used to justify high-carbohydrate diets.

Top right: Mortin Satin, PhD, of the Salt Institute explains the dire consequences of low-salt diets.

Below left: James Carlson, DO, JD, describes how carbohydrate-rich diets negatively impact his patients.

Below right: Pam Schoenfeld, RD, explains how the USDA ignored evidence that the guildelines would lead to choline deficiency.

To watch the full press conference, visit www.westonaprice.org.









Wise Traditions

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Ask the Doctor

SUPPORT FOR THE LIVER By Tom Cowan, MD

The liver is a multi-faceted organ with many diverse functions. It sits in the right upper quadrant of our abdomem and acts as our internal chemist. Our liver is responsible for detoxification, control of the blood sugar, synthesis of blood clotting factors, osmotic balance in our tissues and many other vital functions.

Rudolf Steiner, founder of Anthroposophical medicine, theorized that the liver is the controlling organ of our fluid or life body and in fact in many languages the name for the liver is the same as the word life—I like to call it the "lifer"— for without a healthy functioning liver, life is simply not possible. The fluid body, or in Anthroposophical terms—the etheric body, is like the plant inside of us. (According to Anthroposophical thought the plant body consist of a mineral body taken up into the living sphere, in other words a plant is a living mineral.)

THE INNER PLANT

This inner plant controls how the fluids circulate in the body, preventing fluid congestions, swelling or dryness. This role is evident in cases of severe pathology of the liver, such as liver cancer or cirrhosis, in which one common sign is edema, especially in the legs, or acites which is fluid collection in the abdomen. This happens because the liver is not able to maintain a healthy fluid organism, hence stagnant fluid begins to collect, showing up as edema.

In fact, the unhealthy stagnation of fluid anywhere in the body points to a weakness in the liver. Hay fever or otitis media (middle ear infections) are two examples of disordered fluid organisms which are improved with proper care of the liver.

Another connection of the liver to the plant world can metaphorically be experienced by observing a patient with acute viral hepatitis (inflammation of the liver). In such cases the patient experiences profound fatigue as the "life" forces of the patient are drained. Like a poorly nourished plant with leaves that start to yellow, in the patient with hepatitis, the liver pathology is heralded by the onset of jaundice (yellowing) which is especially noted in the whites of our eyes. In fact, in many traditional medical schemes it is often said that the condition of the liver can be best seen outwardly in the clarity and overall health of the eyes.

Doctors usually get involved with treating the liver when the patient has difficulty with detoxification. This can often be seen by the fatigue of the patient, by the inability to tolerate foods or smells or even the simplest chemical exposures, or sometimes by poor elimination function in the bowels. Chalky white stools are a classic symptom of poor liver function because bile turns the stool brown and bile is the main detoxification "product" of the liver.

TAKING OUT THE GARBAGE

Think of the liver this way: the liver bags the garbage and the bile takes it out to the curb. The garbage is either metabolic waste products that we ourselves produce, or exogenously derived poisons from the outside. Bagging the garbage means that when the liver is exposed to any toxin, its job is to conjugate, or chemically manipulate, the toxin to make it soluble so it can be dissolved in the bile it produces and then flushed out of the body through the bile ducts into the small intestine and then out with the stool. The first phase is called conjugation (bagging up the garbage), the second phase is the elimination phase (taking the garbage out to the curb). With poor liver function, either the garbage doesn't get bagged properly and unprocessed poisons end up in the circulation, or it doesn't get taken out and therefore accumulates in the tissues. There are certain tests available that can tell you the intergrity and the integration of how these systems are functioning but in practice they almost always co-exist so it

In many traditional medical schemes it is often said that the condition of the liver can be best seen outwardly in the clarity and overall health of the eyes.

is the best course of action is to treat them both.

There are many factors that will weaken your liver over time. Excessive exposure to environmental toxins is certainly one prominent factor, often in the form of pharmaceutical medicines, many of which need to be cleared, thereby taxing the bagging function of the liver. Statin drugs and Tylenol are two prominent and frequently used drugs that are directly toxic to the liver enzymes responsible for detoxification. Also, poor bowel function and leaky gut syndrome put extra strain on the liver as the contents of the bowel go directly up to the liver to be processed. If the bowel is leaking, the liver is more burdened. In fact, in most diseases care of the detoxification function of the liver is a sound therapeutic move.

TREATMENT

The treatment of the liver always starts with the diet. As well as doing the obvious things like removing as much toxicity as possible by eating only organic or biodynamic foods, the emphasis in the diet should be on greens, the bitter and sour tastes, and the healthy consumption of saturated fats. Protein intake should be low to moderate but healthy raised animal fats should be consumed as tolerated. I tell patients to start every morning with a glass of water with a half of lemon squeezed into the water and then eat some animal fat (especially grass-fed butter or ghee) and greens (such as dandelion greens or the more bitter greens) at every meal. The green color is the most pure reflection of plant life and this stimulates the detoxification processes in the liver. The fats are used by the liver to help make the enzymes that do this detoxification work. The mixture of cod liver oil and butter oil helps to make sure a supply of healthy fats and fatsoluble vitamins is available to nourish your liver. For medicines, the liver is nourished mostly by plants with a bitter taste, and by therapeutic oils. The best studied plants for liver nourishment include milk thistle and schisandra. These two herbs come together in the Mediherb product called Livco, which has been shown to promote healthy liver function. In fact, milk thistle extract (called silymarin) is used as an intravenous medicine in European hospitals to treat acute poisonings, as with Tylenol overdose. The dose of Livco is one tablet three times per day.

The therapeutic oil to use is the castor oil packs described by Edgar Cayce in many of his readings. Given under a heating pad applied to the liver for two hours, from one to seven times per week, the castor oil stimulates both phases of liver detoxification and is a tried and true medicine for helping all parts of liver function.

There are many other medicines, and bitters and other products that help liver and bile function properly, including coffee enemas which are a proven medicine used by cancer patients all over the world for stimulating liver detoxification.

These suggestions will point you to the way to regain a healthy liver and the vitality that this confers.



HEALTHY 4 LIFE Dietary Guidelines and Recipe Book

Our new colorful, 84-page, guidelines booklet with recipes is available. Instead of complicated formulas involving calories and grams, which most people don't understand, we simply recommend including high-quality foods from four food groups in the diet every day. The good groups are:

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

The feedback to our new publication has been very positive—they are suitable for use in schools and inner city programs. To order online, go to www.westonaprice.org. They are \$10 each or \$6 each for orders of ten or more.

Homeopathy Journal

MANIAC MOM By Joette Calabrese, HMC, CCH, RSHom (NA)

"Mom! Mom! Stop driving so fast. You're scaring us!" The van was bobbing and weaving in the late afternoon traffic. Colleen, the driver, was on the verge of cutting off the Jeep ahead because he just wouldn't yield. She hollered out the window, "I've got a roast in the oven that will soon be nothing but char, an orthodontist appointment at seven, and those insipid cookies to bake for tomorrow's meeting. What the #!%#* are you *doing* ahead of me?"

One hand grasped the wheel; the other clutched her fourth latte of the day.

"Mom, I know you're overwhelmed, but you're going to get us all killed," breathed the voice of reason from the back seat. It was Colleen's fourteen-year-old who always saw things clearly. "Overwhelmed?!! Overwhelmed?!! That's an understatement!"

Ever since Colleen had returned to her old decorative painting business, she found herself forever in a rush, bad tempered and argumentative. With four kids, how did she think she was going to run a business too? But that wasn't all. She awoke every night at 3:00 a.m. to plaguing thoughts that were like a virus scan on a computer, going over every detail of the herculean list of tasks the following day. "This is maddening. I can't even get a good night's sleep! What's the point of staying in bed?" She'd lug herself up and do some bookkeeping or laundry done.

And so was the life of Colleen Ewens. She knew her fits of anger were inexcusable for her kids to witness, particularly because she sensed her cursing had become a second language. But it seemed her increasingly toxic, even derisive thoughts were beyond her control.

Finally, after some persuasion from her business partner, Colleen sought the help of a homeopath. Her friend had probably noticed the impolite tone of Colleen's voice when she spoke to someone at the bank, to clients, and to her own children. Her combative approach was relentless.

Colleen's homeopathy appointment was scheduled on Skype, but not without Colleen cussing at her computer to get the connection set up just prior to her appointment. As usual, she was late and annoyed. Unfortunately, or perhaps providentially, the homeopath was already on the line and witnessed Colleen's mini, self-indulgent tantrum.

"Hi, Colleen" said the homeopath. She actually sounded empathetic. But Colleen's reply was barbed. "How irritating. Did you just witness my behavior? Well, that puts it all on the table, now doesn't it? Here's the rest of my list: I eat too much, get nauseated with cramping in my right abdomen regularly, I'm exhausted every day, can't sleep, work too hard, and take antibiotics like candy for my urinary tract infections. Oh, and add this in, too: I don't believe for one bloody minute that you can do a thing about any of this. But what have I got to lose?"

The homeopath was nonplussed. Her first inquiry was to ask Colleen about her work. "Certainly, I paint with toxic stuff. It's the only way to achieve the look I'm known for. In addition to oil-based paints for durability, I also use gold and silver leaf, and then shellac to give an aged look. I see where you're going here. Don't for a moment suggest that I give this all up because of toxins. I can handle it."

The body has only so many reserves, is the way the homeopath explained it. It wasn't only the paints and related products, but also the antibiotics, not to mention the years of birth control pills. "How many toxins can the liver and other organs of elimination take in without showing signs of breakdown?" she asked rhetorically. Further, when the liver is stressed by these unnatural substances, what we often see is an How many toxins can the liver and other organs of elimination take in without showing signs of breakdown? inability to handle life, resulting in irritability, fatigue, insomnia and more. In fact, three a.m. is the most common time for the liver to process all of this stress, so it's not unusual to wake up at that time when the liver is so active.

The homeopath explained that in the medicine of homeopathy, we don't use a remedy for each of these symptoms, but rather for the summation of all of them. Colleen's symptoms were likely a representation of the toxicity of her liver, particularly because of the tenderness in the right quadrant. The remedy she chose was *Nux vomica*, which is known for its ability to soothe a stressed liver and all signs that accompany that condition. Colleen found this explanation annoying because she was confident that nothing was going to change. But she took the "stupid little pills" anyway, just to prove the homeopath wrong.

But it was Colleen who was proved wrong. Yet after having taken *Nux vomica* for several weeks, it didn't even make her angry to admit that she was wrong. This was a lesson in humility. She even smiled on the Skype screen when she reported the changes to the homeopath two months later. Her flagship sarcasm was appreciably missing.

Perhaps she felt better because she was no

LIVER TOXICITY AND NUX VOMICA

Homeopathy treats the entire person, not just the liver, not just the brain. That's why it's always paramount that the chosen remedy represent the person's unique personality. And Colleen's certainly was one to be reckoned with! The remedy also needs to address the chief complaints, which in Colleen's case were insomnia, fatigue and repeated urinary tract infections. Peripheral symptoms such as abdominal tenderness and nausea needed consideration, as well as the keynote of most cases of liver toxicity, the psychological symptoms. These, of course, included Colleen's compulsion to profanity plus her angry outbursts and impetuosity.

The liver is one of four major organs that eliminate toxins from the body. The other three are the kidneys, intestinal tract, and skin. The liver detoxifies harmful substances whether they come from internal sources or from external sources—such as medications, synthetic hormones, chemicals, and so on. Colleen had been poisoned on three levels. First was the use of antibiotics that tinkered with, but never resolved, her infections, as well as the strong hormones in her birth control pills. Her second level of chemical exposure came from the paint products used in her work, and the third was in her overuse of stimulants in the form of copious amounts of coffee. Colleen's life was one of constant compensation for inadequacies in one way or another, and it is no wonder her liver was overworked and toxic.

Nux vomica was an excellent remedy choice for Colleen. Since its scientific proving from the early 1800s it has been shown to uproot the problems that occur from poisoning. In fact, many homeopaths find that since we live in such a toxic world, particularly in relation to the amount of medications we've been subjected to, *Nux vomica* is a good choice with which to "open" many a case. Indeed, the interpretation could be that the liver is taxed. *Nux vomica* is a leading remedy in hepatitis, either infectious or alcoholic conditions, as well as for chemical sensitivities. Yet *Nux vomica* is also of great aid in poisonings of other sorts, such as from spoiled food, MSG, street drugs, and alcohol. The trick is how and when to administer the remedy and to be certain that the symptoms the person is suffering match the remedy to a tee.

According to Dr. Roger Morrison, "Nux vomica is useful for liver disease with fatigue and mental strain." Franz Vermeulen says, "When 'all medicines' disagree, Nux vomica will often cure the morbid sensitiveness and other troubles with it." These are the kind of results that some have come to only hope for in today's world. Yet homeopathy has been shown consistently to uproot liver ailments, regardless of cause as long as the symptoms address those in the remedy picture.

As a mother of teenage sons, I've warned my boys that if we ever learn that they drink alcohol illegally I will *not* give them the remedy that will save them from a hangover. It's a mother's way of making sure that their livers remind them of the dangers, rather than depending upon relief through a kindly remedy. That's how powerful a remedy I know *Nux vomica* to be. I know that withholding *Nux vomica* from a teen exhibiting reckless behavior will teach him a timely lesson, and when used for liver toxicity truly beyond his control it will act like an answered prayer. Whether to assist an overwrought mother who has mistakenly accepted a drug-for-every-ill mentality, or for inadvertent toxicity, *Nux vomica* can offer a welcome second chance to clear the liver. Is there any other medicine that can offer such an opportunity?

SOURCES: Concordant Materia Medica, Vermeulen, Phatak, Boger, Pille, Allen, Pulford, Cowperthwaite, Kent, Clarke Vermeulen: Merlijin Publishers, Haarlem, the Netherlands, 1994, page 716; *Desktop Companion to Physical Pathology*, Morrison, Roger, M.D. Hahnemann Clinic Publishing: Nevada City, California, 1998, page 261.

longer waking at three a.m. and was therefore sleeping better; perhaps because she had lost a few pounds since her appetite had normalized. But whatever the reason, she felt lighter and happier. She even made an acquiescing and smart decision to work only with milk paints on her jobs. Oddly enough, her clients had been complaining about the chemical odors anyway, but she hadn't cared enough to make the change in the past, delighting in showing them who was boss. Now, with this new approach, she was willing to accommodate other points of view.

Even the constipation she'd forgotten to mention to the homeopath during her first consultation had vanished. And so far, no urinary tract issues had returned.

"What happened to the abdominal pains I used to get? Do you think my liver might have been inflamed?" The homeopath answered that the liver certainly was taxed, but once the symptoms are no longer present-not because they've been masked, but because the pathology has been addressed-we can assume that what was wrong has been righted. Symptoms that are unencumbered by drugs never lie. If you feel well, you probably are. Even so-called "silent killer" maladies manifest symptoms that can be discerned by an expert in such details. And that's what homeopathy is known to accomplish: by rooting out the most detailed symptoms so as to disclose all that must be considered, the homeopath can match them to the corresponding homeopathic remedy.

The most striking aspect of Colleen's recovery manifested in her attitude towards her kids. She barely reacted to the bickering and the messy bedrooms that would have sent her into a rage previously. One day her fourteen-year-old felt safe enough to speak out, "Hey, Mom, remember the time you whacked the car ahead and then the one behind, back and forth to get out of that parking spot, cursing the whole time? You were Maniac Mom."

Colleen muttered, "I *was* a maniac." And that's when she knew how venomous she had felt before, compared to how different her life was now, only three months later. Small homeopathic pills had stimulated and then transformed Colleen, the Manic Mom, and had painted a new mother in a softer hue. Now she colored herself Colleen, mom and artist. Her combative days were washed away like milk paint from a fine, mink brush.

Joette Calabrese, HMC, CCH, RSHom, is a certified classical homeopath who works with WAPF folks the world over via phone and Skype. For a FREE download of "10 Toxins and How to Antidote Them With Homeopathy" go to Homeopathyworks.net and find it on the "Free Downloads and Articles" section of the homepage. Consider scheduling a FREE 15 minute conversation with Joette to see if homeopathy is a fit for you or your child's health strategy. Find that link at the top of the homepage. The most striking aspect of Colleen's recovery manifested in her attitude towards her kids.

IN MEMORIAM

The Weston A. Price Foundation would like to honor the memories of Melody Rose Barone and Sara Slipher, two great chapter leaders.

Melody Rose Barone served as chapter leader for many years in Mount Vernon, Washington. She was an enthusiastic promoter of our message. She is survived by her husband Dr. John Barone, her parents, siblings and daughters. In lieu of flowers, her family requested donations to the Weston A .Price Foundation.

Sara Slipher served as chapter leader in in Indianapolis, Indiana. She planned and carried out a very successful "Nourishing Our Children" conference several years ago and was tireless in educating others about the importance of a nutrient-dense diet. She is survived by her husband Jeff Slipher, step-children, grandchildren, parents and siblings. Again, her family has requested donations to the Weston A .Price Foundation in her memory.

These two lovely leaders will be greatly missed! They have left behind lasting gifts.



The Art of Living Long (1917 translation of *La Vita Sobria* in Four Discourses) **By Luigi Cornaro Arno Press reprint, 1979**

"Now, Sir, to begin my discourse, I shall tell you that I have, within the past few days, been visited by a number of excellent professors who lecture in our University-doctors of medicine as well as philosophy. These gentlemen are all acquainted with my age, and with my manner and habits of living, and know how full I am of cheerfulness and health. They know, too, that all my senses are in perfect condition—as also are my memory, my heart, and my mind-and that this is equally true of even my voice and my teeth. Nor are they ignorant of the fact that I constantly write, and with my own hand, eight hours a day, and always on subjects profitable to the world; and, in addition to this, that I walk and sing for many other hours."

With pardonable pride, the ninety-one-yearold Luigi Cornaro thus introduces the theme of the third Discourse of his La Vita Sobria (The Temperate Life), to one of its intended recipients, his friend, the Patriarch of Aquileia, in 1555. By now affectionately known and venerated as the Apostle of Senescence, and thereafter as the Venetian Centenarian, Luigi Cornaro had already led a long life of health and vigor unusual in his time or ours. He had written the famous first and second Discourses of La Vita Sobria at the ages of eighty-three and eighty-six respectively, and would go on to write a fourth Discourse further expatiating the virtues of a temperate life at the age of ninety-five. He died peacefully in his sleep at the age of one hundred two.

Luigi Cornaro was born in Venice in 1464 into the noble, well known and powerful Cornaro family. Scheming family members defrauded Luigi of honors and privileges (although not the financial support) attached to his noble status, which thereby prevented him from serving in public employment to the state. Humiliated by these indignities he left his ancestral city while still a young man and made Padua his home for the remainder of his life. His apparent early misfortune, however, became the catalyst for a remarkable personal transformation and subsequent achievements quite apart from those he might have inherited from his illustrious name alone.

Born with a delicate, "cold" constitution unfortunately paired with a fiery, choleric temperament, Luigi left his university studies behind and threw himself into the wild, dissipated life of Padua's café society. After years of indulging in excesses of every sort, his health began to crumble, and soon after the age of thirty-five his physical state was in serious danger. "The excesses of my past life, together with my bad constitution-my stomach being very cold and moist-had caused me to fall prey to various ailments, such as pains in the stomach, frequent pains in the side, the symptoms of gout, and, still worse, a low fever that was almost continuous; but I suffered especially from disorder of the stomach, and from an unquenchable thirst."

For a few years more Luigi submitted to "every known means of cure" that his doctors offered with no relief but rather had an increase in suffering. Finally arriving on death's door near the age of forty, Luigi resolved to accept the last advice his physicians had left to offer: to immediately embark upon a temperate and orderly life. "My physicians warned me that if I neglected to apply this remedy, in a short time it would be too late to derive any benefit from it; for in a few months I should certainly die."

A man of firm resolve and tenacity, as well as possessing a fervent desire to live, Luigi found that strict moderation in food and drink soon provided relief and in fact suited his constitution. He drastically reduced the quantity of food he ate to the barest minimum, taking only twelve ounces of food and fourteen ounces of new wine divided

Born with a delicate, "cold" constitution unfortunately paired with a fiery, choleric temperament, Luigi left his university studies behind and threw himself into the wild, dissipated life of Padua's café society.

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among four meals per day. On such an extremely abstemious diet he was completely cured of all his ailments in less than a year. Enjoying a level of vitality entirely new to him, he continued his strict regime in constant good health, strength, and with full capacity of all his senses.

After more than forty years he felt compelled to urge others to share his good fortune by writing his first Discourse on temperance. He had reached an age when so many of his beloved family members and friends had died prematurely, leaving him bereft of satisfying companionship. Proponents of a restricted calorie diet might find vindication in Luigi's example since he certainly enjoyed enhanced immunity, resistance to stress, and longevity. However, Luigi makes it clear that merely attaining old age is not a means unto itself, but rather preserving one's health and capacities in order to share with others the fruits of long experience, learning, and accomplishment is both a deep personal satisfaction and an enrichment to society that should be everyone's ambition in life.

Luigi had discovered early on that in order to preserve his health, it would be up to him alone to learn which foods harmed him and which were beneficial, and, maybe more importantly, in what quantities he could healthfully partake of them. One can only be a perfect physician for oneself alone, he insists-it is not possible for anyone else to know you as well as you know yourself, or to advise you precisely as to the details of your health. This means a good deal of experimentation and keen observation will be each person's responsibility. In Luigi's case he learned that foods he had enjoyed, such as cold, dry wines, melons and other fruit, raw vegetable salads, fish, pork, tarts, vegetable soups, and pastries all harmed him. On the other hand, egg yolks, veal, kid, mutton and all sorts of fowl were beneficial, as were new wine (very light wine less than a year old), meat broths, and bread. These foods in proper quantity were easy to digest and healthful for his individual constitution. "I accustomed myself to the habit of never fully satisfying my appetite, either with eating or drinking—always leaving the table well able to take more. In this I acted according to the proverb: 'Not to satiate one's self with food is the science of health.'"

As for his choleric temperament ("... it was impossible for any person to deal with me. . . a wrathful man is no less than insane at times."), here was yet another important terrain to be tamed by moderation. "I have also preserved myself, as far as I have been able, from those other disorders from which it is more difficult to be exempt; I mean melancholy, hatred, and the other passions of the soul, which all appear greatly to affect the body." These wise insights protected Luigi from despairing, for example, over the outcome of a protracted lawsuit brought against him which might otherwise have ruined not only his fortune, but his health. (In fact, he ultimately prevailed.) Those who knew him testified of his sweet disposition, equanimity of mind, and generosity of spirit.

Luigi also recommended avoidance of extreme cold or heat, excessive wind or poorly ventilated rooms, too strenuous exercise, and especially that nothing should be allowed to interfere with one's sleep and rest. "There is no doubt that if one so advised were to act accordingly, he would avoid all sickness in the future; because a well-regulated life removes the cause of disease. Thus, for the remainder of his days, he would have no need of either doctors or of medicines."

Soon after his health recovery, Luigi married and built the beautiful palazzo in Padua where he would spend the rest of his life, except for summer trips to his country estates where over the course of years he designed and constructed several extensive gardens and villas. He and his wife had one child, a daughter, who, in time, married and filled the palazzo with eleven grandchildren. Luigi designed and built a theatre on the compound with an octagonal central room for the chamber music performances that he Luigi had discovered early on that in order to preserve his health, it would be up to him alone to learn which foods harmed him and which were beneficial, and, equally, if not more important, in what quantities he could healthfully partake of them.

and his musically talented grandchildren would organize. (The theatre still exists and is in public use today.) A prolific and well-educated writer on the subjects of architecture, agriculture and waterways, Luigi was also a dedicated patron to artists and architects, essentially "discovering" the later-to-become-famous architect Falconetto, and encouraging the young Palladio. His patronage helped establish these two influential architects and introduce into northern Italy the Roman Renaissance style of architecture that would soon change the entire course of Western European architecture.

A long and satisfying lifetime devoted to useful and constructive accomplishments is the real goal of Luigi's temperate dietary regime. When in perfect health, one may "forget" about the body, and devote oneself to study, artistic expression, serving others, and, as Luigi proclaims, "making the world more beautiful." A long life full of infirmity and suffering is useless; the object of health is to permit us to fulfill our human potentials for learning, developing our talents and skills, and contributing to our social family. In his four short Treatises, Luigi labored to persuade his readers that this fulfillment was possible for anyone, regardless of his station in life, who would, at least by the age of forty or fifty, adopt a temperate lifestyle by following two simple rules: eat only those foods that agree with your digestion (quality); and eat the minimum necessary to digest those foods well (quantity). His advice echoes the tenets of natural wisdom professed by Hippocrates and Galen, as well as by the great ancient Eastern medical systems. He strongly advised each person to determine the details of these guidelines for himself—his own example of extreme abstinence, he stressed, was suitable for him alone. It was the spirit rather than the letter of his example that he wished would inspire others to live to the full span of their fruitful years—one hundred or even more—that he was convinced both Nature and God had granted all of us.

For three hundred years Luigi's Treatises remained a classic in his own country, and were translated into several languages. The inspiring message of this charming Renaissance man still has the power to appeal to the reason, intellect and heart of modern readers.

At age ninety-five, Cornaro gratefully rejoiced, "O, how glorious is this life of mine, replete with all the felicities which man can enjoy on this side of the grave! I am not troubled with passions, and my mind is calm and free from all perturbations and doubtful apprehensions. Nor can the thought of death find room in my mind, at least, not in any way to disturb me. And all this has been brought about through my careful habit of living. How different from the lives of most old men, full of aches and pains and foreboding, whilst mine is a life of real pleasure, and I seem to spend my days in a perpetual round of amusements. . . I never knew the world was beautiful until I became old." Review by Katherine Czapp



THE RAW TRUTH by Jordan Rubin

¹⁶ This book, published by Garden of Life, commits the cardinal sin of misrepresenting the work of Dr. Weston Price in order to sell products that Price would have never approved. Rubin cites Dr. Price as one of several health "greats," in the company of proponents of raw, lowfat, plant-based diets with an emphasis on juicing and detoxification, such as John Harvey Kellog, Norman Walker, Bernard McFadden and Ann Wigmore. Weston Price never endorsed a diet high in raw foods (he specifically counseled that vegetables should be cooked) and never once mentioned juicing and detoxification in his writings. Even worse, Rubin alludes to Price's work on fat-soluble vitamins to promote his "All Raw" vitamin D supplements without any supporting vitamin A or vitamin K, a recipe for problems. By invoking the name of Weston Price, many of his readers will assume that his recommendations are safe.

Rubin also describes Mary Enig's work on fats and oils, explaining that saturated fats are not the devils they are made out to be. His diet plans are heavy on coconut oil and coconut cream, which of course Enig vindicated during her career; But although Rubin mentions butter as a good fat, he does not include even a little bit of it in his omnivore diet plan.

Rubin tries to please everyone by endorsing both all-raw veganism and an all-raw diet that includes animal products just a few animal products, like raw fish and raw yogurt, but no meat or organ meats. Even raw egg yolks are missing from his very limited omnivore diet plan. Both diet plans are heavy on Rubin's All Raw supplements, with vitamins, calcium, probiotics and enzymes taken at every meal. He provides various plans for different disease conditions, all of which are bound to leave the patient hungry and malnourished. Advertisements for Rubin's line of All Raw products are sprinkled throughout the book. Big THUMBS DOWN for this one. Review by Sally Fallon Morell

The Age of Autism: Mercury, Medicine, and a Man-Made Epidemic By Dan Olmstead and Mark Blaxill St. Martins Press, 2010

The Age of Autism is perhaps the most important new book written about the roots of a catastrophic health pandemic affecting our children. While science has sought to find the "germ" or the "genetic link" to illnesses, Olmstead and Blaxill consider this approach antiquated and inaccurate when considering autism and possibly many more illnesses. They detail the beginnings of autism as a consequence of environmental toxins. "Perhaps because of the less determinate nature of environmental toxins, when comparing germs and toxins, there is more than just a difference in the accepted standard of causation. Whenever germs are discovered to be an essential part of the disease process, we typically attribute causation solely to the germ. We generally accept that the measles virus 'causes' SSPE and the poliovirus 'causes' paralysis even though we don't know why the condition turns pathogenic in some cases and not others. By contrast, in the case of conditions where environmental exposure is identified as a cause of a disease, instead of linking the exposure with the disease, the most frequent response is to remove the disease label from the case."

The condition of autism is screaming to be understood, and we have no time to waste in finding real solutions.

The principles of a nutrient-dense diet and improving gut health are becoming powerful partners in helping families find an effective treatment approach for autism. As I read this book I reflected on a recent conversation with a mother of a child with autism. She told me that she and her husband had spent one hundred fifty thousand dollars on therapies for their son, but it wasn't until they focused on a diet of nutrientdense foods that he began to recover. With gut health improved, her child could detoxify the poisons that were affecting his brain function.

Although Weston A. Price's work demonstrated immunity from disease through a nutrient-dense diet, he studied cultures that were isolated from the onslaught of environmental toxins that humanity is exposed to today. In order to accurately understand the cure and prevention, we need to look at all the factors that play a role in this disorder.

Demonstrating the axiom, "the cure is often worse than the disease," Olmstead and Blaxill carefully outline the extensive and alarming history of mercury in medicine. The Egyptians, Romans, Arabs and Chinese used it for a wide range of conditions. "Mercury is the Great Pretender, mimicking many diseases and their symptoms: the tremors of Parkinson's, the hallucinations of schizophrenia, the paralysis and contractures of stroke, the gastrointestinal pain of ulcers and cancer." Nonetheless, the same dose of mercury does not affect everyone equally. That mercury in medicine did something was often proof of its efficacy, and despite problems, "successive generations of doctors saw themselves as 'improving' on their predecessors' crude use of mercury, refining the dose, the compound, and the usage in ways that made mercury, in their hands at least, more helpful than harmful."

In France during the 1880s, Jean-Martin Charcot, regarded as the father of neurology, studied a group of patients suffering from paralysis and insanity but who did not have syphilis. This disease was coined "hysteria," which became a catchall for conditions that no one could ascertain. Hysteria could also encompass mood disorders, hallucinations and even eccentric behavior. In these studies, evidence of occupational mercury exposure was often missed.

In the 1890s, mentored by Charcot, the psychotherapist, Sigmund Freud began to see offspring, close companions and caretakers of GPI patients, who also suffered from hysteria. In a quote from Sigmund Freud's *Three Essays* on the Theory of Sexuality, he surmises that,



"In more than half of the cases of hysteria, obsessional neurosis, etc., which I have treated psychotherapeutically, I have been able to prove with certainty that the patient's father suffered from syphilis before marriage. . . I am. . . of the opinion that the coincidence I have observed is neither accidental nor unimportant."

As a body of symptoms was either overlooked or misdiagnosed, and psychiatric theories blatantly took their place, Olmstead and Blaxill characterize the irony of the blindness to mercury poisoning as a component of these mysterious illnesses, and a missed opportunity for correct diagnosis.

Olmstead and Blaxill continue their mercury toxicity crossexamination in autism through the first eleven documented cases of autism. The parents of each child were found to be uniquely associated with the chronic exposure to mercury in some form.

Another prevailing, sometimes fatal, disease that affected children through the late 1940s was called acrodynia (or pink disease), meaning "pain in the hands and feet." It was finally determined to originate from the many mercury-containing teething powders, worm treatments, bowel regulating therapies and diaper rinses-the popular remedy calomel being among them. Notably, many of the manifestations of acrodynia are found in autism. From his 1931 book, L'Acrodynie Infantile, French physician Charles Rocaz reported this strange disorder affecting an increasing number of children, and describes a common scenario in one of his patients: "The child quit talking, tried to hit his parents, and battered himself against the bed. The parents sadly remarked that he resembled a 'raving lunatic."" When these disease-causing remedies were no longer prescribed, lo and behold, acrodynia disappeared.

The regrettable legacy that survivors of pink disease carry is heard in the words of Heather Theile of Australia, who founded the Pink Disease Support Group in 1989: "In particular, I have a terrible sense of position of both my body and hands. For example, it takes me ages to line up a clothesline, the clothes and the pegs to hang out the clothes. I have to have a rope hanging down from the ceiling of my carport to be able to have a guide to park the car in the right place. I am hopeless with any locks, catches, car seat catches, etc. I drift when walking and often bump into walls and doors. I go to open a door, but miss the catch by inches. I cannot cope with verbal instructions at all and have to write 'everything' down. This is known as 'thinking in pictures' (Temple Grandin)."

Olmstead and Blaxill describe England's ensuing mercury pollution from the burning of coal beginning with the Industrial Revolution. With black clouds billowing from smoke stacks throughout the British capital, there arose a growing population of sufferers from mental illness. *The Invisible Plague on Insane Persons in Psychiatric Hospitals, Workhouses, and under Care*, by E. Fuller Torrey, M.D. and Judy Miller, reports that in 1807 the total population of hospitalized mentally ill was 5,500; by 1870 this number had jumped to 54,713! By contrast in the 1700s there were few cases of mental illness described. The asylum population in England rose steadily as coal production and combustion increased.

A myriad of unusual illnesses affecting the brain and nervous system appeared beside mental illness including Little's disease or cerebral palsy (1861), multiple sclerosis (1868), amyotrophic lateral sclerosis or Lou Gehrig's disease (1874), schizophrenia (1887), and bipolar disorder (1902). Today, although we no longer "see" the pollution from burning coal, it is nevertheless present with steady emissions of mercury, and the rates of these kinds of diseases progress. "Smokestacks grew higher and pollutants like mercury were simply lofted into the upper atmosphere to come to earth with the rain. . . every day, the global cycle of mercury pollution simply gets worse."

Olmstead and Blaxill continue their mercury toxicity cross-examination in autism through the first eleven documented cases of autism. The parents of each child were found to be uniquely associated with the chronic exposure to mercury in some form. There was a fungicide cluster and a medical cluster.

Originally profiled by Leo Kanner, consid-

ered the father of child psychiatry, these children were part of a study that introduced autism to the world. Without the thought of a mercury connection, Kanner describes his findings: "Since 1938, there have come to our attention a number of children whose condition differs so markedly and uniquely from anything reported so far, that each case merits—and, I hope, will eventually receive—a detailed consideration of its fascinating peculiarities" (Leo Kanner, "Autistic Disturbances of Affective Contact" April, 1943). In lieu of a hypothesis of association to environmental poisons, Kanner writes in the vein of popular Freudian theories that "The parents' behavior toward the children must be fully appreciated. Maternal lack of genuine warmth is often conspicuous in the first visit to the clinic." With this posture of blaming the parents' attitudes toward their children as a genesis of their illness, the term "refrigerator mother" was propagated, while autism statistics kept rising, especially in large metropolitan areas.

It wasn't until the 1960s, with the work of Bernard Rimland, a psychologist, researcher and autism parent, and Dr. Mary Coleman, a researcher at Georgetown University, that groundwork was made in understanding the environmental aspects to autism. Rimland writes that Kanner, "has been reported to have seen well over 20,000 children in his psychiatric career. It is remarkable, in retrospect, that none of the [autistic] children were seen in Kanner's first 12 years of practice, and all were born after 1930."

The first sign of mercury in vaccinations contributing to autism was encountered with pregnant women who had received the commercial, thimerosal-containing, gamma globulin preparations to prevent congenital rubella syndrome (CRS) in the 1960s. (Thimerosal is the mercury-containing preservative that has been used in vaccines.) Previously deafness, muteness, spontaneous abortion, infant mortality, heart defects, and very rarely, mental retardation were identified as the consequences of rubella in the mother.

At the start of 1964 there was a rubella epidemic, and under the guise of this remedy, came a drastic surge in children who were born with behavioral disorders, with an alarming percentage who were on the autism spectrum. The authors ask, "Was autism as an outcome of congenital rubella another example of a 'disease of the remedy'?" While the U.S. no longer uses gamma globulin therapies since the rubella vaccine has taken its place, in developing countries where CRS still occurs and gamma globulin has never been used, deafness, blindness, heart disease and occasionally mental retardation are seen—but autism is never mentioned.

The "straw that broke the camel's back" occurred as autism rates intensified in the 1990s. There was a notable acceleration of cases of children reported to have developed autism immediately after receiving the MMR vaccine. Concern developed over the unusually high rate of autism in Somali refugees. While rates in Africa are very low, the rate

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for the immigrant population in Minnesota was one in twenty-eight children! These children were required to receive three times the number of vaccines before entering this country. Yet in the Amish community, where vaccine rates are low, the rate is one in one hundred fifty thousand children.

The Age of Autism scours vaccine research that began in the 1990s. Independent results reveal that the increased childhood vaccine schedule along with vaccinations that were grouped together and which require mercury compounds as a preservative, like the MMR vaccine, exceed the limits of mercury exposure and are a probable factor in the escalation in autism. Although mercury has been phased out in children's vaccines, influenza vaccines targeted at pregnant women were not included in the withdrawal and can still be a contributing component in the unborn child.

The autism pandemic cannot be exclusively blamed on increases in vaccinations, as our nutrient-depleted food supply and other environmental toxins certainly play a role. The work of the Weston A. Price Foundation is an exceptional partner in teaching people about nutrient-dense diets that heal and build health. Parallel with mounting research is the intensified skepticism about vaccine safety. Many concerned citizens are choosing either to vaccinate selectively or to decline them altogether. Therefore, protecting our personal rights has become a paramount issue fueled by abundant "evidence of harm," which has not yet been reason enough for a transformation of our national medical dictates. As we seek correction of irresponsible policies, we will continue to depend on measures of individual heroism, for inaction may lead to more

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



Disconnect: The Truth about Cell Phone Radiation, What the Industry Has Done to Hide It, and How to Protect Your Family By Devra Davis Dutton (Penguin Group Inc.), 2010

There are certain patterns that are as dependable as human nature. Devra Davis reviews a few examples to illustrate. Smoking was not believed to be hazardous to your health a hundred years ago. Experts could lay out scientific reasons why not. They could point to groups of people who had smoked for ten years with no adverse health effects and they could point to all the other experts who agreed with them because all the experts are never wrong. The same pattern played over again in the 1950s with X-rays. Again, all the experts can't be wrong. Then better science comes along and, well, all the experts were wrong.

Any particular instance of the pattern comes to an end when two things happen. First, people come along who are better than average at recognizing the implications of the evidence. Second, some of those same people must have the character to withstand being treated like idiots because they dare to question all the experts.

Because the human race isn't getting any smarter over time, multiple cases of this pattern continue as I write this. *Disconnect* focuses on one situation specifically and I promise you won't like it. Could it be that everybody's favorite toy is hazardous to our health? You know what I'm talking about. Cell phones.

At this point I've probably lost half my readers and those who remain are experiencing suicidal thoughts or borderline incontinence, but get a grip and forge on. A number of common arguments are brought up by those who can't stand the thought of losing their toy. Two arguments are that the human race has always been exposed to radiation, and that cell phones don't heat human tissue. Humans have always been exposed to radiation but never at the high levels we're exposed to today. Cell phones may not significantly heat human tissue but that doesn't prove no damage is done.

The evidence from independent researchers is starting to pile up. Russian scientists and numerous others have all clearly established that cell phone radiation does damage DNA. If you don't need your DNA then you can ignore this, but if you care about an increased risk of cancer you might want to think about that.

In addition to DNA damage, studies have been done with test animals where dye is injected into the blood and spreads to every point in the body except the brain, due to the blood-brain barrier. When the animals are then exposed to cell phone radiation, that barrier breaks down and dye invades the brain as well. While most of this has been uncovered by independent researchers, Davis tells us of a few cases where even industry researchers have turned against their masters and come out with awkward information about cell phones.

On the other side of the issue there are many studies showing no harm from cell phones. Pretty much all of those studies were done by the cell phone industry. There are many easy ways to rig tests and big industry is very good at that. Human heads are unrealistically modeled. Large numbers of people who barely use their phones are included in studies. Sometimes data is "massaged." Short-term studies are done which can't possibly show long-term effects. Large industries routinely do this, whether the issue is soy, tobacco, pharmaceuticals, or cell phones. They have a lot of money so they can generate a lot of studies and then point to all those studies that "prove" safety.

I have said before that the truth is not up to a vote. This is why it can never be. The vote can be bought and often is. In spite of all those studies that claim safety, the cell phone industry

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everybody's favorite toy is hazardous to our health? You know what I'm talking about. Cell phones.

Could it be

that

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Ignore the Awkward! How the Cholesterol Myths are Kept Alive By Uffe Ravnskov, MD, PhD CreateSpace, 2010

Building cell walls and nerve fibers requires cholesterol. Sex and stress hormones require cholesterol. Converting sunlight into vitamin D requires cholesterol. You could say you only need cholesterol if you need cell walls, nerves, hormones and vitamin D.

Cholesterol is also important for brain function. Again, if you don't need brain function, you don't need cholesterol. That one fact could explain a lot. Apparently you don't need brain function to be a cholesterol expert. These low cholesterol levels make the experts impervious to any mountain of evidence that low cholesterol levels don't help heart health and that higher levels are even beneficial in many cases.

Astronaut Duane Graveline has published an account of his own experience with cholesterollowering drugs, which degraded his memory to the point where he didn't recognize his own wife. Millions of people take statins, making them the best selling drugs ever. Why do multitudes continue to take them when the side effects are so disabling, and the drugs provide almost no benefit? Probably because they can't remember how much better life was before the drugs, and they keep listening to the low-cholesterol experts who say they need these drugs or they will die.

Ronald Kraus is a member of the committee that writes the dietary guidelines for the American people. Research done by Kraus indicated that total cholesterol was not correlated with heart attacks and neither was LDL cholesterol. He did find a correlation with a special, small dense type of LDL. He also found that this special type of LDL decreased with increased saturated fat consumption and yet the committee he serves on recommends the opposite. When Ravnskov asked Kraus about that he explained to Ravnskov that committee members often don't agree. When that happens they vote. That is how we conduct science these days. It is easier to ignore awkward evidence and vote.

Ravnskov found that Swedish Food Administration guidelines were based on World Health Organization (WHO) guidelines, which are based on a fog of studies that make claims not supported by their own data. This information included claims that eating saturated fat raises cholesterol, which in turn causes coronary heart disease (CHD). Recently WHO along with FAO came out with a new report. They reviewed the studies and were unable to find a connection between saturated fat intake and CHD.

Many experts resort to the Framingham study to support the claim that high cholesterol kills. What do the findings of the Framingham study actually report? One of the conclusions is that for every 1 mg/dl drop in cholesterol there was an 11 percent increase in coronary and total mortality. I suppose if your cholesterol is low enough, that tradeoff sounds perfectly reasonable.

There are many other awkward facts to ignore. While cholesterol levels are much higher in Americans than in Japanese, both populations have the same level of atherosclerosis. Ravnskov explains in some detail why the JUPITER trial is flawed and Crestor is not as beneficial as the trial claimed. All you really need to know is that the trial was carried out by Astra-Zeneca, the manufacturer of Crestor.

Covering the topic of conflict of interest in scientific research would take volumes so Dr. Ravnskov only exposes the tip of the iceberg. The guidelines from the National Cholesterol Education Program were published in the medical journal *Circulation* in 2004. The authors of those guidelines are listed in this book along with their extensive ties to the pharmaceutical industry. This fact was not published in the journal. Medical journals in general depend heavily on



Cholesterol is also important for brain function. Again, if you don't need brain function, you don't need cholesterol.

Test subjects often get a dose of the drug to be studied during screening. If the test subject has an adverse reaction, that would be a complication that would warrant disqualification. ads from pharmaceutical companies. History has shown that publishing anything unfavorable to those companies will have devastating consequences. Pharmaceutical companies hold the financial strings to researchers, journals, and schools such as Harvard Medical School. This is legal because the pharmaceutical lobby far outnumbers members of Congress. Marcia Angell, former editor of the *New England Journal of Medicine* commented, "All of this makes a mockery of the traditional role of researchers as independent and impartial scientists."

An interesting secret is revealed in the book as to how to turn major side effects into minor ones. If your statin drug has a major side effect like amnesia, for example, what you do is split that serious symptom into a bunch of different categories so that each individual category appears to be merely a minor nuisance. The drug doesn't cause amnesia, it causes confusion, memory weakness, senility, dementia, and impaired cognitive function.

Another trick is to screen study participants before the trial begins. If test subjects have any complications other than the condition being studied, they are rejected for the study. Test subjects often get a dose of the drug to be studied during screening. If the test subject has an adverse reaction, that would be a complication that would warrant disqualification. That kind of screening will cut down observed side effects during the study nicely. If you find that patients with normal or below normal cholesterol levels are still having heart attacks, you conclude that cholesterol needs to be lowered even more.

In the final chapter, Dr. Ravnskov speculates on the real cause of heart attacks. It would be interesting to see him put his analytical genius into explaining why many heart attack victims seem to have no blocked coronary arteries, but he doesn't address that. While I don't completely agree with that last chapter he does indicate clearly that it is a hypothesis and the tone of the chapter is somewhat speculative so that does not weigh heavily on this review. The book is less than one hundred fifty pages—relatively short compared to other similar books. It is a good summary of what is going on in cholesterol research. It is easy to read (if you have enough cholesterol) and it rates a THUMBS UP.

Review by Tim Boyd

Disconnect, Continued from page 52

buries a warning in the paperwork that comes with every cell phone. You probably missed it. It is in very fine print.

There is another industry, however, that is starting to question all the declarations of safety. The Austrian insurance industry has stopped covering health damage due to cell phones. The Stirling Group of Lloyds of London has refused to insure cell phone manufacturers against healthrelated claims. There are increasing signs that the pattern for cell phones is coming to an end.

This book is not as depressing as you might imagine. Davis has a great sense of humor, replaying scenes from the old TV show "Get Smart" where Maxwell Smart is trying to explain to the phone operator that he is talking to her on an unlisted shoe. Devra Davis doesn't claim that anything has been absolutely proven either way but there is enough evidence to raise concern. She does suggest ways to reduce your risk. One suggestion is using a headset, however I have heard from a number of other sources that headsets still channel the radiation into your skull, so they don't help. Using it in speaker mode and going back to using old-fashioned land lines for long conversations are probably your best bet.

I'm sure the industry would like to drop a cone of silence around Davis and everyone like her. While most may not like the message here, I am abnormal and do like it. This book radiates a combination of intelligence, courage, and humor. That means the thumb is UP.

Review by Tim Boyd

Meat: A Benign Extravagance **By Simon Fairlie** Chelsea Green Publishing, 2010

In the debate between vegans and omnivores there is disagreement not just about which dietary approach is nutritionally better, but which is better for the environment. Simon Fairlie takes a detailed look at the environmental side of the issue.

Many environmentalists claim that we can get about ten times as much food from an acre of grain than from that same acre used to produce meat. Fairlie devotes a number of chapters to examining that claim in excruciating detail. The short answer is that there is a multitude of factors that affect efficiency, and the estimates of the experts vary widely. The subject is extremely complicated and the ratio of ten to one in favor of grain is more of a rough average than a consensus-and it is almost certainly wrong.

Fairlie also takes a look at the water requirements for animals. There are some rather wild claims out there about how much water a cow can soak up. Some imply that a cow will slurp up twenty-five thousand liters per day, which is obviously absurd. Regardless of how much water a cow really needs, most of that water is returned to the environment. It doesn't just disappear from the face of the planet.

The book scrutinizes every angle of food production efficiency. It takes a lot of mental focus to read. So it is rather funny when a simple question comes up. If environmentalists are right and we have over-populated the planet, why are we concerned about efficient food production? Won't that just make the problem worse? This makes me wonder what "they" are really up to when they claim meat is an unaffordable extravagance. Next thing you know, they will be trying to save millions of poor, defenseless evergreens by canceling Christmas. While I doubt that Scrooge environmentalism will catch on anytime soon, what may catch on is the notion

that environmentalists are a bunch of killjoys. We can't eat anything good, just the politically correct twigs, sprouts, and mulch-in-a-box. We can't breathe because that creates CO₂. Bah, humbug.

But I digress. Fairlie goes on to take a fascinating look at the various vegan agendas. In all fairness, there are many different flavors of veganism and Fairlie understands that. Some are just experimenting, or choose the diet for personal health reasons and don't care what everyone else does. Others want to convert the whole human race. Still others want to end predation among all species, and then there are the extremists who think the planet would be better off without the human race.

The predator issue is an interesting one. Experiments have been carried out to see what happens when predators are removed from a local ecology. One or more of the remaining species will become dominant and crowd out other species. The end result is less biodiversity among the remaining non-predator population. There is also a tendency to start outstripping the food supply and then slowly starve. Predators maintain a balance that people who are disconnected from nature don't understand. Sharing a house with a large rodent population while deer and other wildlife chow down on your precious veggie crops can change your mind about predation fairly quickly.

There are a lot of other good points including an excellent explanation of how a carbon credit system would quickly degenerate into a huge scam. There is also a simple and elegant explanation of the false economy of non-local food systems. As usual, there are some points I disagree with and I'm still not sure whether the author literally considers meat an extravagance or if that was meant tongue in cheek. I will give him the benefit of the doubt and point the thumb UP for this one.

Review by Tim Boyd

Regardless of how much water a cow really needs, most of that water is returned to the environment. It doesn't just disappear from the face of the planet.





Could It Be B₁₂? An Epidemic of Misdiagnoses By Sally M. Pacholok, RN, BSN and Jeffrey J. Stuart, DO Linden Publishing, 2005 (1st ed.)

Sometimes it is the person who has suffered from a disease who is the most capable of providing accurate information, creating widespread awareness, and advocating for proper testing and treatment of others afflicted with the same condition. Sally Pacholok, RN, is one such individual. As a young nursing graduate who essentially diagnosed herself with vitamin B₁₂ deficiency and pernicious anemia, Pacholok was astonished to discover a significant percentage of the patients she cared for in her practice exhibited unrecognized or misdiagnosed symptoms of B₁₂ deficiency. Most of these patients were suffering from debilitating conditions that were not responding to the medications their doctors had prescribed for their incorrect diagnoses. Making matters worse, when Pacholok suggested that these patients' B_{12} status be checked, most doctors were scornful or dismissive, in effect condemning many patients to steadily worsening health or even death.

Over the course of more than twenty-five years in health care, Pacholok has used her expertise to accurately spot the multitude of vitamin B₁₂ deficiency symptoms and to advocate for proper diagnoses and care protocols for thousands of patients. Fueled also by moral outrage at years of medical negligence surrounding this disorder, she and Dr. Jeffrey Stuart, her husband and co-author, have written Could It Be B_{12} ? in order to increase awareness among both health care consumers and medical professionals of the common, often disguised, and potentially deadly markers of B₁₂ deficiency. By arming consumers with accurate information they aim to replace current medical apathy with routine testing for B₁₂. The information, advice, and guidance Pacholok and Stuart have collected in their book

could very well prevent unnecessary suffering and even save the lives of many readers and their family members.

Vitamin B₁₂ deficiency affects all age groups, but is often more common in those aged sixty and older; from 10-15 percent in this group are estimated to be deficient in the vitamin. Nearly forty percent of hospitalized elderly patients have low B₁₂ levels, and fifty percent of long-term vegetarians and vegans are deficient. The prevalence of the condition is important to understand, since B₁₂ deficiency manifests in a multitude of symptoms-some subtle, some drastic-and these symptoms are most often presumed by medical practitioners to belong to other disease states. The time lost on such misdiagnoses poses a real threat to the sufferer, since a B_{12} deficiency, if caught in time, is one of the simplest to remedy. Yet when valuable months or years are lost due to misdiagnosis, much of the damage caused by the deficiency may become permanent.

The many body systems affected by vitamin B_{12} deficiency underscore this vitamin's importance in their proper functioning. This is also the reason that when not understood, the deficiency of the vitamin appears to mimic symptoms of seriously debilitating degenerative diseases. The neurological system is perhaps most dramatically affected, presenting signs such as pain, numbness, weakness, "pins and needles" sensations, imbalance, confusion, depression, dementia, and incontinence. These symptoms are often misdiagnosed as multiple sclerosis, fibromyalgia, Parkinson's and Alzheimer's diseases, for example.

Vascular symptoms of vitamin B_{12} deficiency mimic heart disease. Genitourinary system aberrations are mistaken for precancerous conditions, which can lead to unnecessary hysterectomies, and blood anomalies are mistaken for irondeficient anemia. The immune and gastrointestinal systems also are affected by debilitating symptoms that will only worsen as long as the underlying vitamin B_{12} deficiency continues to

The many body systems affected by vitamin B₁₂ deficiency underscore this vitamin's importance in their proper functioning.

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be unaddressed. If any of these conditions is caught early, correctly diagnosed and treated with vitamin B_{12} supplementation, it is reversible, but many symptoms, especially neurological problems such as paralysis, dementia and brain damage in children, will become permanent without timely B_{12} supplementation.

Vitamin B_{12} is a fascinating nutrient, and its metabolism in the body is dependent upon a finely tuned series of events, any one of which, unfortunately, might all too easily fail. While we need only very small amounts every day, our bodies may not absorb or metabolize the vitamin even if we consume adequate quantities. The body's metabolic process for this nutrient is far more complex than for other vitamins. In short, the B₁₂ in our food is bound to protein, and requires the properly acidic environment of the stomach to free the vitamin. This means our stomachs must produce adequate amounts of both the enzyme pepsin and hydrochloric acid, as well as a protein called the intrinsic factor. The intrinsic factor and the freed B_{12} meet up in the small intestine where, with the help of pancreatic enzymes, they are linked together for transport to the last portion of the small intestine, the ileum. The healthy ileum contains receptors that pick up the linked B₁₂-intrinsic factor and carry them into the bloodstream. A protein in the blood then carries the B_{12} to cells for use and any excess to the liver for storage.

While elegant, this carefully orchestrated process can go wrong at any juncture. The most common complication occurs right at the beginning with not enough stomach acid to free the B_{12} from its protein matrix. Many people past fifty suffer from atrophic gastritis—an inflammation of the walls of the stomach with subsequent low hydrochloric acid production. Add the widespread use of antacids in that age group to this condition and B_{12} absorption is prevented at the very first stage of digestion, regardless of how much is consumed in food. Older individuals have fewer of the stomach cells that produce

intrinsic factor as well.

Gastrointestinal disorders such as Crohn's disease, celiac disease, enteritis and any inflammatory process will interfere with B_{12} absorption, even if it is correctly broken down by the body. Toxins such as mercury will interfere with the ability of B_{12} to cross the blood-brain barrier. Alcohol and the anesthetic nitrous oxide (often used in dental surgery) will inactivate B₁₂; birth control pills deplete the vitamin in the body. A variety of inborn metabolic errors can also prevent normal absorption. The most well known aberration is pernicious anemia, although it is not the most common problem. Numerous medications inhibit the absorption of B₁₂, including the many commonly prescribed drugs for heartburn, GERD and ulcers, as well as medications for diabetes, gout, some antibiotics and diuretics, the cholesterol drug Questran, and others. These drugs are commonly prescribed to the aging population, along with fistfuls of other medications that can mask the signs of B_{12} deficiency while worsening its effects, such as anti-depressants, drugs for insomnia, fatigue, numbness and tingling in extremities, incontinence, and tremors. Especially because of these drug interactions the aging population is at great risk for B_{12} deficiency. Most medical practitioners, however, will ascribe their deteriorating conditions to the ravages of age, or the complications and "natural progression" of their wrongly diagnosed diseases.

Those with eating disorders such as bulimia and anorexia are at great risk for B_{12} deficiency, as are vegetarians and vegans. Most chilling is the deadly risk vegetarian and vegan mothers take by not supplementing with B_{12} while pregnant and breastfeeding their infants. The body will not mobilize stored B_{12} in the mother for the benefit of the fetus or newborn; B_{12} must be coming in regularly through the diet for it to reach the child. Pacholok points to very recent research that indicates the B_{12} that is available in spirulina and tempeh is in fact an analogue of the true B_{12} , that blocks the absorption of true

Gastrointestinal disorders such as Crohn's disease, celiac disease, enteritis and any inflammatory process will interfere with B₁₂ absorption, even if it is correctly broken down by the body.

 B_{12} and further deepens its deficiency in those valinly seeking the nutrient from these sources.

Vitamin B₁₂ is absolutely vital for young, developing brains, and early deficits can have devastating, lifelong effects for children. Pacholok cites a 1985 study in which a group of infants of vegans was compared to infants who consumed meat and dairy foods. Researchers detected "subtle but significant impairments in the psychomotor functioning of the vegan children." When the parents of these children were told of the findings, many of them switched their children to diets containing milk, eggs and sometimes meat. On average, the children began eating these foods at age six. These children were tested again in adolescence, and many were still found to be B_{12} deficient even after years of eating animal foods. The researchers' report is sobering: "We found a significant association between $[B_{12}]$ status and performance on tests measuring fluid intelligence, spatial ability, and short term memory." The impairment in fluid intelligence is particularly disturbing, "because it involves reasoning, the capacity to solve complex problems, abstract thinking ability and the ability to learn. Any defect in this area may have far-reaching consequences for individual functioning." Of course one can only imagine how many of these children have also been diagnosed and drugged for ADD, ADHD, and autism spectrum disorders.

"Most pediatric cases involving neurological damage due to acquired B_{12} deficiency," Pacholok notes, "involve children eating vegan, vegetarian, or macrobiotic diets." Strangely, however, Pacholok generally lauds the decision of parents and even children themselves who choose these diets. "None of this is a criticism of meat-free diets, which—because they are low in fat, high in phytochemicals and antioxidants, and generally low in artificial colorings and additives—tend to be very healthful." Apart from the fact that children on such diets will have a hard time getting much use from phytochemicals due to their immature digestive systems, it is

apparently nearly impossible for those trained in conventional medicine to even consider challenging the establishment credo that animal fat is the enemy. Instead of advice regarding diet, Pacholok advocates for B_{12} supplementation primarily via injection to sidestep the problems associated with the GI tract entirely—as she clearly does not believe diet to be a trustworthy avenue for many, if not most, people. In a population widely afflicted by multiple gut disorders, chronic over-medication, and the preponderance of bad, fad, or simply mad diets, she could be right.

Aside from this modest gripe, I am grateful to Pacholok and Stuart for preparing such a thorough and useful guide to the understanding of vitamin B_{12} deficiency. Their detailed advice for the most accurate means to test for the deficiency will permit anyone to know how to request, or more likely, insist that the doctor takes their condition seriously and follows through responsibly. This is one of those books that can empower those without medical training but who must advocate for themselves or family members when navigating an often apathetic medical system. For those who suffer from a hidden B_{12} deficiency, it could be a lifesaver.

Review by Katherine Czapp



CARBOHYDRATES CAN KILL by Robert K. Su, MD

Carbohydrates Can Kill begins as a kind of primer on the chemistry of carbohydrates, fats and cholesterol, with detailed information about how these macronutrients are assimilated by the body. There follows a long history of how Su regained his health by restricting carbohydrate intake, especially intake of refined carbohydrates.

Su's contribution lies in the compilation of studies in the third part of the book, which detail the superiority of highfat, low-carb diets for an array of health conditions: osteoarthritis, sleep apnea, high blood pressure, atrial fibrillation, heart disease, diabetes and above all, obesity. These studies show us that fat is not fattening if carbs are restricted. He also examines the connection between sugar consumption and cancer, heart disease, neurological degeneration and digestive problems even in the absence of overweight.

Su is definitely on the same page, noting that salt, cholesterol and saturated fat are not the enemies, but too much carbohydrate, especially refined carbohydrates, definitely are. But not all carbohydrates kill—Weston Price described several healthy populations that consumed fairly high levels of carbohydrate foods. Su could solve this paradox with a good subtitle, such as "How I Regained My Health by Restricting Refined Carbohydrates." Hopefully he will do so with the next printing. THUMBS UP. (Available from Two Harbors Press.) Review by Sally Fallon Morell

The Case Against Fluoride: How Hazardous Waste Ended Up in Our Drinking Water and the Bad Science and Powerful Politics that Keep it There By Paul Connett, PhD, James Beck, MD, PhD, & H.S. Micklem, DPhil Chelsea Green Publishing, 2010

On the label of every tube of fluoride toothpaste is a statement which reads, "Drug Facts: Active Ingredient—Sodium Fluoride ... Keep out of reach of children under six years of age. If more than used for brushing is accidentally swallowed, get medical help or contact a Poison Control Center right away." The amount recommended for brushing is about the size of a pea. This pea-sized dab contains about the same amount of fluoride as one glass of water in areas that fluoridate the water. Do you drink the recommended eight glasses of water per day? Do you call the Poison Control Center when you do?

The insanity of intentional water fluoridation is examined from every angle in this book. International law forbids dumping fluoride waste into the sea but it is accepted in American drinking water. As stated in the toothpaste disclaimer above, the FDA officially considers fluoride to be a drug. This drug has never been approved by the FDA. Contaminating drinking water with fluoride can be most charitably characterized as an experiment which violates the Nuremburg Code prohibiting experimental human treatment without informed consent. China, India, Japan and most of Europe do not fluoridate their water.

One of the first studies claiming the safety of fluoride was done by Cox and Hodge. Cox worked for the giant aluminum company Alcoa. At that time fluoride was a major waste product of aluminum processing. It must have seemed like a wondrous miracle when Cox discovered that this toxic waste was safe and effective for preventing tooth decay when added to the water supply. The real miracle is that so many people apparently believe this. Hodge worked on the Manhattan Project supervising experiments on unsuspecting patients who were injected with uranium and plutonium. These guys have all the credibility of those famous leading scholars named Larry, Curly and Moe. If you believe the studies and health advice of Cox and Hodge, you might want to consider cutting back on eating those old lead-based paint chips.

Many other studies are reviewed, such as those of Dr. Phyllis Mullenix, who not only had no conflict of interest with the commercial entities involved but in fact suffered professionally for daring to suggest that fluoride might be problematic.

John Colquhoun of New Zealand promoted fluoride enthusiastically around the country for years. After traveling the world to survey the effects of fluoride, he realized he was quite wrong. Colquhoun was a man of rare courage and integrity, and spent the rest of his life trying to undo the damage he had done.

When the National Research Council came out with a report—over five hundred pages long—unfavorable to fluoride, the American Dental Association took less than one day to dismiss it. The Centers for Disease Control rejected it six days later. The director of Quackwatch called fluoride opponents "poison-mongers." The irony piles pretty high when you consider that most opponents are unpaid and do much of this on their own dime, they have nothing to monger or sell, and are trying to remove the poison, not add it.

Toward the end of the book the authors pull out one of my all-time favorite quotes from the late Michael Crichton. "Historically, the claim of consensus has been the first refuge of scoundrels; it is a way to avoid debate by claiming that the matter is already settled....The greatest scientists in history are great precisely because they broke with the consensus. . . There is no such thing as consensus science. If it's consensus, it isn't science. If it's science, it isn't consensus. Period." THUMBS UP. Review by Tim Boyd



When the National Research Council came out with a report-over five hundred pages long unfavorable to fluoride, the American Dental Association took less than one day to dismiss it.



The inherent problem of all monocultures is the ultimate destruction of soil fertility, crop disease and climate change, most often in the form of warming and drought.

Empires of Food: Feast, Famine and the Rise and Fall of Civilizations By Evan D.G. Fraser and Andrew Rimas Free Press, 2010

Empires of Food is a fascinating book that certainly reveals the old adage, "history repeats itself." As we moved away from the huntergatherer paradigm to that of civilization, man has often been deceived by the pursuit of progress. From the Mayan, Greek, and Roman empires to our present day society, many urban cultures have mistakenly sought development through monocultures—agricultural systems that depend on limited crops like wheat, corn and soybeans. However, these restricted agricultural systems have always suffered grave consequences.

According to the authors, "These societies, these food empires, can only exist if three things happen: Farmers need to grow more food than they eat; they need a means of trading it to willing buyers; they need a way to store it so it doesn't turn to sludge before reaching its economic apotheosis. When these three premises are met, urban life flourishes. Which is, in itself, the seed of the problem. . . When a food empire fails, mobs tear apart the marketplace, angry over the cost of bread. Governments raise armies to conquer greener, more fertile valleys. People uproot. Forest creeps back over old fences. Arable land falls into disuse, and society contracts. It happens again and again. And it's happening now."

Reading this summation of agricultural history now as we face alarming governmental interference to thwart the emergence of a truly sustainable system struck me to the core. The inherent problem of all monocultures is the ultimate destruction of soil fertility, crop disease and climate change, most often in the form of warming and drought. Also common is the inevitable abuse of governmental power as whoever controls the food supply controls the people. Inevitably, urban society cannot ceaselessly survive in this unsustainable structure.

However, the wisdom of our current biodynamic, pasture-based farming movement is the answer to correcting the serious problems of our depleted food supply. Protecting biodiversity and our precious resources are essential elements of our survival. Furthermore, Fraser and Rimas discuss the importance of saving food surpluses and supporting a global sustainable farming network as insurance for times of shortage.

This book provides an enlightening historical journey through the problematic agricultural practices that led to the destruction of great societies that once flourished. Although today we have supermarkets full of varieties of cheap food never before offered—food that can only be grown with fertilizers and insecticides made from petro-chemicals—there will ultimately be an end to this system. Cheap food is not cheap.

The types of changes we have made with regard to our food choices, sources, and our health in relation to the work of Weston A. Price we must also foster in relation to our entire global food system. Can we raise enough awareness and learn from history before it is too late? Can we become a society that makes decisions according to how those decisions will affect our offspring for the next seven generations? I say we must.

Review by Kathryne Pirtle

RESEARCH PROJECT

Donna McIntosh, MHN, CHFS, is doing some informal research regarding the Weston Price way of eating and its effect on fertility. She would like to interview women who were infertile but finally got pregnant by changing their diets to a nourishing traditional diet. She would like to know which parts of your diet you changed and how long it took you to conceive. Please contact her at

> Donna McIntosh, MHN, CHFS Advanced Nutrition Group, Inc. The Goddess of Fertility thefertilitygoddess@gmail.com 760-333-6399

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The Dirty Life: On Farming, Food and Love By Kristin Kimball Scribner, 2010

This memoir describes the radical transformation of a New York City single, female professional writer into the partner/wife of an organic farmer. The author brings the experience of a seasoned travel writer: immune to culture shock, but perhaps not as well-prepared for the challenges of her new life in farming in rural upstate New York.

A follower of Weston A. Price dietary principles would find the discussion around food refreshing. Although starting the new farm left the couple financially stressed and materially deprived, they enjoyed genuine wealth when it came to eating real farm-fresh food. Kimball's accounts of cooking and eating with lots of butter, lard, organ meats and eggs are presented without question as positive and wholesome.

As a couple, Kimball and her husband set out to establish a highly diversified farm that would provide a whole diet for their Community Supported Agriculture (CSA) members. Once they got their first Jersey cow, they had an abundance of real milk, butter and cheese. This soon led to the need for pigs to make good use of the excess whey and skim milk. Chickens, beef cattle, and draft horses were added to the barnyard to make for a well-stocked farm. An old sugar bush on the property was utilized to produce maple syrup. Most of the farm was kept in pasture or forage crops to feed the livestock. In the spring five acres were tilled to grow a wide selection of organic vegetables for the CSA.

This would not be the usual type of CSA that only offered vegetables. The whole-diet approach meant that a farm share would, also, naturally, include milk, meat and eggs from its livestock operation.

For those who are interested in establishing a profitable farm, the experiences Kimball describes provides insights into how to be creative and resourceful in acquiring farm animals and used equipment. She also highlights what they did to launch their CSA, and some effective marketing techniques. An important point stressed throughout the book was how critical their connection to the local farming community was to their initial survival, as well as their continued success.

My favorite passage from this book will resonate with other real milk lovers:

"If you do not own a cow or know someone who owns a cow, I must caution you never to try raw milk straight from the teat of a Jersey cow, because it would be cruel to taste it once and not have access to it again. Only a few people in America remember this type of milk now, elderly people, mostly, who grew up with a cow."

An increasing number of college students, with no prior farm experience, are taking an interest in farming as a career. Besides finding *The Dirty Life* a pleasurable agrarian read, wanna-be farmers may find this book a valuable introduction to the farming lifestyle.

The incredible abundance of work required to establish a successful working farm can be overwhelming, and this book leaves no illusions as to the challenge. At the same time, the author also acknowledges a special kind of satisfaction that follows the toil and fatigue. Although this is not a how-to book, I did not detect any technical inaccuracies in the descriptions of farming methods.

Review by Joseph Heckman, PhD

ONE HALF MILLION!

That's the number of informational brochures that we have printed since the Weston A. Price Foundation was founded in 1999. These brochures have helped educate thousands and have served as our number-one membership tool. To order brochures to give to family, friends and colleagues, visit www. westonaprice.org.



An increasing number of college students, with no prior farm experience, are taking an interest in farming as a career.

Growing Wise Kibs MORNING NOURISHMENT: BOUNTIFUL BENEFITS AND CREATIVE IDEAS Making the Most of Breakfast By Jen Allbritton, CN

Breaking one's fast from a restful night of sleep with nourishing foods charges all body cylinders. In fact, our mood and performance for the entire day is dependent on a good breakfast, as it sets the stage for balanced body chemistry and hormones. Compared to breakfast-skippers, children and adults alike who adequately fuel up in the morning have more energy and better emotional stability and find it easier to maintain their body weight. If you seek motivation to eat a good breakfast, keep reading; if you are stuck in a rut and in need of creative recipes, keep reading. Breakfast should be relaxed and nourishing. . . and non-negotiable.

BREAKFAST EATERS THINK BETTER

One study following a group of students found that they had better mental performance, including attention and memory, after eating breakfast compared to when the same group didn't eat anything. The researchers also compared sugary ready-to-eat cereal to oatmeal and found oatmeal's nutritional advantage (more nourishing whole food meal) made it a better choice at improving brain power and encouraging better test scores.1 Additional stats show higher test grades and better school attendance in breakfast eaters than in non-breakfast eaters too.² Bottom line: to excel in whatever we do, whether it be school, work, play or relationships, we need breakfast to be at the top of our mental game.

Well-nourished students in Madrid who consumed an adequate breakfast (more than 20 percent of their daily energy) achieved better reasoning scores in the scholastic aptitude test (SAT) than did breakfast-skippers.³ What a good motivator for your profession-aspiring teen: "If you are college-bound, eat breakfast!" Same goes for more mature folks: a group of adults aged sixty-one to seventy-nine years who consumed a nourishing breakfast of such whole foods as whole grains and eggs fared better on memory tests in the morning than when that same group ate sweetened cereals or doughnuts.⁴ So a nourishing breakfast is important for the mental health of both young whippersnappers and those with a few miles on their tires.

BREAKFAST EATERS CONTROL WEIGHT BETTER

Those who skip breakfast tend to eat more calories throughout the day, ultimately leading to weight gain.⁵ Here's one reason: skipping breakfast eventually results in insulin becoming less sensitive, that is, insulin resistance. Insulin is a hormone that carts sugar around in the blood, taking it either to be used as cell energy or to be converted to fat and stored. If body cell receptors (acting like miniature doors) are "less sensitive" or resistant to insulin, when sugar-loaded insulin comes to deliver its cargo to a cell, the cell refuses entry. This results in excess sugars floating around the bloodstream. The body then tries to produce more insulin to get the sugar into the resistant cells, and a cycle begins. This precarious scenario causes not only weight gain, hypoglycemic symptoms (light headedness, low energy, brain-fog), but contributes to obesity and heart disease as well. Eventually the body may become unable to make insulin, which allows blood sugar to rage out of control, causing type-2 diabetes (simply an extreme case of insulin resistance).6

Not surprisingly, obesity and insulin resistance syndrome rates are 50 percent lower in breakfast-eaters compared to those who frequently skip breakfast.⁷ Breakfast-eaters also tend to make overall better food choices throughout the day. Skipping meals encourages overeating at later meals and "the munchies" for more snacks. A study at Brown Medical School evaluating approximately four thousand people who have kept weight off successfully found

One study following a group of students found that they had better mental performance, including attention and memory, after eating breakfast compared to when the same group didn't eat anything.

that 78 percent ate breakfast daily.⁸ On the flip side, an earlier study from the University of Massachusetts found that people who habitually missed the morning meal were four times more likely to be obese.⁹ Simply put, breakfast gets one's metabolism off to a good start and keeps the body more balanced all day long.

WHAT NOT TO EAT

A typical, politically correct, fat-phobic breakfast might include a refined-flour muffin, a glass of OJ, non-fat sweetened yogurt and, worst of all, an egg white omelet. Oh, and don't forget the cup of caffeinated Joe. Even if these continental-style breakfast choices are low in sugar, the scarcity of nourishing proteins and healing fats makes them miserable choices for nourishing a healthy body. Even worse is Americans' reliance on boxed cold cereals involving some menagerie of machine-generated crunchy puffs of brightly colored shapes and candy-like creations.

Let's review four compelling reasons to opt out of these concoctions. First, the sugar content of many breakfast cereals rivals that found in a chocolate glazed donut!¹⁰ (For more info on the damaging effects of excess sugar consumption, see "Zapping Sugar Cravings" in the Fall 2010 *Wise Traditions.*) Second, the process necessary to achieve these kid-enticing flakes, shapes and crunch is called extrusion. This process combines high temperatures and high pressure, ultimately rendering many nutrients useless as well as damaging the residing proteins (or amino acids) within the grain and making them toxic to ingest.¹¹

A third reason boxed cereals are a poor choice for breakfast is inadequate preparation, making the grains difficult to digest. To get the best nourishment and digestibility out of grains, it is best to prepare them in such a way that inactivates such compounds as enzyme inhibitors,¹² which would otherwise hamper digestion, and phytic acid, a compound that combines with minerals and prevents their absorption.^{13,14} The traditional practices of soaking and sprouting grains accomplishes this through pre-digestion of the food. This explains why sprouted foods are less likely to produce allergic reactions in those who are sensitive.¹⁵ And gluten-containing flours, especially wheat, are the main ingredient in most cereals and happen to be one of the most troublesome allergy-causing foods.

Dr. Braly, co-author of *Dangerous Grains*, believes that undiagnosed sensitivities to gluten and other grain proteins contribute to many autoimmune and neurological conditions, bone loss, chronic pain, learning problems, fatigue, intestinal complaints and more.¹⁶ The wide use and acceptance of wheat may be why many folks who have trouble with gluten fail to consider it as an underlying contributor. Moreover, there is evidence that high-gluten diets alter the normal lining of the small intestine in *healthy* people,¹⁷ which opens up the possibility that gluten, particularly in large amounts, is not ideal for many of us.

Finally, even if you avoid sugary cereals and opt for the "healthier" choices, fiber is typically a focal point, often with the promise of promoting "regularity." In fact, just one cup of some fiberfortified cereals dishes up more fiber than the highest recommended dose for fiber laxatives. However, recent research shows that overdoing fiber-from foods or supplements-can have detrimental effects on the body. Konstantin Monastyrsky, author of Fiber Menace, offers compelling arguments and research that proves that high-fiber diets contribute to a whole host of conditions-the very conditions believed to be improved by more fiber-including hemorrhoids, constipation, irritable bowel syndrome, and even colon cancer.

Monastyrsky explains that too much fiber creates large stools that over-stretch the intestinal

PLANNED BREAKFASTS

Certain children, or adults for that matter, thrive on having a plan. Here is when a weekly breakfast schedule might come in handy, especially for those hectic school days when there is no time for dilly dallying with decisions. Why not make a set breakfast for each day of the week? Involve everyone who will be partaking in the meal in the decision-making process. Monday and Wednesday could be oatmeal with a pool of butter and frozen berries swirled in, Tuesday and Thursday one-pot egg and veggie scramble, Friday a yogurt- or kefir-based smoothie along with a hard-boiled egg. Saturdays could be pancake day and Sunday could be celebrated with an omelet.

SPRING 2011

Those who skip breakfast tend to eat more calories throughout the day, ultimately leading to weight gain.

BREAKFAST FAVORITES FROM FELLOW WAPF-FOODIES

SALLY FALLON MORELL, President of the Weston A. Price Foundation: "Our favorite is to bake no-nitrate bacon in a pan with fruit, such as pineapple slices, apple slices, banana, even apricots, peaches or nectarines, or with cherry tomatoes and mushrooms. This is served with eggs any style—scrambled, fried, omelet." She enjoys this with a glass of raw whole milk. Her breakfast tonics include Swedish bitters, beet kvass and cod liver oil and high-vitamin butter oil mixed with warm water.

SUMMER WATERS, LAc, NTP, WAPF Chapter Leader: "My favorite breakfast is homemade soup. I enjoy chicken soup with chicken broth, sautéed veggies, chicken and a spoonful of bacon fat, ghee or butter. I then add a scoop of miso to each bowl as I prepare it to keep the miso alive. That way I have all my most cherished food groups in one meal: meat, veggies, broth, fat, and ferment! Adding different herbs is another way to add variation and even more nutrition. A dollop of sour cream or crème fraîche or maybe some smoked salmon or bacon pieces crumbled on top of different soups are excellent too."

RAMIEL NAGEL, author of *Cure Tooth Decay*, children and spouse: "Baked sweet potatoes fried in tallow, lard or ghee with breakfast sausage or bacon, and sauerkraut or kim chee, with cod liver oil and/or butter oil as supplement."

CHRIS MASTERJOHN, author and creator of www.cholesterol-and-health.com: "Three raw egg yolks (I crack the egg into my hand and let the white slip through my fingers and fall into the trash, and pop the yolk into my mouth). Large bowl of yogurt made from raw milk and fermented for twenty-four hours, full of frozen mixed berries. A large spoonful of raw sauerkraut and a raw orange. If I'm being a good boy, I'll add one-eighth to one-fourth pound of liver, lightly pan-fried for about one minute in coconut oil. A larger breakfast, say after a workout, may look more like a lunch: grass-fed hamburger topped with melted cheddar cheese and sliced bell peppers sautéed in coconut oil on two pieces of toast made from French Meadows European Style 100% rye sourdough bread with butter, topped with some tomato sauce and a raw orange. Two quarts of salad made from romaine lettuce, strawberries, unpasteurized olives, green onions, carrots, celery, bell peppers, and feta cheese, topped with macadamia nut oil and raw apple cider vinegar. Raw sauerkraut or pickles."

ANNE FISCHER SILVA, Clinical Nutritionist: "I came up with a recipe for breakfast that is a nice alternative to eggs and a very wholesome switch from pancakes or French toast." See Breakfast Bar recipe (see on page 67).

JILL CRUZ, WAPF chapter leader in Chicago: "Our favorite is a berry smoothie: three tablespoons of raw yogurt, two tablespoons of raw cream, one-half cup fresh berries, two to three raw egg yolks. Blend and drink. If you leave out the yogurt, increase the cream to three or four tablespoons and only add two egg yolks; it turns into a lovely mousse you can eat with a spoon out of a parfait glass."

JEN ALLBRITTON, CN: "There are two breakfasts that make me feel well-nourished and ready to take on the day. One is a bowl of homemade, twenty-four-hour-cultured yogurt made from pastured raw milk, combined with fresh or frozen raspberries, a raw egg yolk, a dribble of raw honey and handful of coconut granola (recipe on page 67) or ground almonds or walnuts. Second is a one-skillet veggie egg scramble. Sauté veggies, whatever is handy (for me it is usually a mix of onion, cabbage, carrots, zucchini and peppers), in plenty of butter, ghee or coconut oil and once the veggies are soft, drop in two eggs (or leftover meat and one egg works great too) and mix them into the veggie mix. Flip the mixture until the eggs are cooked through. Accompany with feta cheese, raw cherry tomatoes and a clump of raw sauerkraut."

ALLBRITTON BOYS: "My two young kiddos adore oatmeal. I soak oat groats overnight (or all day if I am going to cook them in the crock pot overnight) often with another grain, like amaranth or brown rice, with a dollop of yogurt to jump-start those enzymes. When ready to cook I usually include a can of coconut milk in the cooking water to add extra nourishing fats. To the final product, I add a pastured egg, gobs of butter and coconut oil, a dash of salt, coconut flakes and a sweetener. I stir in a small amount of frozen fruit to cool it off right before serving. Usually, I will make enough to last four of five days and simply re-heat each morning. On warmer days, Strawberry Breakfast Ice Cream (recipe on page 67) is a hit, as well as yummy, kefir-based, fat-loaded smoothies with several egg yolks and coconut oil."

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tract, eventually causing damage. Also, bacteria in the intestinal tract ferment fiber and when too much fermentation occurs with excess fiber, the acidity that results causes intestinal inflammation, bloating and gas. Furthermore, fiber interferes with food's digestion in the stomach, resulting in heartburn and indigestion.¹⁸ Ultimately, fiber isn't the super-nutrient it's blindly believed to be, especially the form found in hardto-digest, highly-processed cereals. The small amount of fiber humans are designed to consume should come from whole, unprocessed foods that are properly prepared, such as cooked vegetables and soaked grains and legumes or sour leavened flours. Once again, whole, unprocessed foods prepared in the wise ways of our ancestors win in the end!

To drive these anti-boxed cereal points home, Sally Fallon Morell tells us in *Nourishing Traditions* about an unpublished experiment performed at the University of Michigan in 1960. The experiment was actually in jest; however, the results are no laughing matter.

Three groups of six rats were observed: group one was fed cornflakes and water; group two the cardboard box that the cornflakes came in and water; and the control group received rat chow and water. The control group remained in good health through the testing period. However, the rats fed cornflakes and water died before those fed the cardboard box. From apparent outward behavior and autopsies, the cornflakeeating rats showed signs of servere insulin instability caused by dramatic insults to blood sugar and damage to the nervous system. Who knew that those consuming boxed cereals would be better off choking down the thirty-cent box instead!¹⁹

THE RULES OF A GOOD BREAKFAST

Breakfast can be as simple or involved as you like, but there are four rules that should be followed:

- Fat and protein should be the featured nutrients. For most people, a carbohydrate-loaded breakfast based on vegetable juices, fruits, grains, flour and sugar doesn't offer enough nutritional bang to get the day off to a good start. Breakfast-candidate foods (preferably produced through non-toxic, pastured-based agriculture) well-endowed with protein and fat include eggs, meats, fish, full-fat dairy foods such as yogurt or kefir, nuts and seeds, coconut oil, lard, butter and avocados. Once these fats and proteins are decided on, fruits, vegetables, tubers and whole grains make a wonderful side note.
- Make at least a portion of breakfast food easily digestible through soaking grains, sour leavening of flours for breads, culturing dairy products, or fermenting fruits and vegetables. In *Nourishing Traditions*, Sally Fallon Morell reminds us that, "Almost everywhere in the world people ate fermented foods on a daily basis. They often ate them for breakfast, no

One reason protein and fat are so essential for breakfast is that they are critical for overall brain chemistry balance.

SAMPLE BREAKFASTS FROM AROUND THE WORLD

While many cultures have moved away from their native food roots, there are certain nourishing traditional breakfasts still served around the world.

- CAMBODIA: Rice congee (a type of rice porridge soup) is a popular breakfast food usually accompanied with salted eggs, pickled vegetables or dried fish. Chicken congee, pig's blood congee, and seafood congee are other favorites.
- SOUTH KOREA: Breakfast typically involves a bowl of rice along with stock made from simmered meats, bones, shell fish, anchovies with vegetables (radish, onion, seaweed, cucumber, squash, etc.) and an oil or fat. Kimchi (fermented vegetables and seasonings) is often served on the side.
- JAPAN: A traditional Japanese breakfast contains miso soup, rice with nori or other garnishes, natto (a type of fermented soybeans), rice porridge, grilled fish, raw egg and a pickled vegetable.
- SCANDINAVIA: A fat and protein-rich fare is common, including fish, cheese, eggs, bacon, whole-grain porridges, breads, potatoes, and fruits, along with juices, coffee, and tea or kulturmelk (Norway), a cultured milk similar to buttermilk or yogurt.

Get yourself in the habit of going to sleep early enough to allow time in the morning to relax through your morning meal.

doubt because after a night of sleep the body needs something that is rapidly and easily digested."20

- 3. Don't rush! Get yourself in the habit of going to sleep early enough to allow time in the morning to relax through your morning meal.
- 4. Plan ahead. Know what you will have tomorrow, whether it is going to be a beautifully laid out fare with flowers and a table cloth or something you throw together in under two minutes.

One reason protein and fat are so essential for breakfast is that they are critical for overall brain chemistry balance. And one of the best sources of protein and fat is the incredible, edible egg! Eggs, laid by sun-bathing, bug-munching chickens, provide an especially brainy breakfast, being the richest source of the nutrient choline. This brain-loving vitamin is a key constituent of cell membranes, giving them flexibility and structure. It also provides a large portion of two fat-like brain molecules that account for a high percentage of the brain's total mass, meaning choline supports optimal brain function.²¹

INCREDIBLE EGGS

Talking about eggs, an interesting study funded by the American Egg Board found that choosing two eggs for breakfast over a bagel resulted in more weight loss and higher energy

levels, even though both breakfasts consisted of the same number of calories. Now, there are three take-home points from this study. One, protein is the body's metabolism controller, creating balance and stabilizing appetite and hunger. Two, grains, especially refined varieties and definitely without the accompaniment of protein and fat, typically send one's body chemistry into a frenzy while trying to recover and compensate. Three, calories are not just calories; their source makes a big difference in how they work in the body and on our metabolism.

A tip from Sally Fallon Morell on fried eggs: cook them sunny side up with a lid on the pan. This keeps the yolk soft and ensures the white congeals. Nothing puts children off eggs like runny whites. Also with scrambled eggs, they need to be really well beaten so no white appears in the cooked eggs-some children can't stand to see the whites in scrambled eggs.

BREAKFAST BASICS

Keeping to a basic, old-fashioned breakfast menu is fine and dandy-eggs (prepared any way: scrambled, poached, boiled, fried, omelet) with a side of sausage or bacon from pastured animals; soaked porridge loaded with butter, coconut oil, nuts, seeds and berries; or French toast (made with properly prepared sour dough or sprouted bread) served with sausage, butter and a maple syrup-sweetened fruit sauce with

EGG BEATERS: CANNOT SUPPORT LIFE

Egg Beaters appeared on the market in the early 1970s. Fabricated with egg whites, corn oil, nonfat dry milk, emulsifiers, additives, artificial flavor and synthetic nutrients, the product contains the same levels of protein, fat, calories, macrominerals and vitamins as real eggs. But Egg Beaters are devoid of cholesterol as well as saturated fat and important unsaturated fatty acids, such as arachidonic acid. The weanling rats fed Egg Beaters did not grow well and lacked proper fur development. All those fed Egg Beaters developed diarrhea within one week and died within three to four weeks.

The authors of the paper, Meena Kasaii Navidi and Fred A. Kummerow, noted that Egg Beaters were not appropriate "as a substitute for egg yolk in infant feeding by pediatricians who may consider supplementation with cholesterol-free substitutes early in life in order to prevent the development of atherosclerosis" (Pediatrics Vol 53, No 4 April 1974). The dramatic results obtained in this study may have saved thousands

routinely served to the elderly in nursing homes.

of babies from the fate of being fed Egg Beaters; however the product is FIG. 1. Weanling rats fed shell eggs (left) or Egg Beaters (right)

CREATIVE BREAKFAST IDEAS FOR THE WHOLE FAMILY

COCONUT GRANOLA

4-5 tablespoons soft butter or coconut oil 3 cups large coconut flakes 1 cup chopped or ground crispy almonds

4-5 tablespoons honey 1 cup halved crispy cashews 1 to 2 cups halved crispy pecans or crispy walnuts

Preheat oven to 250 degrees. Mix butter or coconut oil, honey and coconut flakes together in large bowl. Add crispy nuts and stir together until well coated. Spread evenly on cookie sheet in one layer. Bake in oven for approximately 20 minutes, stirring occasionally to prevent burning. Beware of overcooking! When the granola is a golden brown, pull out and allow it to cool completely, which is when it will get crispy. Good snack or on yogurt or fruit. This is a variation of a recipe created by Deb Millard. (Note: See Nourishing Traditions on how to make crispy nuts.)

STRAWBERRY BREAKFAST ICE CREAM

1 1/2 cups frozen strawberries 1 cup thick yogurt or ricotta cheese 1 tablespoon honey 1 avocado

2 tablespoons strawberry fruit spread (optional)

Blend all together in a food processor or blender and serve immediately.

BREAKFAST BARS

1 1/4 cup almond flour (soaked, dehydrated nuts ground to a flour) 1/4 teaspoon sea salt 1/4 teaspoon baking soda 1/4 cup coconut oil 1/4 cup maple syrup (organic, grade B) 1/8 cup filtered water * 1 teaspoon vanilla extract 1/2 cup shredded coconut 1/4 cup raisins or dried cranberries 2 1/4 cups any combination of pumpkin seeds, chopped almonds or walnuts, sunflower seeds, sesame seeds, flax seeds, etc. (soaked and dehydrated first)

In a large bowl, combine almond flour, salt and baking soda. Add coconut oil, maple syrup, water, and vanilla. Stir dry ingredients into wet. Mix in shredded coconut, seeds, and dried fruit. Grease an 8x8 baking dish with coconut oil. Press the dough into the baking dish, wetting your hands with water to help pat the dough down evenly. Bake at 350 degrees for 20 minutes. Cut and serve. Cool before cutting; these bars are crumbly. Very tasty topped with a dollop of yogurt or crème fraîche. *Option: For another variation of grain-free granola, leave out the water and prepare as usual. Once the bars have cooled, break into small pieces and place on a baking sheet. Bake at 350 degrees for 10-15 minutes, or until crisp and golden. Recipe created by Anne Fischer Silva, Clinical Nutritionist.

MEFFINS Makes about 1 dozen

1 pound ground pastured pork (other ground meats work too) Salt and pepper to taste 1 cup cottage cheese

12 pastured eggs, beaten about 1 cup cheese, shredded or crumbled

1 cup chopped veggies of choice (onion, garlic, peppers, carrots, green onions, are all good) Herbs and spices of choice (sage, thyme, rosemary, garlic powder, onion, powder, chili powder, etc.)

Preheat oven to 350 degrees. Grease 12 muffin cups. Brown sausage in skillet on medium heat and transfer to bowl. Use the leftover grease to sauté chopped veggies (adding extra fat if necessary; butter, ghee, coconut oil, lard or tallow). In a large bowl, beat eggs then add sausage, cottage cheese, sautéed veggies, onion, garlic powder, salt, pepper and other herbs or spices of your choosing. Spoon approximately 1/4 cup of egg/sausage/veggie mixture into each muffin cup, sprinkle with cheese and cook between 15 to 20 minutes, until egg has set.

You can't beat the feeling of starting your day off with a breakfast that settles well, gets your brain cells firing, and keeps you feeling vibrant and energetic all morning. a side of berries and cream. However, there are days when it is fun to step outside the box, and when that day comes, consider these inspirational ideas:

- Breakfast soup: "For many cultures, soup is a breakfast food. The Japanese begin their day with a bowl of fish broth and rice. French children traditionally consumed leftover soup before they started off to school."²³ See Summer Waters' breakfast account on page 64.
- Meat and egg muffins (Meffins!): The variations for scrumptious morning breakfast muffins are endless with different meats, sausages, vegetables and cheese. Make a big batch and freeze your favorite. See recipe on page 67.
- Scrapple or liverwurst (pâté-like foods made from organ meats): sliced and fried until the outside is crispy along with scrambled eggs or stuffed in a breakfast burrito.
- Fruit and cheese sundae: Cottage cheese or ricotta with berries, nuts and seeds piled high in a fun fluted glass.
- Homemade cold cereal or granola: There are properly prepared cereal and granola recipes in *Eat Fat Lose Fat* by Mary Enig, PhD. Serve with cream or cultured dairy product.
- Dinner leftovers: Salmon patties, roast with gravy and fixings, shrimp stir-fry, egg or chicken salad, simple buffalo patties with fixings.
- Smoked salmon: Include with cream cheese or butter on properly prepared crackers or sourdough bread.

NO-TIME-FOR-BREAKFAST BREAKFASTS

Being rushed for time is still no excuse to bypass this all important meal; keep this list of last-minute grab-and-go ideas on the fridge. Note, many of these ideas must be made beforehand to have available for those rushed mornings (e.g. hardboiled eggs and muffins). Also, eating while in a hurry is never ideal for digestion and assimilation of your lovingly prepared food, so do your best to make these rushed meals occasional.

- Yogurt pops: A simple mix of yogurt, frozen berries, vanilla or almond extract and egg yolks blended and frozen in popsicle molds or paper cups with wooden popsicle sticks.
- Smoothies in a thermos: Pour your favorite smoothie into a thermos to take along on your way to school, work, or play-date.
- Granola breakfast bars: Pre-made batch of your favorite (see Breakfast Bars recipe on page 67 as one option).
- Apple donuts: Cored apple, sliced into thin rounds. Slather one apple slice with nutbutter and sprinkle with anything else you desire: dried fruit, crumbled dried banana chips, cinnamon. Top with another apple slice and enjoy (thanks to my friend Julia for this fun and simple idea!).
- Cheese and crispy nuts: What could be simpler! You can include a few dates for some natural sweetness.
- Hard boiled eggs: Have them on hand for grab and go.

IN CONCLUSION

You can't beat the feeling of starting your day off with a breakfast that settles well, gets your brain cells firing, and keeps you feeling vibrant and energetic all morning. For some, fueling one's family with nourishing foods is routine, yet for others, it may be a habit you need to start; either way, with the tools now at your disposal, there are no excuses not to make breakfast-time easier, yummier and more interesting in your household.

GERMINATED GRAINS EQUAL MORE NUTRITION

Sprouted foods of all kinds—nuts and seeds, along with grains—are more digestible and also offer better nutrition. Researchers at the University of Minnesota discovered that sprouted whole wheat has 28 percent more thiamin (B_1), 315 percent more riboflavin (B_2), 66 percent more niacin (B_3), 65 percent more pantothenic acid (B_5), 111 percent more biotin, 278 percent more folic acid, and 300 percent more vitamin C than non-sprouted whole wheat. Reference?

Jen Allbritton is a certified nutritionist and author. She lives with her family in Colorado and spends lots of time in her kitchen cooking up WAPF-friendly creations. Contact her if you'd like to learn more about subjects related to diet and children at jen@growingwisekids.com.

REFERENCES

- 1. Mahoney CR, Taylor HA, Kanarek RB, Samuel P. Effect of breakfast composition on cognitive processes in elementary school children. Physiol Behav. 2005 Aug 7;85(5):635-45.
- 2. Rampersaud GC, Pereira MA, Girard BL, Adams J, Metzl JD. Breakfast habits, nutritional status, body weight, and academic performance in children and adolescents. JAm Diet Assoc. 2005 May; 105(5):743-60; guiz 761-2.
- 3. Lopez-Sobaler AM, Ortega RM, Quintas ME, Navia B, Requejo AM. Relationship between habitual breakfast and intellectual performance (logical reasoning) in wellnourished schoolchildren of Madrid (Spain). Eur J Clin Nutr. 2003 Sep;57 Suppl 1:S49-53.
- 4. Randall J Kaplan, Carol E Greenwood, Gordon Winocur and Thomas MS Wolever. Dietary protein, carbohydrate, and fat enhance memory performance in the healthy elderly. Am J Clin Nutr, Vol. 74, No. 5, 687-693, November 2001
- 5. Hamid R Farshchi, Moira A Taylor and Ian A Macdonald. Deleterious effects of omitting breakfast on insulin sensitivity and fasting lipid profiles in healthy lean women. Am J Clin Nutr, Vol. 81, No. 2, 388-396, February 2005.
- Pizzorno, Joseph, and Murray, Michael, N.D. Textbook of Natural Medicine 2nd Ed. Churchill Livingstone 1999
- 7. Eating breakfast may reduce risk of obesity, diabetes, heart disease. March 2003. Science Blog. http://science-

blog.com/1192/eating-breakfast-may-reduce-risk-of-obesity-diabetes-heart-disease/

- Wing RR, Phelan S. "Long-term weight loss maintenance," Am J Clin Nutr, July 2005, pp. 22S-5S
- Ma Y, et al. "Association between eating patterns and obesity in a free-living U.S. adult population." Am J Epidem, July 2003, pp. 85-92
- 10. Better cereal choices for kids? Some child-focused products are 50 percent sugar. Consumer Reports. November 2008. Found at http://www.consumerreports.org/health/ healthy-living/diet-nutrition/healthy-foods/breakfast-cereals/overview/breakfast-cerealsov.htm
- 11. Fallon, Sally, Enig, Mary Ph.D. Nourishing Traditions. The Cookbook That Challenges Politically Correct Nutrition and the Diet Dictocrats. New Trends Publishing. Washington, DC. 2005 (Deluxe ed), pp 25 and 486.
- 12. Ibid., p 25.
- 13. Pitchford, Paul. 1993. Healing with Whole Foods. North Atlantic Books. Berkeley, California, p. 184.
- 14. Morris ER. Phytate and dietary mineral bioavailability. Phytic Acid Chemistry and Applications, Graf E (ed). Minneapolis: Pilatus Press, 1986, pp. 57-76.
- 15. Pitchford, Paul. 1993. Healing with Whole Foods. North Atlantic Books. Berkeley, California, p. 233.
- 16. Braly, James. M.D. and Hoggan, Ron. M.A. Dangerous Grains. Avery 2002.
- 17. M. Doherty and R.E. Barry. Gluten induced mucosal changes in subjects without over small-bowel disease. Lancet. 7. 1981. 517-20.
- 18. Monastyrsky, Konstantin. Fiber Menace. The Truth About Fiber's Role in Diet Failure, Constipation, Hemorrhoids, Irritable Bowel Syndrome, Ulcerative Colitis, Crohn's Disease and Colon Cancer. Ageless Press, 2005, pp. 15-16 & 42.
- 19. Fallon, Sally, Enig, Mary Ph.D. Nourishing Traditions. The Cookbook That Challenges Politically Correct Nutrition and the Diet Dictocrats. New Trends Publishing. Washington, DC. 2005 (Deluxe ed), pp. 468-469.
- 20. Ibid., p. 478.
- 21. Mateljan, George. The World's Healthiest Foods, 2007 Choline, p. 745
- 22. Vander Wal JS. Egg breakfast enhances weight loss. Int J Obes (Lond). 2008 Oct;32(10):1545-51. Epub 2008 Aug 5.
- 23. Fallon, Sally, Enig, Mary Ph.D. Nourishing Traditions. The Cookbook That Challenges Politically Correct Nutrition and the Diet Dictocrats. New Trends Publishing. Washington, DC. 2005 (Deluxe ed), p. 197.
- 24. Crisafi, Daniel, ND, MH, Ph.D. Alive Magazine 1995.

COMMUNITY CARE

Community Care is a Canadian non-profit organization that serves the St. Catharines and Thorold, Ontario area with emergency services to those in need, specifically with food security. In the last three years, Community Care found that the amount of households requiring assistance was up by 30 percent and these households were in need of food basics. After receiving a generous donation from Pilar Bauta, a Weston A. Price Foundation member, Community Care was not only able to provide these additional households with the basics, but was also able to provide healthy, traditional, locally grown alternatives for these families.

The initiatives gave families the opportunity to have ground chicken, fresh vegetables, potatoes, sauerkraut, sourdough bread, and jars of honey. Plus, at Easter, two hundred families had access to a six-pound capon and this Christmas they had free-range turkeys. The new alternatives that were now available were very well received. Those in need of assistance were now able to find perishable food items on the shelves that were also healthy! The "Savoury Sample" volunteers were able to demonstrate several new recipes using these new ingredients. The most popular were the White Chili and the Herbed Chicken Loaf, all made with ingredients found at Community Care but with a locally grown and healthy twist.

While Community Care still encounters some challenges with providing local, traditional foods to their clients (for example,



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the farm eggs that were available were unable to meet public health standards) the CEO, Betty-Lou Souter, believes this initiative is sustainable. More funding is needed to keep these foods on their shelves but the new relationships made with local farmers have been incredibly valuable.



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Food Feature

STONEWARE: FOR THE BEST BAKING EVER! By Maria Atwood, CNHP

As a member and chapter leader of the Weston A. Price Foundation, I have made every effort within my means to return to food that is truly healthy, life-giving and unprocessed. I had previously spent an inordinate amount of time reading about and experimenting with diet after diet. During those years I avoided many of the wonderful baked dishes that I now enjoy with gusto. When I made the transition from lowfat, vegetarian and vegan eating to a traditional, whole food, full-fat lifestyle, I naturally rediscovered the wonderful foods my mother had made in her earlier years. I also remembered our good neighbors and family friends from my youth, the Italian farmers, Mr. and Mrs. Mello. Oh, the sweet smell and taste of the fabulous Italian bread baked in their outdoor stone oven was heaven on earth!

In my research and rediscovery of the many traditional foods eaten by our forebears, it was only a matter of time before I began to seek out the best cooking and baking vessels available as well, and found the marvelous warmth-giving quality of stoneware baking pans. Not only my food but also my ovenware has since undergone a complete transformation from top to bottom, and stoneware holds a special place in my kitchen, making it "the best baking medium ever."

Prior to my introduction to the fine product I'm currently using, I was not seriously interested in stoneware, because for one thing I'd heard that the major brands would, with time, turn blackish on the inside. Also there were the issues regarding the need to hand wash as they were not dishwasher safe, nor was I able to pre-prepare a dish, freeze it, and then take it straight from the freezer to the oven. Last but certainly not least was the ever-looming concern of toxic substances that I had heard could be part of stoneware and earthenware. I grew up in an era when we were cautioned not to eat from these types of dishes, as they are often made in other countries and potentially contain high levels of lead and other unregulated toxic substances. At the time I did not know the difference between earthenware and stoneware baking pans. No, instead I would just continue to use my cold, lifeless glass pans or some older metal ones that I had stashed away in my cupboard. But when I began the transformation of my diet to the healthy traditional foods of our ancestors, the memory of Mr. and Mrs. Mello and their masonry oven tugged at me and I looked again at stoneware cooking vessels. I have since learned of the safety, superiority, and earthy appeal of stone cookware. I now bake exclusively with stoneware, and encourage others to do the same.

VIRTUES OF STONEWARE

True stoneware, which has been vitrified during the firing process, is impervious to moisture. The silica in the clay fuses at extremely high firing temperatures, creating a strong, glass-like consistency. Stoneware has a reputation for being "hard as stone" and is nearly non-porous. Earthenware on the other hand is fired at lower temperatures, and the resulting vessels are less strong than stoneware and also quite porous. Baking techniques often require you to soak earthenware to allow it to absorb water which it releases as the dish cooks in the oven, producing moist, evenly cooked foods. You will find many examples of earthenware on the Internet and in cooking catalogs. Stoneware is better utilized in instances when you might otherwise use a glass or metal baking pan because what you are cooking does not need the "steaming action" of a soaked earthenware vessel.

The question of safety when using stoneware often comes up, and for good reason. As mentioned above, there has always been the possibility that it may contain lead or other toxic metal substances. Traditional Cook markets one of the finest American-made stoneware products available. All the raw materials used in manufacturing begin as naturally occurring soft clay,

The two major reasons why stoneware bakes so much better than glass or metal is due to its microscopically porous surface and the even heat distribution that stoneware so adequately provides.

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sand or stone composites that are removed from the mine site (land reclamation practices are in place), transferred to a processing plant where they are washed clean, blended, ground, sized, and packaged for shipping.

Firing is done in batches with natural gas at 2100 degrees Fahrenheit; the firing process takes approximately twelve hours to complete. Once fired the item is next subjected to a stringent quality assurance process, packaged, and shipped. They are guaranteed to be free of lead, cadmium, and other known carcinogens, assuring that when fired to a greater than 2100 degree temperature the finished products will maintain food-safe surfaces for the lifetime of the item. They also meet both the FDA and California Proposition 65 standards for food-safe surfaces.

The two major reasons why stoneware bakes so much better than glass or metal is due to its microscopically porous surface and the even heat distribution that stoneware so adequately provides. Because this microscopically porous material circulates the evaporated moisture from the food while baking, it naturally allows the food to bake crispier on the outside, such as would be the case with pizza crust. At the same time it helps retain the moisture in the interiors of baked foods such as casseroles, breads, pies and meats.

Another plus is that stoneware is stick-resistant thanks to the slightly rough surface, which decreases the actual surface area in contact with the food item, thereby reducing the area of contact that might adhere during baking. You may however use oil to coat your stoneware without any worry of reducing its efficiency or that it might bake into the stoneware and cause it to blacken over time. I love these unique features!

Foods baked in stoneware are therefore cooked as Mother Nature intended. Imagine your loaf of bread, apple pie or casserole baked in the warmth of stone that radiates the energy of the earth from which it came. The beauty of the piece is also an asset to any dining experience, as stoneware can be placed on the table with pride for your family and guests.

Not only is stoneware totally non-toxic, but also it will also go from freezer to a pre-heated oven at 400 degrees, is dishwasher safe, and requires no pre-seasoning. The fact that it does not require pre-seasoning, and can be safely put in your dishwasher means that while the product is used long term, it will still look fresh and new.

Stoneware, because it is more costly to produce, and is more durable and impermeable, will require that you spend a bit more than if you were to purchase mass-produced baking pans. That being said, the joy of using your stoneware will far outweigh the small cost difference. Based on this information, I became so enamored with stoneware for all my baking, that I finally decided not only to use it myself but also to make it available to others. Happy baking!

KEFIR PIZZA DOUGH For round 15-inch stoneware pizza stone

1 cup freshly ground whole wheat	3/4 cup kefir
3/4 cup unbleached white flour	1 teaspoon salt

This recipe uses kefir as the only liquid and only leaven. It is simply scrumptious! Mix flour with kefir and salt with a spoon until you can't anymore. Turn out onto a flat surface and knead until soft and pliable. Cover and set in a warm place until it has risen—this may take up to 24 hours depending on your home temperature. Punch down and shape into whatever you are baking. Adapted from *Kefir Flat Bread* (http://maria. fremlin.de/recipes/naan.html).

COCONUT BREAD

For 5 1/2-inch by 9-inch stoneware loaf pan

12 whole eggs	1 cup butter, slightly melted		
1/4 cup honey (optional or use less)			
1 teaspoon salt	1 1/2 cups sifted coconut flour		
2 teaspoons baking powder			

This bread is made with full fat coconut flour. It can be used much like regular bread, or in lieu of pound cake. The leavening comes from the eggs and baking powder, since coconut flour lacks gluten.

Blend together eggs, butter, honey and salt. Combine coconut flour with baking powder and whisk thoroughly into batter until there are no lumps. Pour into greased (I use coconut oil) stoneware loaf pan, and bake at 335 degrees in the middle of the oven for approximately 1 hour or until a toothpick comes out clean, and bread is nicely browned. Remove from oven, place stoneware on a rack, and allow the bread to cool completely in the pan. Turn pan over gently with one hand on top of the bread to allow the loaf to drop out gently. Adapted from *Cooking With Coconut Flour*, Bruce Fife, ND.

ALMOND FLOUR APPLE CAKE For an 8-inch by 8-inch square stoneware pan

1 cup finely chopped McIntosh apples 1/2 cup butter, softened 4 ounces softened cream cheese, preferably homemade
1/3 cup maple syrup (or to taste)
5 eggs, at room temperature
1 teaspoon vanilla
1 1/2 cups plus 2 tablespoons almond flour
1 teaspoon baking powder
1 1/2 teaspoons cinnamon
pinch of salt

Peel and core the apples, then chop finely. In a medium bowl, cream the butter, cream cheese and maple syrup. Add the eggs, one at a time, blending thoroughly. Mix the almond flour, baking powder, cinnamon and salt. Add to the egg mixture a little at a time. Gently fold in the apples. Pour into a greased stoneware pan. Bake at 350 degrees for 35-40 minutes or until toothpick comes out clean. The cake will be golden brown and firm to the touch when done.

CHILE RELLENO CASSEROLE For a 9-inch by 13-inch rectangular stoneware pan

8-9 eggs, beaten
1/2 cup raw whole milk
1 large can whole green chiles, sliced and seeded
1 pound Monterey Jack cheese, sliced
3 cups Monterey Jack cheese, shredded
Crushed red pepper, to taste

Thoroughly beat eggs and milk. Pour half of eggs into an oiled 9-by-13 inch pan. Top with half a can of whole green chilies sliced and layered over eggs. Cover with sliced Monterey Jack cheese. Repeat another layer of eggs, chili and top with grated cheese. Sprinkle crushed red pepper to taste over top and bake at 325 degrees for 40-45 minutes. Adapted from cooks.com

PEACH-WALNUT SPROUTED QUICK BREAD Stoneware loaf pan

2 cups sprouted whole wheat flour

1/2 teaspoon each baking power (aluminum free), baking soda and sea salt
1 heaping teaspoon cinnamon or apple-pie spices
2 beaten eggs (free range)
1/2 cup full fat yogurt
1/3 cup honey or maple syrup
1 cup chopped peaches
1 cup crispy walnuts (from Nourishing Traditions.)
2 tablespoons Rapadura or maple sugar

Mix flour, spices and salt together. In a small bowl mix the eggs, yogurt and honey or maple syrup. Mix the dry and wet ingredients and stir in the peaches and walnuts. Pour into a well-buttered loaf pan and

sprinkle the top with Rapadura or maple sugar. Bake at 350 degrees for 40 minutes, then test with toothpick or sharp knife. Bake another 15 minutes if toothpick or knife does not come out clean. This recipe takes 40-60 minutes to bake depending on your specific conditions. From Discussing NT Yahoo Group.

YOGURT HERB BREAD Stoneware loaf pan

3 cups freshly ground spelt, kamut or whole wheat flour
2 cups plain whole yogurt
1/2 cup filtered water
3 large eggs, lightly beaten
1 teaspoon sea salt
2 teaspoons baking soda
1/4 stick melted butter
1/3 cup maple syrup
1 teaspoon dried dill
1/2 teaspoon each dried oregano, thyme, basil and tarragon

Mix flour with yogurt and water, cover and leave in a warm place for 12 to 24 hours. Bread will rise better if soaked for 24 hours. Place flour mixture in food processor and process for several minutes to knead the dough. Add remaining ingredients and process until well blended. Pour into a well buttered and floured loaf pan (preferably stoneware).

Bake at 350 degrees for at least 1½ hours, or until a toothpick comes out clean. From *Nourishing Traditions*, page 484.000

Maria Atwood, CNHP, is a certified National Health Professional, traditional foods teacher and natural health advocate. She is also the WAPF chapter leader in the Eastern Plains of Colorado. Her specialty is teaching others the benefits of nutrient-dense and traditional foods. In order to help support the chapter, she has also produced a 90-minute DVD and written a "Tell Me More" booklet describing how to make some of the world's most nourishing foods based on the cookbook Nourishing Traditions. She resides in Colorado Springs, Colorado and her products, including Stoneware, can be found at www. traditionalcook.com.
SOY TO THE WORLD: HOLIDAY WISHES FROM WHOLE FOODS MARKET By Kaayla T. Daniel, PhD

This past holiday season Whole Foods Market offered customers gift boxes and certificates brightly printed with the wish "Soy to the World." Whole Foods Market, of course, perceives soy foods and soy milk—particularly modern packaged and processed soy products—as a major profit center. Soy also fits nicely within CEO John Mackey's vegan agenda and his promotion of soy as the ticket to personal and planetary health. Sadly, soy to the world will not bring joy to the world this holiday season or any other.

The word "soy," however, fits Whole Foods Market very well. As coined in the new urban lexicon (see sidebar "Talking Tofurky") "soy" is streetwise lingo for something false, of poor value, or just not what it seems. That pretty much sums up a whole lot of the phony baloney, pseudo-organic products that Whole Foods sells. Indeed a whole lot of what this chain preaches is out of integrity with what it practices.

GREENWASHING

Heard of whitewashing? The variant found at Whole Foods is known as "greenwashing." The chain put green leaves on its logo, prominently displays environmentally correct "core values," and gives mouth service to sustainability, yet engages in numerous practices that are environmentally unfriendly.

"Bagging it," for example. Whole Foods encourages us to bring our own bags to save the environment and gives bag credits to local charities. Eco consumers feel good about this, but what about all those highly processed and overly packaged foods toted home in them? Soy good to know that not one of those pricey crackers or cookies will crack or crumble. As for those sturdy plastic boxes, they'll survive for years in the landfills.

SOY LOCAL OR SOY LOCO

Whole Foods talks the good talk about supporting local farmers and in fact is one of

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its conspicuously displayed "core values." But walk down the aisles and almost everything comes from somewhere far away. Where were all those little soybeans milked to produce soymilk? Where did they catch those tofurkies? Where did those fruits and vegetables grow? California, Mexico, Chile, India? Not soy often in our own backyard.



How do local farmers feel about Whole Foods Market? Many mutter "Soy loco" ("I am crazy") under their breath whenever they give in and sell to Whole Foods. Farmers who expect a fair wage for their hard work can rarely sell to Whole Foods given the chain's aim to buy dirt cheap and sell sky high.

SOY GREEN

More rain forest acres are destroyed for soybean crops than for raising beef cattle, yet soy is touted as green for the environment. Most of the Midwest has been destroyed by the monocropping of three vegan staples: corn, wheat and soy.

SOY GENEROUS

"Soy to the World" means planeloads of soy products donated to survivors of famines and natural disasters. Seems benevolent, but there's more to this than good PR. Disaster relief builds global business by making the world's people dependent upon imported soy and other industrially grown, processed and packaged products. Such "charitable" practices undermine local farmers and cottage industries and wipe out indigenous crops.

SOY EGALITARIAN

Equal opportunity poor health. Yuppie vegans at one end of the spectrum pay premium prices for health-destroying soy foods. Poor people eat donated soy from relief packages. The results for both are malnutrition, digestive distress, thyroid disorders, reproductive problems, ADD/ADHD, allergies, even heart disease and "Soy" is streetwise lingo for something false, of poor value, or just not what it seems.

Wise Traditions

15TH SOY SYMPOSIUM – ADAPTING TO NEW MARKET FORCES November 11, 2010 in Washington, DC

Hosted by the United Soybean Board and the Soyfoods Association of North America, the 15th Soy Symposium included company executives, soy bean farmers, policy influencers (including Dan Glickman former, U.S. Secretary of Agriculture and Chairman of the Motion Picture Association of America), journalists (including Sally Squires, former medical and health writer for the *Washington Post* and Jia Lunn Yang, financial writer for the *Washington Post*), industry representatives, academics (including Brian Wansink, former Executive Director of the USDA's Center for Nutrition Policy and Promotion), chefs and former Olympic gold-medal gymnast, Dominique Dawes, who was the featured lunch speaker.

The event was billed as a conference to "examine how food companies are adapting to four primary forces—health, economics, global marketing and sustainability." The take-away points from the discussion were primarily ideas and strate-gies to get more consumers eating more soy food products.

To the credit of conference organizers, attendees really did dine on soy foods, rather than salmon and shrimp as in previous conferences. The menu featured mini tacos made with TVP, tofu dip, beef and soy sausage, soy nut cookies, soy yogurt, soy milk, Caesar dressing made with soy milk, black soybean chili, and tofu chocolate almond mousse.

In his opening remarks, Dan Glickman shared the story about how he told the theatre industry to use soybean oil instead of coconut and palm oils in movie popcorn. He praised the "bridge builders" like Hubert Humphrey, George McGovern and Bob Dole, who ushered in mega-corporate farming and helped formulate the dietary guidelines, based on the products of commodity agriculture. He stressed the need for more of the same to feed the world's growing population and lauded the soybean industry's role in shaping "nutrition" policy, especially in public schools.

The keynote address by Brian Wansink, PhD set the context for discussion by clearly defining who the industry should and shouldn't be focusing on with respect to soybean consumers. He gave as an example the success soymilk producers experienced by targeting lactose-intolerant consumers. He further discussed looking at a triangle representing all the people in the United States: At the top of the triangle are "soy-seekers." These people love soy, look for soy in products and are huge champions. At the very bottom of the pyramid are the people who are "indifferent" to soy for whatever reason. It could be they don't care, they are uninformed, or some other reason. The middle segment of the triangle represents the "nutrition pre-disposed"—not towards soy in particular, but towards healthy food in general. Wansink stated this is the segment the industry should focus on, as there is tremendous potential there. One of the problems in the industry, he said, is that people have focused too much on the top part of the pyramid and everyone is trying to get a piece of this tiny pie. The strategy for marketing to the pre-disposed segment is two-fold: Come up with a great idea that works for a lot of people (even if not all), and then after that find a ripple effect that works for others.

In a moment of honest revelation, Wansink spoke about the disappointment throughout the industry when highly anticipated health claims about the benefits of soy did not yield high sales for soy products, with the exception of soy milk. He suggested that the government promote soy products the way it promoted organ meats during World War II, as something good for you and good for the nation. He also suggested that marketing strategies target "nutritional gatekeepers," that is chefs and family cooks interested in nutrition. Wansink further noted that as health claims failed to convince the population that soy was the magic bullet fifteen years ago, the opportunity for soy today is with the obesity challenge and the new dietary guidelines. Specifically, soy should be promoted as a solution to overweight by marketing it as a healthy substitute to meat and dairy products.

Other speakers discussed how soy products will help meet U.S. dietary guidelines, with its renewed emphasis on plant-based diets; noted that the soy industry is working on production of novel varieties of high oleic soybean oil low in saturated fat; stressed the marketing of soy as a complete protein, perfectly appropriate as the only protein source for infants, children and adults; promoted the use of "stealth health" as opposed to "muscling" in change to force dietary changes (that is, sneak soy into common food products); speculated on how to remove the allergens from soy; and figure out what to do about the fact that soy doesn't actually taste very good.

One panelist was asked: "How do you counter negative data from wackos on the internet?" The answer: don't add to the debate with more data because the "data is irrelevant." People will believe what they want to believe regardless of truth. Effective marketing is the ultimate solution. The soy industry should "cultivate the root as opposed to fertilize the leaves" which means targeting children. The panelists agreed that Rachael Ray needs to eat a soy burger!

Interestingly, motivational speaker Dominique Dawes, a Silver Spring, Maryland native, confessed that as a child one of her favorite foods was chitterlings—which she ate by the plateful. It was one of many home-cooked "soul-food" dishes prepared by her mother. She also ate home-cooked foods during her career.

Thus the conference danced around the key problems with immensely profitable, highly fabricated soy foods—they are toxic and they taste terrible. A full report of the conference by a WAPF member, who attended and sat quietly in the back of the room, will be posted at the end of this article at westonaprice.org.

cancer. Soy to the world.

Meanwhile, John Mackey, Whole Foods CEO, likes to be seen as just a regular Joe. He earns only fourteen times the salary of his average "team member," after all. While other corporate executives doubtless take home far bigger paychecks, Mackey's "talking tofurky" here. If he were an executive who "talks turkey," he would admit to also earning millions in stock options. He might also be sensitive to the fact that his store is widely mocked as "Whole Paycheck Market" because its extreme markups make it soy overpriced for the average consumer.

SOY ORGANIC

Whole Foods sells only organic soybeans, right? That's what they say, but it took months and an embarrassing exposé by the Cornucopia Institute—before just some of the Silk products made with commercial soybeans were removed from the shelves. Similarly, Whole Foods has sold a whole lot of veggie burgers, energy bars, and other "organic" products made with soy protein isolate and other ingredients processed using hexane solvents. Cornucopia also exposed that, but you read it first in *The Whole Soy Story*.

Elsewhere in the store, pseudo organic reigns. Consider factory-farmed "organic" Horizon brand milk and butter. As for produce, the artful displays conflate organic and commercial. And if the internet postings of disgruntled Whole Foods "team members" can be trusted, much-if not all-of it is cleaned with non-organic cleaners. Seems the organic cleaners are brought out when the inspectors come in. Shoppers who aren't careful may go home with commercial produce just like that found at the supermarket down the block but at a substantially higher price. Whole Foods Market carefully crafts the illusion that it sells organic, but far more of what it sells is "natural"-whatever that means-or even commercial.

SOYLED HEALTH CLAIMS

Is soy the "miracle bean" that can cure everything from cancer to ingrown toe nails? Whole Foods would certainly like us to think so. Similarly, consumers who buy baked and deli goods at Whole Foods are almost always con-oiled, though canola is increasingly replaced by soy oil, which, if anything, is even worse.

Hemp, chocolate, or agave, anyone? Health claims for any of these are very "soy," that is, not what they seem. Agave nectar, for instance, is tricked out high fructose corn syrup. Chocolate-covered soy nuts are surely the "tofurky" of snacks. Most sanctimonious of all is Whole Foods' promotion of vegan goods with a green smiley face and the slogan "I'm vegan!"

STEPFORD FOODS

All the onions are exactly the same size. Big, round and heavy! All the apples, too. Never saw anything like that in my own garden or orchard. Yet Whole Foods gives us row after perfectly presented row of produce. Bland, but pretty-faced, immaculately clean, blemish free, perfectly made up and not one strand of hair out of place, these are the Stepford wives of the fruit and vegetable kingdom. I guess Whole Foods thinks Stepford foods provide a stress-free shopping experience. No need to choose. Perfect for the shopper in Calvin Klone jeans.

SOY LATTE

The Urban Dictionary defines "soy latte" as something overpriced and pretentious, especially something that tastes good initially but leaves a bad taste in one's mouth. Seems to me that sums up Whole Foods Market awfully well. $\bigcirc \bigcirc$

Kaayla T. Daniel, PhD, CCN is known as The Naughty NutritionistTM because of her ability to outrageously and humorously debunk nutritional myths. A dynamic speaker and seminar leader, Dr. Daniel challenges and entertains her audiences on topics such as "Naughty Nutrition," "Empowering Fertility" and "Juicy for Life," and offers leading-edge information on clinically proven ways to prevent and reverse disease and attain optimum health. She is author of The Whole Soy Story: The Dark Side of America 's Favorite Health Food and won the Weston A. Price Foundation's Integrity in Science Award in 2005. Dr. Daniel does nutritional consultations by phone and in office. Visit her websites www. wholesoystory.com and www.naughtynutritionist.com, email her at kaayla@drkaayladaniel. com or call 505-266-3252.

Whole Foods has sold a whole lot of veggie burgers, energy bars, and other "organic" products made with soy protein isolate and other ingredients processed using hexane solvents.

TALKING TOFURKY

Eager readers want to know how to incorporate the "health benefits" of soy into festive dinners. As the Naughty Nutritionist[™], I suggest we not *eat* soy during this or any other holiday season, but instead *speak* it. In other words, let's talk tofurky. Given that laughter is the best medicine, I present a baker's dozen of soyspeak examples found in, or inspired by, the Urban Dictionary (www.urbandictionary.com).

SOY: Short for soybeans, soy foods, or soy products. Something ersatz, poor quality or otherwise lacking good value. "Man, that joke was soy!"

TOFU: Soybean curd. Something that seems fine at first, but turns out to be ersatz or cheaply made. "Dang. Got my Tiffany diamond appraised and found out it was tofu."

TOFURKY: A mound of pseudo turkey made of tofu and other interesting ingredients. Something bland and boring that has been tricked out to seem hip, cool or funky. "It's a tofurky of a house—particleboard box iced with Corinthian columns, gables, griffins and a red tile roof."

GOING COLD TOFURKY: The action of a vegan who gives up a habit or addiction at a single moment, rather than gradually. "I'm addicted to Facebook. Gonna have to go cold tofurky."

TALKING TOFURKY: To use a ten dollar word or phrase when a one dollar one will do. For example, using "ambulate" rather than "walk" or "at the present time" instead of "now." "Am I just dumb or is my boss 'talking tofurky' when he orders me to 'validate support strategies for customer satisfaction parameters?'"

SOYMANELLA: Food poisoning from contaminated Tofurky or other soyfood product. "Can't go shopping today, sweetie. Got soymanella at that Thanksgiving potluck."

SOY LATTE: Overpriced and pretentious. "She wears Gucci socks to work out! How 'soy latte' of her!"

VEG'N: Alternative spelling of vegan. Diet said to bring one to G*d . A loving, inclusive term that unites vegans and vegetarians rather than emphasizes their five letters of separation. "Oh my G*d, I'm a veg*n."

VEG@N: Alternative spelling of vegan. "Why do you spell it veg@n instead of vegan?" "Cuz it's where it's at. Veg@n looks so cool!"

TOFU FRIENDS: Friends who act like the people they are with. Bland nondescript friends who can change their flavor at will. "He's a WAPFer at home but a tofu friend with the girls on campus."

SOY VEY: Expression used by people who get so frustrated trying to talk with their vegan friends that they throw up their hands and walk away. "Soy vey, Jack. Enough already."

TURKEY IN TROUBLE: Game played on vegans attending Thanksgiving dinner, in which the cook hides a little squab or cornish hen along with stuffing in the turkey cavity. "We played 'Turkey in Trouble' on poor Chandra. She'd learned nothing about turkeys laying eggs at her 'soy latte' college and started screaming when she found we'd roasted a 'pregnant' turkey!"

SOYBEANS: Vegetable legume processed into tofu, tofurky, and other food-like products and marketed as a unique agent able to effect miracle cures. "So many claims are made for soybeans that you just want to bang your head against the wall while reading about them."

Kaayla T. Daniel, PhD, CCN

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Legislative Vpdates

THE FOOD SAFETY BILL PASSES: WHAT DOES IT MEAN? By Judith McGeary, Esq.

People inside and outside the Beltway had trouble keeping up with the many procedural turns taken by the FDA Food Safety Modernization Act. In the end, the bill was voted on twice by the Senate and three times by the House. President Obama signed it on January 4, 2011.

The final bill gives FDA mandatory recall power and directs the agency to inspect facilities at least every five years. Some have lauded these as important improvements, particularly in light of the complete lack of inspection of the Wright County egg facilities or the Peanut Corporation of America's Texas plant. But the bill does not ensure that FDA will use that recall or inspection authority responsibly. It does nothing to address the revolving door between the agency and industry, epitomized by Michael Taylor's current position as FDA's food czar following his work for Monsanto. Nor does the bill address the underlying causes of most food-borne illness, namely the practices of the CAFOs and industrialized agriculture production and processing systems. These fundamental flaws make it far too likely that the bill will do little to actually improve food safety.

FREE REIN FOR FDA CAPRICIOUSNESS

Indeed, the bill increases FDA's ability to act unfairly and arbitrarily by lowering the standard for "administrative detention," whereby FDA can stop food from being moved or sold for a period of time. The previous standard required FDA to have "credible evidence" that the food posed a "threat of serious adverse health consequences." Under the Act, FDA now merely requires "reason to believe" that the food is "adulterated or misbranded," which could include such things as incorrect labeling. FDA already detains food on flimsy grounds, so this change may not make a major practical impact. But the Act's new standard makes it easier for the agency to defend these detentions. In addition, the Act gives FDA the power to levy fees for such things as re-inspection of a facility, giving FDA new powers to harm facilities it doesn't like simply by finding minor problems and requiring multiple re-inspections.

LARGE OPERATIONS FAVORED

The bill's extensive new requirements for food producers, particularly the produce safety standards and hazard analysis plans (similar to HACCP), favor large-scale industrial producers over small-scale sustainable producers. Senator Tester of Montana fought for an amendment, co-sponsored by Senator Hagan of North Carolina, to exempt local food producers from these portions of the bill. In the final amended bill, producers who gross under half a million dollars (adjusted for inflation) and who sell more than half their products directly to individual consumers or to "qualified" retailers and restaurants are exempted from the produce safety standards and hazard analysis plans. "Qualified" retailers and restaurants are those that are either in-state or within two hundred seventy-five miles of the producer; there is no geographic limit on sales to individual consumers.

The Tester-Hagan amendment was essentially damage control. Given the overwhelming public pressure to pass a food safety bill, it was imperative to get an amendment to prevent the bill from crushing small local producers. Even with the amendment, the bill poses problems for the local foods movement. In addition to the lowered standard for administrative detention discussed above, the bill will impose extensive new regulations on medium-scale producers. But the amendment succeeded in carving out a sphere of protection for the most vulnerable, small-scale business, keeping them alive to fight the next fight. Judith McGeary is the Austin, Texas Chapter Leader, an attorney and small farmer in Austin, and the Executive Director of the Farm and Ranch Freedom Alliance. She has a B.S. in **Biology from** Stanford University and a J.D. from the University of Texas at Austin. She and her husband run a small grass-based farm with sheep, cattle, horses, and poultry. For more information go to www.farmandranchfreedom.org or call 1-512-243-9404.

PRECEDENT FOR SMALL, LOCAL PRODUCERS

The Tester-Hagan amendment also goes beyond damage control by setting an important precedent, namely that local food producers selling directly to consumers are different, and should be regulated differently, from the mainstream conventional food system. This should be an obvious concept, but it has never before been recognized by Congress. The importance of this precedent can be seen in Agribusiness's reaction. Major industry organizations that had supported the food safety bill for over a year opposed the bill as soon as the Tester-Hagan amendment was included. These groups attempted to use every delay as an opening to strip the amendment back out, failing only because of the grassroots support for the amendment. The Agribusiness reaction complicates citizens' ability to hold their Congressmen accountable. Some people have assumed that a "no" vote on the food safety bill means that their Congressperson was listening to the grassroots and opposed new FDA regulation. However, many members of Congress who voted against the final bill did so because they were listening to the Agribusiness interests. So take care and don't assume that your Congressperson is an ally or an enemy based solely on whether he or she voted "yes" or "no" on the bill.

MORE WORK TO BE DONE

Agribusiness's control of Congress and the agencies developed over the course of several decades, as more and more family farmers were lost to consolidation and consumers became more disconnected from the sources of their food. It will take a lot of time and work for the local foods movement to reverse this trend. In the coming year, Congress will be determining the FDA's budget, while the FDA begins the rulemaking process to implement the food safety bill, and it is critical that the grassroots stay active and involved. We must take the principle recognized in the Tester-Hagan amendment and stated by Senator Tester—that our farmers are growing food, not commodities—and build on it to recapture control of Congress and the agencies.

FREQUENTLY ASKED QUESTIONS

Disclaimer: The comments below are my interpretation of the likely application of the bill and are NOT intended as legal advice. The application of the Act in practice will be significantly impacted by the FDA's rulemaking process.

Q: I sell grass-fed beef/ grass-fed lamb/ pastured pork. Will I face new regulations under the Act?

A: No. The Act applies to FDA, not the USDA. Meats are regulated by USDA.

Q: I have a backyard garden where I grow food for myself and my family. Will I be regulated under this Act?

A: No. If you do not sell any food, you are not subject to the Act. [Note: FDA theoretically has power over even non-commercial activities, due to the Supreme Court's decision in Wickard v Filburn. But this Act does not apply to that level.]

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Q: I grow and sell fruits and vegetables. What new regulations will I face?

A: If you do not qualify for the Tester-Hagan amendment, you will be subject to the produce safety standards that FDA will develop. The proposed standards will have to go through the rulemaking processes, during which the public will have a chance to comment. To determine whether you qualify for the Tester-Hagan amendment, answer these questions:

- 1. Do you gross under \$500,000 annually from the sale of food products? (Note: the gross sales limit is averaged over three years, and will be adjusted for inflation.)
- 2. And do you sell more than half of your products to some combination of:
 - a. Individual consumers (regardless of where they are located);
 - b. Restaurants that are in the same state as your farm or within two hundred seventy-five miles of it; and/or
 - c. Retailers (such as co-ops, health food stores, and grocery stores) that are in the same state as your farm or within two hundred seventy-five miles of it. Note: both the restaurants and the retailers must in turn sell directly to consumers. In other words, to be a qualifying sale, your farm must be no more than one step removed from the consumer.
- 3. If the answer to both questions is "yes," you are exempt from the produce safety standards.

Q: I make value-added products such as jams, jellies, breads, cheeses, dried fruits, lacto-fermented vegetables. What new regulations will I face?

A: Unless you are a "retail food establishment" or a "qualified facility" (see next paragraph), you will have to comply with the FDA's new regulations for Hazard Analysis and Risk Control Plans (HARCP). This requires you to develop a written analysis of known or reasonable hazards; identify and implement preventative control; establish alternative correct procedures; verify through documents, periodic monitoring and reanalysis; and keep records to document the monitoring, compliance, testing results, corrective action, and efficacy. The HARCP is subject to FDA review and approval.

If you are a retail food establishment or a qualified facility, then you will be exempt from the new HARCP requirements. Here's how those categories are determined:

- Do you sell more than half of your products directly to individual consumers (not businesses)? The sale can occur either at the same location where you make the food or through a farmers' market, farm stand, or CSA. If yes, then you are a "retail food establishment." Retail food establishments do not have to register with the FDA nor are they subject to the new HARCP-type requirements. You still may face inspections by FDA if you engage in interstate commerce, as was the case even before the Act.
- 2. If you are not a retail food establishment, the next question is whether you are a "qualified facility."
 - a. Do you gross under \$500,000 annually from the sale of food products? (Note: the gross sales limit is averaged over three years, and will be adjusted for inflation.)
 - b. And do you sell more than half of your products to some combination of:
 - i. Individual consumers (regardless of where they are located);
 - ii. Restaurants that are in the same state as your farm or within two hundred seventy-five miles of it; and/or
 - iii. Retailers (such as co-ops, health food stores, and grocery stores) that are in the same state as your farm or within two hundred seventy-five miles of it. Note: both the restaurants and the retailers must in turn sell directly to consumers. In other words, to be a qualified sale, your facility must be no more than one step removed from the consumer.
 - c. If the answer to both questions is "yes," then you are a "qualified facility." You still must register with the FDA due to the require-

ments of the 2002 Bioterrorism Act. But instead of having to do a HARCP, you may instead provide (1) documentation showing you meet the elements for a qualified facility; and (2) proof that you comply with applicable state and local laws. This could include such things as your commercial kitchen or food handler's license. If you choose, or if absolutely no local or state laws apply, then you must submit a simplified hazard analysis plan.

Q: What happens next?

A: First, Congress will have to decide how much money to appropriate for FDA to implement the Act. The estimate for full implementation is \$1.4 billion, while some members of Congress are threatening to provide absolutely no funding. The final result will almost certainly be something in between.

Second, FDA has to go through the rulemaking process to implement most of the provisions of the Act. Since the agency was already working on produce safety standards, those are likely to be proposed relatively quickly. The majority of the other regulations are supposed to be proposed within eighteen months. The agency will provide notice of the proposed regulations in the Federal Register and the public will be able to submit comments. So keep an eye out for action alerts!



MARION PATRICIA CONNOLLY, PPNF Curator May 6, 1926 – November 18, 2010

Marion Patricia Connolly, or Pat, as she preferred to be called, passed away on November 18, 2010 . Her dedication to promoting the works of Weston A. Price, DDS, Francis M. Pottenger, Jr., MD, and many other nutrition pioneers kept the candle of knowledge burning at the Price-Pottenger Nutrition Foundation and around the world for over forty-five years. Her lectures and presentations have reached and influenced countless others, who have changed their lives by embracing these teachings. Her greatest desire was that this research be preserved and made available for both this generation and those to come. Thanks to her tireless efforts, Weston Price's book *Nutrition and Physical Degeneration* has been constantly in print since Dr. Price' death.



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

A Campaign for *Real* Milk FDA AND USDA: CHEESE IS SERIOUS! By Steve Bemis, Esq.

I've been wondering, why does one part of the USDA promote cheese consumption while another says it's an unhealthy source of too much fat? As I ponder, I assume USDA has thought about the conflict at a policy level (maybe too generous, but safer than assuming they don't think), and I imagine the decision: "Hell, promoting more cheese on pizzas means megabucks to big dairy, so go for it. Never mind the health impacts which we also warn about, since anyone eating this kind of cheese-thick food won't change their behavior anyway. Sure, foodies will jump on us for the conflict, but that noise will blow over and the megabucks will still roll in for the industry."

And what may this focus on cheese have to do with raw milk? Is there any connection between this exuberant USDA cheese marketing and recent FDA crackdowns on artisanal cheese makers?

THE FRACTIONALIZATION GAME

Cheese is made from milk; milk's fractioning, in turn, is the foundation of this country's dairy industry. Milk, milkfat, skim milk powder and other fractions of milk are processed into cheese, butter, ice cream, yogurt, kefir and other industrial components which are ubiquitous in processed and ultra-processed foods. "Skimming the cream" from milk is extremely important economically. Since different cows produce milk with different proportions of milkfat, standardized portions of the removed cream are dialed back in (or not, in the case of the aptly named skim milk), and 1/2 percent, 1 percent, 2 percent and "whole" milk products are created. The rest of the cream goes into premium milk products like ice cream.

At this point a bit of history may help: Michigan was the first state to require milk pasteurization in 1948. The story of pasteurization is typically told as a rush during the 1940s and 1950s to adopt a pathogen-destroying, healthpreserving technology; it was not, however, that new. Pasteur had discovered the process (initially for wine) more than eighty years earlier, and it had been feasible to pasteurize milk on an industrial scale for more than sixty years. Was there some other compelling reason for this sudden rush to pasteurize, which overwhelmed the Medical Milk Commissioners' certified raw milk? I submit there was more to the story than the campaign waged by the wealthy Nathan Straus and others to adopt the technology.

WHY PASTEURIZATION?

There are, as we've seen, powerful economic incentives to industrialize milk and its constituent fractions. Those old enough will remember the years prior to and after WWII with retail milk competition based on the "cream line"-the more cream your milk had, the better. The cream line permitted customers to see how "rich" your milk was in comparison to the competition. Marketing had intensified-even the narrow-neck shape of old milk bottles forced the cream up and made it look like there was more of it. This kind of competition wasn't good for the industry: producers were being forced to supply more of the most economically valuable portion which was being wasted, compared to what the cream could bring in premium products.

Homogenization, which effectively removes the cream line, solved this problem. First the cream is removed, and some is dialed back in to create the familiar milkfat "grades" (1/2 percent, 1 percent, 2 percent and whole). Then, the milk is homogenized, so that even these adjusted grades have no cream line to show the consumer how little remains.

Technically, what happens during homogenization is the milk is forced through tiny orifices at thousands of pounds per square inch, which knocks down the size of milk's fat globules. When these globules are broken down so small that they cannot re-coalesce, the cream no longer rises and the cream line disappears. An additional benefit of homogenizing was to extend shelf life by preventing the cream from congealing and clumping after several days on the shelf. Thus, marketing appealed to consumers' distaste for clumpy milk, to their wish for longer shelf life, and, of course, led to the emphasis on the supposedly healthy aspects of these new "low fat" products.

The catch is that homogenized milk with no further processing will go rancid within a matter of hours. The much smaller fat globules have many times the surface area of the larger globules. If left untreated, the enzymes in the liquid phase of homogenized milk will immediately start breaking down the now-very-tiny fat globules because the protective elements which were sufficient to cover the large globules are spread too thin to adequately protect the vastly increased surface area with the many small globules created by homogenization.

How to fix this and save the economic benefit realized by "skimming the cream" and then homogenizing? The answer is to pasteurize the milk, since pasteurizing kills off the milk's liquid phase enzymes so the milk won't go rancid.

Hence, once the dairy industry took the homogenizing step to follow the dollars, it *had* to pasteurize. And the industry will have to stick with the gospel of pasteurizing, since their current economic structure requires it.

(It is important to note that the opposite is not true: once pasteurized, milk does not then need to be homogenized. Pasteurized milk is obviously no longer raw, but the few dairies that are not afraid to compete on cream line should also be supported whenever possible—it's where I go if I can't get raw milk. There is some argument that homogenization—which subjects the milk to extreme pressure and heat—is itself very damaging to milk; thus non-homogenized milk is more nutritious and less damaged, even if it has been pasteurized.)

NEW TACTICS

Although all this is not news to some, nevertheless I think it fleshes out how economics undergirds the gospel of pasteurization. Does raw milk have risk if contaminated? Sure, as does any contaminated food. Is contamination of raw milk a huge red herring keeping our eyes off a far more important reason for pasteurizing milk? I'm beginning to think so.

It is now clear that FDA's current campaign against artisanal cheese makers, together with USDA's considerable interest in supporting cheese (a keystone product in the industrialized dairy pantheon), signal an important new emphasis in the government's anti-raw-milk dogma. During recent years FDA has beat the drums of fear about pathogen contamination in raw milk. Essentially a campaign of fear, FDA's focus on fluid raw milk can only be viewed as a failure. Raw milk consumption continues to surge; FDA's interstate ban is under legal attack; and FDA's dogma is regularly being shown to be inconsistent, illogical and unscientific-an embarrassing and ever-deepening quandary in which the agency finds itself due to its steadfast refusal even to hold a dialogue on the subject.

CHEESE IS SERIOUS

Block cheddar cheese is a principal USDA baseline for pricing and dairy support in a byzantine system riddled by lack of transparency, scandals and even litigation among market players. FDA tactics that now emphasize cheese can mean only one thing: The ante is upped; we're talking many millions of dollars simply for more cheese on pizza, in a total milk market measured in multiple billions. For an industry built on the altar of fractionalizing and homogenization, which require pasteurization, the bottom line is simple: cheese is serious, and must be protected at all costs from the inroads of raw products that thumb their noses not just at homogenization, but at the economic lynchpin, pasteurization.

Steve Bemis is a retired corporate attorney and farms hay in Michigan for local farmers. For the last several years, Steve has worked with the Farm-to-Consumer Legal Defense Fund advocating for greater access to local foods, especially raw milk. He is a founding Board Member of the Fund and also serves on the Farm-to-Consumer Foundation Board.

The dairy industry will have to stick with the gospel of pasteurizing, since their current economic structure requires it.

STATE RAW MILK LEGISLATION UPDATE by Pete Kennedy, Esq., President, The Farm-to-Consumer Legal Defense Fund

A number of raw milk bills have been introduced in the state Houses in the current legislative session. What follows is a state-by-state summary of the bills that have been (or are about to be) introduced.

IOWA – A bill will be introduced shortly that will allow the sale of raw milk and raw milk products to individuals on the farm and through delivery by producers. Dairy farmers selling under the bill would be subject neither to licensing nor inspection. State law currently prohibits any sale of raw milk and raw milk products other than cheese aged sixty days or more.

MASSACHUSETTS – Legislation has been introduced that would allow licensed raw milk farmers to deliver raw milk directly to the consumer off site from the farm. The farmer would also be able to contract with a third party to deliver raw milk to the consumer. Current law allows only the on-farm sale of raw milk by licensed farmers. In the last year, the Massachusetts Department of Agriculture and Resources (MDAR) has threatened enforcement action against buyers clubs that have sent agents out to the farm to pick up raw milk for club members. A second bill, the cowshare bill, would establish the right of those who have a partial or complete ownership interest in a dairy animal to legally obtain milk from that animal for the owners' own personal use. The bill was introduced in response to a recent threat by MDAR that it would take action against farmers operating cow- or herd-share programs.

MINNESOTA – Current statute allows the sale of raw milk and cream "occasionally secured or purchased for personal use by any consumer at the place or farm where the milk is produced"; this is in conflict with the Minnesota Constitution which provides that one may sell or peddle the products of the farm occupied and cultivated by that person. A bill has been introduced that would rectify the inconsistency. HF255 (and companion bill SF147) would allow direct farm-to-consumer sales and delivery of raw milk and raw milk products such as cream, butter, yogurt and cheese on a regular basis. Delivery would also be allowed by either the seller's or buyer's agent and could take place at farmers' markets, farmstands or designated delivery sites among other locations. In the past year, the Minnesota Department of Agriculture (MDA) has cracked down on the delivery of raw milk, even executing a criminal search warrant at a consumer's residence where delivery took place.

NEW JERSEY – Assembly Bill 743 (and companion bill S-2702) would allow the sale of raw milk and raw milk products (such as yogurt, kefir, butter, cream and cheese) by a licensed dairy either directly to consumers or to retail stores. The bill also states that if a farmer and the consumer enter into a contract for shared ownership of a cow, no raw milk permit would be required. Current law prohibits the sale of raw milk and raw milk products except for cheese aged sixty days or more. The bill has been voted out of the Agricultural and Natural Resources Committee and is going to the full Assembly for a vote.

OREGON – House Bill HB 2222 would allow the licensed sale of raw milk and raw milk products directly to consumers and to retail stores. Current law allows the unlicensed sale of raw milk on the farm by dairies with no more than two producing dairy cows, nine producing goats or nine producing sheep. The new bill would not affect this microdairy exception.

TENNESSEE – House Bill 898 seeks to clarify Tennessee's "cowshare" law. The bill simply states that no law "shall be construed as prohibiting the independent or partial owner of any hooved animal from using the milk from the animal or a dairy product made from such milk for the owner's personal consumption or other personal use." Current law provides that the milk from the animal can be used for the owner's personal use but does not mention the right to have that milk processed into other dairy products.

TEXAS – HB 75 would expand the venues where licensed dairy farmers can sell raw milk and raw cheese aged sixty days or more. Currently, licensees can only sell raw milk on the farm. The new law would enable the farmer to sell directly to a consumer at the consumer's residence or "any other location where producers customarily sell their products directly to consumers" (such as at farmers' markets, farmstands). DairyMax, a regional dairy promotion organization, violated the law by running ads attacking raw milk to discourage support of the bill. Federal law only allows dairy check-off fees to go toward promoting milk and milk products.

WASHINGTON – Legislation has been introduced that would exempt from regulation on-farm raw milk sales if the farm has no more than two producing cows, nine producing goats, or nine producing sheep. Current law allows the sale of raw milk only by licensed dairies.

WISCONSIN – Legislation is set to be introduced that would allow the on-farm sale of raw milk and raw milk products by Grade A dairies and by unlicensed dairies if the farm is milking fewer than twenty cows; all sellers of raw milk and raw milk products would have to register with the state. Current law allows only the incidental sale of raw milk on the farm; "incidental" has been defined by state regulation as meaning only those sales that are not in the regular course of business.

WYOMING – Legislation (HB 0017) was introduced that would have legalized cowshare, goatshare and herdshare contracts—"herd" being defined as no more than five lactating cows or ten lactating goats. There's currently no law prohibiting herdshares; however, the Wyoming Department of Agriculture views raw milk distribution through share programs as being the illegal sale of raw milk and recently sent "cease and desist" letters to several farmers it suspected of operating shareholder dairies.

STATE RAW MILK LEGAL UPDATE by Pete Kennedy, Esq., President, The Farm-to-Consumer Legal Defense Fund

CALIFORNIA – ORGANIC PASTURES

On February 24 Federal Judge Sandra Snyder ordered that the motion of Organic Pastures Dairy Company (OPDC) to withdraw its guilty plea to two counts of "introduction and delivery for introduction into interstate commerce of misbranded food" (that is, selling for human consumption food labeled for animal consumption) be granted. In December 2008, OPDC had entered into a plea bargain with the United States where sentencing on the guilty plea was delayed for twenty-four months, with the dairy being allowed to withdraw its guilty plea if it committed no further violations during that time. [See *Wise Traditions* Summer and Fall 2008 issues for background on the case.]

The February 24 order also granted the motion of the United States to dismiss with prejudice the same charges against OPDC's founder and president, Mark McAfee. McAfee had pled innocent to the charges in January 2009 with the U.S. government agreeing to defer prosecution for twenty-four months and to drop the charges if no violations were committed during that time.

In the meantime, McAfee has yet to hear from the Food and Drug Administration (FDA) on his petition to the agency to modify the federal regulation banning raw milk for human consumption in interstate commerce. The petition requests FDA issue a rule permitting the sale of raw milk from one state where the sale is legal to another state where the sale is also legal. The law requires that FDA respond to a petition no later than six months from the time of its filing; McAfee filed the petition in December 2008.

MINNESOTA – THE HARTMANN CASE

On December 20, Judge Rex Stacey issued his long-delayed decision on the petition of the Minnesota Department of Agriculture (MDA) to condemn food embargoed at the Gibbon farm of Michael and Diana Hartmann, granting the petition and ordering the embargoed product to be destroyed within thirty days. [See *Wise Traditions* Summer and Fall 2010 issues for background.]

In a memorandum accompanying his decision, Judge Stacey found that "eight people became ill with the same, rare strain [of *E. coli O157:H7*]. The only commonality among these eight people was that they all consumed Hartmann products within days of becoming ill. This same, rare strain of *E. coli* was present in samples taken from the Hartmann farm." The judge dismissed the Hartmanns' argument that no food product on the farm tested positive for *E. coli O157:H7* and found that the environmental samples taken from the farm testing positive for the rare strain of *E. coli* were sufficient proof of adulteration to grant the condemnation order.

Judge Stacey held that the Minnesota Constitution exempted those farmers selling or peddling the products of the farm from licensure but not from other regulatory requirements.

Two weeks after the judge's decision, when MDA inspectors went to the Hartmann farm to destroy the embargoed product, they found that most of the embargoed food was gone. On January 12, MDA filed a petition with Judge Stacey to find Hartmann in contempt for, among other grounds, disposing of embargoed product without MDA being given advanced notice and without the products being disposed of in the department's presence. What MDA did not mention in its contempt motion was that the department had given Hartmann written permission on June 16, 2010 to remove any of the embargoed food for family use. A hearing on the MDA motion was set for March 10.

In addition to the charge for contempt, MDA had also initiated an administrative procedure against Hartmann for numerous alleged violations of state law that could ultimately lead to criminal charges being brought against the farmer. Potential charges could include violations of the Minnesota Consolidated Food Licensing Law, the Minnesota Food Law, the Minnesota Meat and Poultry Inspection Act and the state dairy code.

The extent to which MDA is willing to go to put Hartmann out of business is shown by their actions against Rae Lynn Sandvig, a Bloomington raw milk consumer whose residence had been a longtime drop site for the Hartmann farm. Last June MDA and Bloomington city officials executed a criminal search warrant at the residence of Rae Lynn and her husband Greg. In December MDA followed up by sending a letter to Sandvig informing her that the department had "scheduled an administrative meeting concerning your sales of food, your actions assisting in the sale of raw milk from your home in Bloomington, Minnesota, and the sale of food from the Traditional Foods Warehouse [TFW]." TFW is a private buyers club located in Minneapolis. [See *Wise Traditions* Fall 2010 issue for background.]

The letter goes on to state, "This administrative meeting is your opportunity to be heard before the department decides what, if any, enforcement action it will take against you for operating a food business without a license, selling raw milk, and selling food from unapproved sources.... The meeting is to allow you due process before the department proceeds with further enforcement action. This could consist of criminal prosecution or administrative penalties."In January Sandvig met with MDA officials; the department has not yet indicated what course of action, if any, it plans to take against Sandvig.

The reason for MDA threatening Rae Lynn Sandvig is its desire to put Hartmann out of business. The Hartmann farm is located about ninety miles from the Twin Cities, where most of the farm's customers reside. The Sandvigs are one of a number of drop sites the Hartmanns use to distribute their products in the Twin Cities area; MDA raided another drop site on December 6, embargoing over one hundred gallons of milk it found in Roger Hartmann's truck at the site. If MDA is able to shut down the distributing points, it would be much more difficult for the Hartmann farm to remain in business even if the farm did survive any further action taken against it by the state. Many of the farm's customers could or would not drive to the farm to pick up raw milk or other products. The threatened prosecution against Sandvig could create a chilling effect on the other drop sites so that they will no longer make their property available to the Hartmanns for food distribution.

MISSOURI – MORNINGLAND DAIRY

A trial was held January 11-12 at the Howell County Courthouse in West Plains, Missouri, to determine whether approximately 29,000 pounds of cheese held at the facility of Morningland of the Ozarks, LLC (d/b/a Morningland Dairy) should be destroyed despite no reports of illness. Morningland's entire inventory of cheese has been under embargo since August 26, 2010. Morningland is a farmstead cheese operation that has been in business for more than thirty years without any reported illnesses from the consumption of its products.

On October 22, 2010 the Missouri State Milk Board filed a petition in the Circuit Court of Howell County to order the destruction of the embargoed cheese. On October 1, 2010 the Milk Board had issued a letter to Joe and Denise Dixon, owners of Morningland, requesting that the dairy destroy its entire cheese inventory because some pieces of cheese sent off for testing on August 27 came back positive for *Listeria monocytogenes (L. mono.)* and others came back positive for *Staphylococcus aureus (Staph. aureus* or *S. aureus)*.

The trial before Judge David Dunlap went for ten hours each day with much of the testimony focusing on whether the cheese was adulterated and whether the conditions at the Morningland cheese facility were unsanitary. Retired pathologist Dr. Ted Beals, an expert witness for Morningland, testified that it cannot be presumed that a food is adulterated just because its contains *L. mono.*, but that it must be shown it is a type of *L. mono.* that is capable of making people ill. The Milk Board provided no evidence at the trial as to the type and amount of *L. mono.* present in the cheese.

As to the sanitation at the Morningland facility, the state had stipulated during a deposition that all 100 environmental swab samples collected by FDA last September at Morningland's cheese plant had all tested negative for *L. mono*. Further, Morningland had never been cited for having unsanitary conditions during any inspection of the plant since the Dixons had taken over its operation in 2008.

On February 23, Judge Dunlap issued his decision siding with the Milk Board and ordering that all the embargoed Morningland cheese be destroyed. The judge held for the state based on his conclusions that the cheese was made from milk produced by diseased animals and that the cheese was produced under unsanitary conditions, both of which would be in violation of state statute.

What the judge had done in issuing his ruling was to substitute his judgment for that of the Milk Board. Judge Dunlap found that the Morningland herd was diseased because three tests for somatic cell counts in the herd exceeded the limit allowed by regulation. The Milk Board had never taken any action against Morningland for the high somatic cell tests because there is only a violation of law if the somatic cell count is higher than the maximum limit in three out of five consecutive tests. The dairy's three high counts were spaced out among some sixteen different testings. Further, if the Milk Board had suspected that animals in the herd were diseased, it would have had a state veterinarian check the herd—something that was never done.

In addition to the high somatic cell counts, the judge concluded that testimony from Denise Dixon provided further evidence the herd was diseased. Dixon testified that several cows had been culled in September 2010; Judge Dunlap stated in his opinion that it could be inferred that the reason for culling was animal disease. In October 2010, Morn-ingland did obtain a Grade A permit enabling them to sell raw milk to a co-op for pasteurization; however, at the time of the culling, the Dixons had no income from their dairy operation since the Milk Board had embargoed all the cheese in their facility and had shut down any further production. The Dixons culled the animals to raise desperately needed funds for the dairy. There wasn't a shred of evidence introduced at the trial to show that the culling had been done because of diseased cows. Cows would have had to be tested individually to determine which ones to cull; the Dixons never conducted such tests.

In ruling that the cheese facility was unsanitary, Dunlap relied entirely on the testimony and reports of Milk Board inspector Don Falls. In the inspection reports Falls compiled on the Morningland plant, he wrote Morningland up for changes that needed to be made to the facility; during the trial, Falls admitted during cross-examination that nothing he wrote the plant up for amounted to unsanitary conditions.

Morningland will be filing a motion for a new trial. If the motion is denied, an appeal will be filed on Judge Dunlap's decision.

For the latest developments on raw milk issues, go to www.farmtoconsumer.org. Portions on raw milk legislation also appeared in the March 2010 issue of *Graze Magazine*.

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

Healthy Baby Gallery



Twins Ola Rose and William Griffiths were welcomed by Kirsten and Thorpe Moeckel and twelve-year-old sister Sophie on September 24, 2010. Their mother ate a Weston A. Price diet, consuming lots of goat milk and liver from their farm during her pregnancy. Although the twins came at thirty-four weeks, they were 5 pounds 2 ounces and 5 pounds 15 ounces and came right home! They are healthy, happy, chunky babies now, enjoying a diet of mom's nutrient-dense breastmilk.

Maebelle Violet Feeman, daughter of Jessica Feeman, Ann Arbor, Michigan chapter leader, was born on June 3, 2010, here pictured at eight months old. Mom had started eating a more traditional diet about three years before conception and continued during pregnancy, including a lot of raw milk, butter, and cream; kefir; lots of pastured eggs; grass-fed beef and lamb; and cod liver oil and butter oil. Maebelle was very alert and strong at birth, and continues to be a very healthy and happy baby. Maebelle has started to enjoy egg yolks and liver paté, but mostly prefers mommy's breast milk! She is an absolute joy!





Our babies are not only smart but athletic! Here is a photo of Ashley Naylor, not yet five years old, learning to ride her two-wheeler bike. Ashley loves ballet and the circus.

Adopted babies Addison Leigh, at three years and Michael, at eight months, grew up on the WAPF formula. Addison had a lot of allergy symptoms which are clearing up with a good diet and natural treatment. Michael is never sick, though his frame is small. Their mother has shared the benefits of the WAPF formula with others who are also having good results! Says grandmother Connie Newcome, "I am so proud of my daughter for making the effort to bless her children with good health!"



Please submit your baby and raw milk granny photos to Liz Pitfield at liz@westonaprice.org. Be sure to label photographs with the full name of the baby.

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Healthy Baby Gallery

Eden Jean Eisenberg was born on August 18, 2010 at home. She weighed 7 lbs 12 ounces, and measured 21 inches. During the pregnancy her mom ate lots of organic butter, yogurt, pastured eggs, grass-fed beef, sustainably caught wild salmon, cultured raw A2 milk from a local herdshare, organic seasonal produce from farmer's markets, soaked nuts and grains, sauerkraut, miso, pastured chicken broth, liver and ovary supplements, fermented cod liver oil and butter oil. Mom also enjoyed mineral water free of fluoride and chloramines. Pre-pregnancy preparation included liver, colon, candida, and metal cleanses, and a few months on the GAPS diet. Since Eden's birth, her family relies heavily on their local WAP community supported kitchen, Three Stone Hearth, for heavenly nutritious prepared foods. By two months Eden was consistently sleeping ten hours through the night. Pictured here at four months, Eden has been exclusively breastfed and is a joyful baby who loves traveling and meeting new people.



Three-year-old Sydney Swanson is a super healthy and happy toddler. She was born to WAPF-fan parents. Sydney was breastfed for almost two and one half years, supplemented with raw milk from the age of one and a half. Sydney loves raw goat and cow milk, bone marrow, bacon, and raw cultured butter. Sydney eats sauerkraut and loves pickles! She does not know anything about pizza, cupcakes and has never tasted pasteurized milk! She is all that happy parents could dream of in a baby girl! Thank you WAPF—we could not thank you enough for everything you do!



SPRING 2011

Caleb Sebastian Stokes' mom took cod liver oil and high-vitamin butter oil for one year before conception, and continued with the combo during pregnancy. Her pregnancy diet consisted of eggs, fruits, vegtables, soy-free eggs and a lot of beef and raw milk. Caleb was born at over nine pounds after a five-hour, drug-free labor. Breast-feeding was problem-free. His parents report that Caleb is the happiest, calmest, and the most patient baby they know. He loves to sleep and get his rest, he isn't fussy at all and is very observant.

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WAPF AT NOFA CONFERENCE

Consumers and small farmers came out to the National Organic Farming Association conference in January, held at the Princeton University campus, New Jersey. Participants learned about "Why Raw Milk?" by Pam Schoenfeld, RD, and "How to Be a Good Chicken Farmer," by Joseph Heckman, PhD. From left to right: Charlie White, Judith Mudrak, Debbie White and Mike Mudrak.

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The Weston A. Price Foundation currently has 523 local chapters, 445 of which serve the fifty United States and 78 in twenty other countries. A big welcome to new chapter leaders from Bulgaria, Scotland and the Philippines!

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Wearing our "They're Happy Because They Eat Butter" aprons, Erin Frank of Community Crops and Rachael Wells of the Weston A. Price Foundation celebrate healthy food at the Nebraska Healthy Farms Conference.

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Wise Traditions

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CHAPTER RESOURCES

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

LOCAL CHAPTER LIST SERVE

Thank you to Suze Fisher, a chapter leader in Maine, for setting up a local chapter chat group. New chapter leaders can sign up at http://groups.yahoo.com/group/wapfchapterleaders/

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LOCAL CHAPTER BASIC REQUIREMENTS

- 1. Provide information on sources 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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Left to right: Farm-to-Consumer Legal Defense Fund President Pete Kennedy shares smiles with Sarasota Chapter Leader Cynthia Calisch and Matt Stone, author of 180DegreeHealth.com, following Matt's presentation to the Sarasota membership on "Metabolism Myths" and Pete's legislative update. Matt will be a featured speaker at the 2011 Wise Traditions Conference in Dallas.

SARASOTA, FLORIDA CHAPTER ACTIVITIES

November 2010, Sarasota Chapter Leader Cynthia Calisch tapped Michael Schmit, Canadian raw milk leader, to speak to the Sarasota buying club during his vacation in Florida. Above, Michael Schmidt, Cynthia Calisch and Pete Kennedy. Below, Elisa Vander Hout, wife of Michael Schmidt with son Oliver, age two. Of course his parents feed him the best raw milk and grass-fed meats.





SPRING 2011

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Pasture-based farmer Larry Eisenbeis with featured speaker Sally Fallon Morell TRADITIONAL DIETS SEMINAR IN SIOUX FALLS, SOUTH DAKOTA



Yankton, South Dakota chapter leaders and conference organizers Mary Walkes and Cindy Konopasek.

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SASKATCHEWAN CHAPTER LEADERS CELEBRATE RAW MILK

Over sixty people attended a Saskatchewan chapter meeting on cow shares and farm food sourcing featuring Micheal Schmidt. From left to right: Sandra Brandt (Regina, Saskatchewan chapter co-leader), Janeen Covlin (Canora/Preeceville, Saskatchewan chapter co-leader), Jana Kutarna (Regina chapter co-leader), Michael Schmidt, and Joyce Wells (Regina chapter member).

Representatives from the two local newspapers and the local CBC radio station were in attendance. Best of all was the chance for small dairy farmers to meet and chat.

Photo by Wybo Ottenbreit-Born.

SPRING 2011

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WAPF AT THE PATAGONIAN EXPO

Coyhaique, Chile chapter leader Dr. Ann Oldham Michael with co-leader Ema Morales (on left) and Marianela Araya (on right) represented the Weston A. Price Foundation at the Patagonian Expo, a country fair featuring a Chilean rodeo, folk singers and South American crafts. Ann, Ema and Marianela taught participants how to make lacto-fermented vegetables and gave out WAPF literature in Spanish.



Wise Traditions

International Chapters

PUERTO RICO

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

QATAR

Susan & Geoff Mayer 974 7 728 8197, sf.mayer@frontier.com

SCOTLAND

Edinburgh: Robert Jardine 0131 442 2243, robbie4wp@yahoo.co.uk

UNITED KINGDOM

Cheshire: Carol Dines & Tracy Wood, 01270 873322 wap.cheshire@yahoo.co.uk

London: Philip Ridley 01962 620910, philridley@hotmail.com, meetup.com/westonaprice-london

Manchester: Tom Godwin 0161 610 0354, info@foresight-fitness.co.uk & Elizabeth Wells 7970 690 233, naturallywells@googlemail.com,

http://www.facebook.com/pages/Weston-APrice-Foundation-Manchesterchapter/155649897791548

South East England: Madeleine & Tim Frankel 07980 000346, wapf.gaps.southeastuk@gmail.com

South West England: Ben Pratt 07952 555811, ben@nutritions-playground.com, www.naturalfoodfinder.co.uk

UK resource list: www.naturalfoodfinder.co.uk

URUGUAY

Shawn Davis & Mari Davis (515) 897-4460, wapf@genesisnaturals.com

TRADITIONAL FOODS IN SALALAH, OMAN, SAUDI ARABIAN PENINSULA



Qatar chapter leaders Susan and Geoff Mayer recently travelled to Salalah, Oman from their current country of residence in Qatar. They went in September, one of the best times of year to enjoy the lush green and tropical conditions brought to this area of Oman at the end of their "monsoon season."

They were wonderfully surprised to find coconut palms, banana trees, papaya trees; camels, goats, and cows feeding on green pastures; and some fresh sources of ghee, raw milk, and roasted meats (including organ meats)!

Of their two tour guides—both originally from Bedouin tribes, but now in the tourist industry—one came from the desert and one from the mountains. Each had a father who was a camel dairy farmer and ate a breakfast of camel milk and dates during their long lives. One father recently died at one hundred years old, the other is ninety years old.

Once the Mayers mentioned their interest in finding raw camel milk, they took them to the retail spot where it had just been delivered five minutes earlier (at seven in the evening every night). The camel milk had been bottled in empty water bottles and it was absolutely delicious—actually on the sweet side.

Sensing their enthusiasm for the raw milk, the store/restaurant proprietor selling the milk also wanted them to taste the homemade ghee from cows—he poured it into Susan's palm and had her lick it—which he said he does every day and claimed

it helped him retain good eyesight! Lastly, this one-stop shop had just finished roasting some goat – with all parts included! The chef



SPRING 2011

gave them a little of everything, which was all wonderfully tender as it had been slow-roasted on a bed of hot rocks. But the surprise was the unbelievable flavor of the liver, the best they had ever tasted! Says Susan, "We were jubilant at seeing all the animals grazing on grass. We even saw the goats, cows, and camels having a day at the beach - a rest from the annoying flies!"



Wise Traditions

99

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FARM PRODUCTS BY STATE

AL

Our free-range eggs come from heritage breed chickens (Buff Orpingtons, Welsummers and Barnevelders) supplemented with organic, soy-free feed. Please call ahead or email to check availability. Grace Valley Farm, Trinity (near Decatur) (256) 476-4177, churchmedia@ aol.com. Pickup only.

DC

CSA: Hi-Brix, nutritionally dense, biodynamically grown kitchen vegetables, grass-finished beef, pastured pork, broilers and eggs. Openings for 2011 season in DC Metro area. Contact Allan Balliett, info@freshandlocalcsa.com (304) 876-3382, www.freshandlocalcsa.com.

IL

Come to our farm! Healthy, FAT, beef & pork, born and raised certified organic, no nitrates. Sides or cuts (as available) plus many other healthy foods. Chapter Leaders Dale Kelsey sustainable producer receiving no government funds, no grants, no subsidies—and Eileen Kelsey, CHom. incorporating WAPF Nutrition with Classical Homeopathy (815) 239-1466.

IN

Raw milk cheeses, grass-fed beef, veal, wheyfed pork. Also, a variety of fresh raw dairy products available as pet food. 100% pasture fed cows. NO hormones, pesticides, antibiotics used. **Will ship.** Available from the Yegerlehner's The Swiss Connection. (812) 939-2813, www.swissconnectioncheese.com, Clay City,

MA

Robinson Farm: A diversified organic farm selling grass-based raw cow's milk, eggs, hay, seedlings, vegetables, perennials, flowers, grass-fed beef, humanely raised veal, local cheese, yogurt and maple syrup. Farm tours by appointment. Visit our farm stand store open every day. Contact Pam Robinson: www. robinsonfarm.org, info@robinsonfarm.org or (413) 477-6988. We encourage our readers to obtain as much of their food as possible from small farms and independent businesses.

MD

Nick's Organic Farm. Grass fed beef (no grain ever), free range eggs, pastured chicken & turkey. Liver, organ meats, & bones. Pick up in Potomac or Buckeystown. Our cattle are always on organic pasture. Our cattle and poultry receive all organic feed, no hormones, antibiotics, or animal parts. We raise our own hay and grains and grind our own poultry feed. Quality Organic Products Since 1979. (301) 983-2167 nicksorganicfarm@comcast. net - www.nicksorganicfarm.com

Windmill Meadows Farm, Washington County. Grass-based sustainable family farm. Our focus: healthy, well-balanced soil produces healthy livestock on healthy grass for healthy, good-tasting food products. Grass-fed dairy, beef, goats, pasture-based poultry (broilers & layers). Availability to Washington DC markets (301) 739-5258.

MI

Creswick Farms. Dedicated to raising healthy, happy animals—lovingly cared for as Mother Nature intended—which provide high-energy, nutritious and delicious food sources for health-conscious individuals. No antibiotics, steroids or GMOs ever fed to our animals! (616) 837-9226, www.CreswickFarms.com.

MN

Farm on Wheels offers animals raised on green grass & certified organic by MOSA. Nutrientdense cuts of beef, lamb, chicken, turkey, goose, duck, pork, lard, butter & eggs. No corn or soy. Farmers Market year round in St. Paul, Prior Lake, Northfield, Linda (507) 789-6679, www.farmonwheels.net.

FARM PRODUCTS BY STATE

Fresh food from fertile soil. River Birch Micro Farm. Member: Farm-to-Consumer Legal Defense Fund. Eggs from chickens on grass pasture. Fruits, nuts and vegetables. Farmer/ Soil Scientist Joseph Heckman, Ph.D. 19 Forman Ave, Monroe Township, New Jersey 08831 (732) 605-0444.

Full food farm ecosystem in NorthWest NJ seeks member/partners to build community for third growing season. We provide free-choice weekly pickups year-round of pastured animal products, seasonal and stored vegetables, with future plans for beans, grains, fermented foods. howlingwolffarm@ embarqmail.com.

NY

NJ

Raw milk from dutch belted cows organic certified farm, grass-fed. Call us for other products. Ana Lups, Pleroma Farm, Hudson, NY (518) 828-1966.

New York Buyers Club. Certified organic grass-fed dairy products from Jersey cows. Eggs from pastured chickens. Grass-fed beef, pork and chicken. Fermented foods, Green Pasture Products, soaked and dried nuts and raw honey. **Will ship**. (717) 768-3437. Pleasant Pastures.

OH

Ber-Gust Farm - pastured, miniature Jersey dairy cows. All natural beef, pork, poultry and produce. Also jams, jellies, honey and apple butter. Waynesfield, Ohio. (419) 230-2195, (419) 230-2194 www.ber-gustfarms.net.

PA

Bareville Creamery offers raw cultured butter from our grass-fed no-grain dairy. We **will ship** to you or visit our farm to pickup \$8.00/pint tub plus shipping, Daniel & Katie Zook, Leola, PA, (717) 656-4422.

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FARM PRODUCTS BY STATE

Certified organic grass-fed, raw milk dairy, beef and poultry products near Reading, PA. Cows and chickens are moved everyday to new pasture. Cows are soy free. King of Prussia Farmer's Market. www.springcreekstrickerfarms. com or call Spring Creek Farms (610) 678-7629, Forrest Stricker.

Certified organic grass-fed dairy. Raw milk cheeses, cottage cheese, yogurt, sour cream from Jersey cows. Eggs from pastured chickens. Grass-fed beef, pork, chicken, rabbit & turkey. Call for information. **We ship.** (717) 768-3437 Pleasant Pasture Organic Acres.

Grass-fed organic raw milk and dairy food: 100% grass-finished beef and lamb, pastured pork, chicken and turkey, wild Alaskan salmon, fermented vegetables, raw honey, maple syrup and more. Long Island drop. Paradise Pastures, Paradise, PA (717) 687-6346.

New location for an attractive variety of quality grass-fed and free-range products, located near the Lancaster and Chester County Line. For more information and/or questions, please call (717) 768-3263, Elam & Linda Stoltzfus, Narvon Natural Acres, Narvon, PA.

Owens Farm, Sunbury, PA, grass-fed lamb, pastured Tamworth pork (fed soy-free grain), pastured meat chickens, soy-free heritage chickens, raw honey, sheep camp, farm tour, Adopt-A-Sheep and more. Visit Owens Farm www.owensfarm.com (570) 286-5309. info@ owensfarm.com.

Raw milk from 100% grass-fed cows, yogurt, eggs from free-range chickens, 100% grass-fed beef and raw milk cheese. Ira & Mary Beiler. (570) 278-5881.

Raw Dairy products from our no-grain, grassfed Jersey cows. Milk, cream, yogurt, kefir, and cheeses: Cheddar, Colby, Swiss, Havarti, Gouda, Gruyiére. Free-range, pasture-raised and organically-fed broilers. No added hormones or antibiotics. **We ship.** Shady Acres, Elizabethtown, PA. (717) 361-1640.

Raw dairy products from our 100% grassfed cows - whole milk, heavy cream, cream cheese, sour cream, cottage cheese, butter. All made here on our 13-acre Chester County Farm. Free from hormones and synthetics. Samuel and Esther Fisher, (610) 273-2076.

FARM PRODUCTS BY STATE

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 lamb and pastured chickens, turkeys and eggs. No hormones or synthetics. On-farm sales. Wil-Ar Farm, Newville, PA. (717) 776-6552.

Raw milk cheeses from organically managed, 100% grass-fed Jersey cows. Retail and wholesale. Prices start at 4.75/pound, **we do mail order** cheese. Raw milk and organic eggs available. Hilltop Meadow Farm, Eastern PA, 15 minutes N of I78, 153 Martins Rd. Pine Grove, PA 17963 (570) 345-3305.

Soy free, pasture raised chicken. Fed organic feed. No chemicals used on this farm for 10 years. Also, breast, wings, leg and thigh available. **will ship** Co-ops welcome \$4.25 per pound. Miller's Biodiversity Farm (717) 806-0392.

ТΧ

Grass-fed beef from our heritage cattle, born & raised on our 110-yr-old Shudde Family Ranch near San Antonio. Healthy soil, to healthy grasses, to healthy cattle, to healthy nutrition-dense beef for healthy families. Inspected, frozen. **We ship.** www.ShuddeRanch.com (866) 392-1510.

VA

Belle Meade in Sperryville. Pastured livestock, no hormones/antibiotics: chickens, other poultry, pork, grass finished beef, eggs; organic vegetables. Contact 540-987-9748 or tanya@bellemeadeschool.org. Join e-mail list to receive availability updates. Pickup at farm; nearby locations; Fairfax County Government Center. www.bellemeade.net

Cow/Herd shares available, with Member in Local Kine (M.I.L.K.) Project in Fauquier County at Western View Farm, 2028 Laws Ford Rd., Catlett, VA 20119. For information call Martha Bender (540) 788-9663.

Mount Vernon Farm raises 100% grass-fed beef & lamb and pastured pork. We have an on-farm store and buyers clubs throughout Northern and Central Virginia. Contact us at (540) 987-9559 or mtvfarm@gmail.com. www. mountvernonfarm.net.

FARM PRODUCTS BY STATE

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.

Virginia Buyers Club. Certified organic grassfed dairy products from Jersey cows. Eggs from pastured chickens. Grass-fed beef, pork & chicken. Fermented foods, Green Pasture Products, soaked & dried nuts & raw honey. **Will ship.** (717) 768-3437. Pleasant Pastures

Farm Products

BEEF, All natural grass-fed Texas Longhorn. Heat & serve beef shipped in 28oz cans, case of 12. Buy direct save with 50lb. box grind. Halves cut & wrapped. Jerky, hot dogs, summer sausage. **Will ship** Certified Texas Longhorn Beef, 35000 Muskrat, Barnesville, Ohio 43713, phone (740)758-5050, www.head2tail.com.

KATALYST KOMBu CHA TEA, using certified organic ingredients with Fair Trade teas in our raw kombucha .Available in 5 flavors Refreshing, Energizing , Delicious. Sold from Maine to Northern Florida . Also **will ship** throughout the uS. (413) 773-9700 or info@katalystkombucha.com.

LACTO-FERMENTED VEGETABLES, cultured, 100% organic, by Immunitrition. Three delicious, raw blends – Garden, Sea & Sunshine. **will ship** throughout uSA via uPS. Available in 32 oz. jars or try our Cultured Veggie Taste Tester with bonus pumpkin oil & sea salt. (877) 773-9229, www.culturednutrition.com.

MAPLE syrup, maple products and maple gifts, Certified Naturally Grown (naturallygrown. org). Fifth generation farm that takes pride in quality products. Located in the Northern Catskills of NY. **will ship**. Visit maplehillfarms. biz or call (800) 543-5379. We look forward to meeting your sweet needs!

The greatest fine art of the future will be the making of a comfortable living from a small piece of land. *Abraham Lincoln*

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FARM PRODUCTS

REAL PICKLES. Lacto-fermented vegetables. Raw, certified organic and regionally grown. Pickles, sauerkraut, kimchi, ginger carrots, hot sauce, beets. **will ship** within Northeast only. See website for store list and mail order info. Real Pickles, Greenfield, MA. (413) 774-2600. www.realpickles.com, info@realpickles.com.

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LIVE BLOOD CELL ANALYSIS is a handy and valuable window on the state of health or disease. This procedure has a powerful motivating effect to help others improve their diets emphasizing the principles of Weston Price. Have microscope, will travel. Contact Karen Myer, ND, at (262) 522-9993.

HEALING ARTS

Nu TRITIONAL answers for "modern" diseases. Heart disease, osteoporosis, type 2 diabetes, weak immune systems, etc. can be reversed using nutrition/detoxification. Daniel Cobb Doctor of Oriental Medicine, danielcobb2@yahoo.com, (505) 820-0292. There is no fee. Only donations are accepted.

INVESTORS NEEDED

Hu NGERING for something more when you're on the road? Seeking partners/funding for an outlet that will offer WAPF-friendly options to travelers at airports and rest stops. Menu items to include grass-fed beef on sprouted buns, bone broth soups, lacto-fermented condiments, and more! Contact Katharine Spehar: kjspehar@gmail.com

MAKE MIRACLES HAPPEN. Developing, innovative non-profit seeks R & D phase funding for environmentally-sustainable, economically-viable production model of one of nature's perfect foods. Help others help themselves to better health. Make a difference. Contact (816) 724-1565.

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If people let government decide what foods they eat and what medicines they take, their bodies will soon be in as sorry a state as are the souls of those who live under tyranny. Thomas Jefferson

PERSONALS

BEAuTIFuL, educated, outdoorsy SWF, 50's, 5'8", 125#, snow, water, sustainable lifestyles, landowner (3 countries), hand-milker, cheesemaker, passionate, political, spiritual, fun-loving; seeking adventurous, intelligent man, 50+, financially and emotionally secure, for happy, committed life. stillmeadow@mail. com or (828) 884-4499.

GROWING? SWF 27 Christian in central MD near PA seeks long term relationship with male aged 24-38. Must be in mid-Atlantic or willing to relocate. Interests: sustainable gardening, cooking, herbs, animals, traditional arts, history. (410) 848-3141 or buttermilkgarden@gmail.com.

ORGANIC FARMER/blacksmith, 35, wants friends and a wife. Interests: Biblical Christianity; high-brix farming; metalworking; horse farming and logging; alternative energy; rural life skills; and healthy, sustainable lifestyle. Not enamored with the electronic age. Timothy Martin 331 County Route 47, Potsdam NY 13676

SWF, 43, petite, WAPF member, sustainable living, down to Earth, non-smoker, healing arts practitioner, college degree. Live in NJ, can relocate. Enjoy walking, hiking, reading, outdoors,cooking, gardening, animals. Divorced with no children. ISO SWM 44-50 for committed relationship. nancyhiker@yahoo. com

SERVICES & PRODUCTS

Become a Certified Nutritionist / Wellness Coach with Kevin Brown co-author of The Liberation Diet. Starts March 29th. Journal SPE-CIAL: \$400.00 course discounted to \$140.00 "Be effective at winning people over to the Real Food message" for info visit: www.growingedgeinstitute.com

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**!

DVD "Raw Milk: The Whole Truth" (AKA: The Raw Milk Controversy: Fact& Fiction) Explains

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SERVICES & PRODUCTS

the whole truth about Raw Milk! Reviewed by WAPF: http://www.westonaprice.org/ dvdmedia-reviews/thumbs-up/1433-rawmilk-controversy.html. See 4 video clips on YOuTuBE! (ChefJem33) Order by check or through PayPal. email chef@thesetruths.com \$20.00 per DVD (incl. S&H & PayPal fees)

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SUPPLEMENTS & SUPERFOODS

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WORK OPPORTUNITIES

APPRENTICESHIPS - VERMONT Farm seeks 2011 apprentices. We integrate American Milking Devon cattle, pigs and chickens with growing and fermenting six tons of vegetables. Our grain-free cows support raw milk sales plus butter and cheese making.

We focus on selling nutrient-dense foods while eating well ourselves! Learning opportunities include milking, biodynamics, natural livestock care. Positions available April to November, short and long term. Cabins, food, laundry, Internet access and lots of education. Call Doug Flack, (802) 933-7752, Flack Family Farm, www.flackfamilyfarm.com. Snailmail please.

EDu CATION/LODGING - McNutt FARM II SCHOOL, 6120 Cutler Lake Road, Blue Rock, Ohio, 43720. (740) 674-4555 We welcome you by reservation and deposit, on-farm lodging, over night, weekend or week. Private quarters/ equipped kitchen, Livestock & pet lodging.

FARM CARETAKER - 60 year old single male willing to do labor in exchange for housing, good with animals, landscaping, water features, stonework, gardening. Non-drinker, non-smoker, salary not a priority. Excellent references. Call David House (518) 884-0603.

WORK OPPORTUNITIES

FARM LABOURER/Food Buyer's Club PR Person/up-State New York. Organic, Sustainable, WAPF Farm and newly formed Buyers Club needs a energetic, dependable, good with a animals person to do a multitude of jobs. Accommodations & food at the farm with small stipend plus salary and commission from the Buyer's Club. Must be drug-free, non-smoking, committed individual. Please call Caroline at 518-234-4858 or Rachel at 518-797-3373

FuLL FOOD FARM based on abundance paradigm celebrates third growing season. Partners share year-round pastured animal products, vegetables. Planning for beans, grains, prepared foods including fermented products. Working toward becoming teaching center for innovative grass-based farming. howlingwolffarm@embarqmail.com

RESPONSIBLE, ENTHU SIASTIC young woman seeks year-round farm internship/apprenticeship while completing online MS in nutrition. Have brief farm experience. Air Force veteran no stranger to hard work & quick learning. NE/ Mid-Atlantic preferred. WAPF member, would love to learn from you! Contact Amy at (917) 923-8189 or berger.amy1@gmail.com.



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PASTURE-RAISED PRODUCTS Life-Enhancing Acres MILLER'S ORGANIC FARM Located in the heart of Lancaster County, Pennsylvania. Our cows, pigs and chickens are rotationally grazed in grazing season. During winter they are fed good quality alfalfa and grass-mix hay. Raw Dairy Products available year round. SPRING, SUMMER, FALL BUTTER BREAD PRODUCTS - Homemade sourdough rye, sprouted spelt bread and muffins FERMENTED sauerkraut, beets, pickles, beet kvass, KIMCHEE, Salsa, pickle relish MILK PRODUCTS: COW Milk, Colostrum, Cultured Butter, Buttermilk, Yoghurt, Kefir, Eggnog, Creme **Beyond ORGANIC!** from Beautiful Jersey Cows. Fraiche, Cream, Whey, Cottage Cheese, Homemade Raw Ice Cream CHEESE: Baby Swiss, Monterey Jack, This herd has not been fed Cheddar, Colby, Cream Cheese, Cave Ripened Cheddar, Farmers Cheese, SHEEP/GOAT milk yogurt and cheeses CAMEL MILK any grain in the last 10 years BEEF: Hamburger, Stew Meat, Beef Stock, Steaks, Roasts, Organs, Tallow, and they graze a mixture of PORK: Ground Pork, Sausage, Lard, Pork Chops, Pork Tenderloin, Spare Ribs, Sausage, Scrapple, Ham, Bacon, Lard, Nitrate-Free Bologna and hotdogs POULTRY: Ducks, Turkey, Soy-Free Chickens, Chicken Broth Stew Meat, Eggs grasses on nutrient-rich soil WILL SHIP APPLE BUTTER, CELTIC SEA SALT, RAW HONEY COD LIVER OIL, BUTTER OIL, CHIPS 717-768-7848 We accept MAIL ORDERS/RAWESOME members only. Call for Price List (717) 556-0672 Camel Lane got "activator-x"? NO Antibiotics **Drome-Dairy** NO Hormones Is located in Central Pennsylvania. High CLA Levels Grass-fed Organic Our camels are fed GMO and Soy Free Shipping in the USA free Oats and Barley and Hay. GHEE They have access Your source for edible goodness! Made from non-homogenized milk of to 38, acres of cows grazing on rapidly growing green Grass-fed Meat: Beef, Bison, Goat and grass in spring and fall. pasture Lamb. Also carry: Pork, Poultry, Naturally high in CLA & fat-soluble and they love vitamins, including X-Factor. Rabbit, Dairy, Organic Snacks and to browse or MORE! Visit us online! Rich and very delicious- enhances the Maple-Hickor flayor of any food. We have the hard-to-find items Casein and lactose removed. Oak and Rose you're looking for: Recommended for the GAPS diet. fence rows A five-generation old family tradition, since 1889. Organs, braunsweiger, liver-Fresh or wurst, headcheese, marrow Frozen Milk bone stock, tallow, pemmican Indian Foods Available Daily and fully cooked beef products PureIndianFoods.com at the Farm. Order online, via mail or fax 1-877-LUV-GHEE (1-877-588-4433) 3350 State Rte 54 www.uswellnessmeats.com We provide wholesale rates to Turbotville, PA 17772 Toll Free: (877) 383-0051 retailers, co-ops and practitioners. (570) 649-6970 'Our animals eat right so you can too!' NORTHSTAR BISON Beltie Beef LLC/Caldwell Farms 100% Grassfed & Finished Bison, Beef, & Lamb FROM THE HEART OF WISCONSIN Also carry: elk, ostrich & organic, pastured poultry Michael D. and Lorna M. Caldwell, Owners Specialize in: CERTIFIED ORGANIC Fresh or Frozen meat & organs BELTIE GRASS-FED BEEF

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INFORMATION

Fish That We Eat Iqaluich Niginaqtuat

This manual by Anore Paniyauraq Jones is the second in a series of three detailing the traditional foods of the Inupiat. The first book in this series about Inupiat foods was *Nauriat Niginaqtuat*, *Plants That We Eat*, an ethno-botanical manual, long out of print but due to be re-printed in the fall of 2009 by University of Alaska Press. It is 150 pages with black and white photos and sketches.

The second manual, *Iqaluich Niginaquat*, *Fish That We Eat*, provides information regarding the traditional use of fish, their processing, recipes and eating enjoyment. It was compiled from the local traditional fish knowledge of northwest Alaska and was partially funded and placed on the web by the U.S. Fish and Wildlife Service.

The third manual in this series will similarly detail the traditional Inupiat processing techniques and recipes for sea mammals.

Presently there is no funding to support this work. Any suggestions would be welcome. The web link to *Iqaluich Niginaqtuat, Fish That We Eat*, is below. The report is located under the U.S.F.W. Northwest AK section. From here you can read it and/or download and print it. It should be printed double-sided due to the length (341 pages), including 100+color photos, sketches.

> http://alaska.fws.gov/asm/ fisreportdetail.cfm?fisrep=21



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