Wise Traditions IN FOOD, FARMING AND THE HEALING ARTS

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THE WESTON A. PRICE FOUNDATION[®]

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THE WESTON A. PRICE

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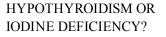
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President's Message

Late summer and early fall is the time when we work on our shopping guide for the upcoming year. (Responsibility for the shopping guide is now in the very capable hands of Carolyn Graff.) What strikes us is the proliferation of small companies engaged in artisan, organic and traditional processing—making lacto-fermented foods, crispy nuts, bone broths, raw cheese, natural yogurt and kefir, sprouted grain mixes, soaked grain cereals, sourdough breads, traditional cultures, additivefree pemican and jerky, fermented cod liver oil and high-vitamin butter oil. This is just the beginning of a wonderful revivial of the kinds of foods that keep us healthy and bring prosperity to local communities ... all of which could be headed for extinction should the proposed food safety bills pass in their present form.

In recent action alerts and media efforts, we have been focusing on the threat of food safety bills to small farms; but the threat is equally real to small food processors. In their present form, the food safety bills would give the FDA the power to do to food what the agency has done to pharmaceuticals, that is, forced concentration into several powerful monster drug companies by eliminating the competition of the small players, and sweeping natural remedies from the practice of medicine. The specter of several large food processing companies providing our only food choices is very real with HR 2749 (the House bill, now passed) and S 510 (the Senate bill, which is pending) in its present form (see page 61 for details on this bill). While personally I would like to these bills defeated, this is not a realistic scenario so our best hope is some kind of amendment. While many groups have suggested amendments to make these bills more farm-friendly, no group has yet proposed an amendment to protect the small processor. Currently a coalition of organizations is trying to come up with language that would be acceptable to lawmakers. Our hope right now is the Senate. We sent out an email in August asking members to visit the office of their senators. If you have not already contacted your senator, there is still time. At the very least, write a letter or send an email. Even better, request that the farmers and companies you purchase your food from send emails regarding S 510 to all their customers, making a strong request that Congress not pass any bill unless it contains clear wording that protects the small farmer and the small food processor.

We will be featuring food from local farms and artisan producers at Wise Traditions 2009—in fact, this year our food is going to be the best ever! We also have a terrific lineup of speakers, with a big emphasis on the how-to's of grass-based farming, plus vital information on why our grassfed and artisan foods are so important for maintaining vibrant health. The deadline for the advanced registration discount is October 1, so don't delay! For details, see page 74. QCO



Our youngest daughter was born in May, 2001. Through routine newborn screening at the hospital, she was diagnosed with congenital hypothyroidism. The doctors said she would have to take Synthroid her entire life or be permanently impaired, both physically and mentally. They also said that I should be tested, which revealed that I was hypothyroid.

We visited the pediatric endocrinologist at the UW-Madison Clinic. I asked him whether it could be that her tiny body had been supplying the thyroid hormone demand for me. I was told that thyroid hormone did not cross the placenta. (Why, I wondered, when just about everything else did?) I looked at that precious little child and just knew there was nothing wrong with her.

I found a local general practitioner who was willing to work with us and monitor her rather than simply prescribe synthetic hormones at the ripe old age of eight days. If she really needed thyroid hormone, she would get it, but I didn't want to give it to her unnecessarily. The GP could also take care of me, and he began monitoring my thyroid levels, too. It was like a see-saw. As the weeks went by, her TSH levels came down and mine went up! So thyroid doesn't cross the placenta, eh? Well, something that was affecting her thyroid gland sure did! Before she was one year old, she had perfectly normal blood tests. Her growth and development have been excellent and she has never had even one dose of synthetic thyroid, praise God!

I began taking Synthroid in October,

2001. After a few months on Synthroid, when the fog began to clear, I decided that I needed to find an alternative to synthetic hormones. I researched thyroid disease and made a strong attempt to eliminate goitrogens (primarily soy) from our diet. I began taking Armour thyroid. I also asked the doctor whether I might be deficient in iodine. I have lived in the Goiter Belt my entire life. I was told that I just wouldn't be deficient. We have iodized salt, after all, and there is salt in everything we eat, too much salt in fact. No, no, that just couldn't be my problem.

For years, we in the United States have been told to take the salt shaker off the table to reduce our sodium intake. Processed foods are generally high in sodium.

I did some investigating. I contacted many food processors in the U.S., big name companies that make cereals, meat products, breads, cheeses, snack foods, soups and other foods. Only one company said they used iodized salt in the production of their food (and I use the term "food" loosely), but they didn't use it in the U.S; only in Canada. So much for getting all the iodine we need from salty processed foods.

I put the iodized salt shaker back on the table, although it certainly is not an adequate source of iodine. A year or two later, a friend introduced me to Weston A. Price Foundation and real milk. We put a little "barnette" in our back yard and got a Jersey cow and some hens. At first, I washed my cow with a little soapy water when I milked. Eventually, I started washing her with an iodine udder wash that I bought at our local farm supply store. You know, putting my hands in that iodine water twice a day did something for me. I was too warm. I couldn't sleep. My hands shook. My heart pounded. My hair fell out. I was jittery. I was weak. I was taking too much Armour thyroid!

I went back to the doctor and told him I was taking too much Armour. I told him about the iodine udder wash I used on my cow. He absolutely did not believe me. Perish the thought that my problem was lack of iodine! My blood was tested for TSH and my dose was lowered. I couldn't even take the reduced amount. I went back again. He tested me again. I will never forget the way he looked as he said, "Now tell me. What exactly is it that you have been doing?"

Laughing with "udder" glee, I said, "I stick my hands in iodine water twice a day when I wash my cow before I milk her. I was iodine deficient. That's my story, and I'm sticking to it!"

I immediately cut my dose of Armour in half and devised a plan to slowly let my healing thyroid gland take over so I did not shock my system. Nearly six months ago, I was completely weaned from Armour thyroid. What a great simple cure, and cheap! One whole gallon of iodine udder wash concentrate costs about \$10.00. Seven years of being poked, paying doctor bills, and taking prescriptions when all the time the cure was at the farm supply store! Now that we know what a little iodine can do, we take kelp and use that good, old fashioned, stinging 2% iodine tincture on any wounds. It prevents thyroid disease and infection!

What is horrifying is the fact that my precious child was nearly condemned to a lifetime of unnecessary and harmful treatment! Would her normal little thyroid gland have atrophied and given up the ghost? Would she have suffered all the horrible side effects of hyperthyroidism from unnecessary treatment and not been able to tell me? I don't know. I am just thankful I did not have to find out.

I know the symptoms of thyroid disease well. If I ever need to see a physician to get a thyroid prescription again, I will do it. There is a need for good doctors. If I were ever in a car wreck and someone had to put me back together, I can tell you, I would be exceedingly grateful for skilled physicians. I only wish they would consider nutrition first before pharmaceuticals.

> Suzanne Rohloff Monroe, Wisconsin

GLUTEN AND THYROID FUNCTION

In the Summer, 2009 *Wise Traditions*, both Dr. Rind and Dr. Dommisse mention allergies to wheat in their articles, points which many readers might overlook. I have come to the conclusion that wheat and gluten were two of the main factors in suppressing my metabolism, leading to weak adrenals, weight gain, fatigue, infections, slow healing and a weak immune system, despite spending a fortune each month on the best health foods and supplements, while I was simultaneously consuming gallons of raw milk during those many months.

A few years ago, I went for one

month without wheat except for one big slip mid-month, namely Oreo cookies we crave what we're allergic to. A blood test at the end of the month ordered by my endocrinologist proved conclusively that the absence of wheat and related grains alone caused my thyroid to heal and no longer be swollen, eliminated fatigue, gave me new energy, and as the doctor's scale proved, lose fifteen pounds effortlessly. I did no exercise that month, not even mowing the lawn; I was a couch potato to prove the theory.

The doc examined my thyroid gland and confirmed I'd reversed fifty years of hypoactive thyroidism.

> Candy Reed Lake Panasoffkee, Florida

MERCURY DETOX WITH IODINE

Thank you for the article on iodine in the Summer, 2009 *Wise Traditions*. I have been using iodine for about a year or more now for mercury poisoning. I also have problems with thyroid function, I think, since I am cold all the time, and my eyebrows are faint on the outer edges. I have fibroids, and other such symptoms. I found Brownstein's and Galen Knight's lectures at the last WAPF conference to be very reaffirming and informative. Also Jerry Brunetti's lecture on trace minerals from years past was extremely helpful.

I probably got mercury poisoning from lots of amalgam fillings, which I had removed years ago by a dentist who took no precautions because he thought it was harmless. I also probably took in a lot of methylmercury and DDT from a year of eating catfish from the Sacramento/San Joaquin River Delta in California, where I worked on a catfish tagging project for the California Department of Fish and Game in the early 1980s.

I had a large parotid tumor removed several years ago, before I knew that they were often caused by dental mercury, and that cod liver oil and iodine could detoxify the mercury. It had grown over a decade from a pimple-sized lump to the size of half a ping pong ball at the time of surgery.

I was especially interested in the sidebar "Reaction to Iodoral" on page 46. In it Dr. Lonsdale says that he and other doctors taking Iodoral were afflicted with dysphagia after taking the tablets for a short time. This is very interesting because the first of my mercury detoxification symptoms was difficulty swallowing. I had no idea what this was and had never before experienced it. In fact, before this happened, I was proud of being able to swallow numbers of pills, huge mouthfuls of food, and to gulp down large quantities of liquids effortlessly.

When the detoxification began, I became unable to swallow. I would chew my food forever, until it was liquid, and still couldn't swallow it. I went to my acupuncturist and said that I thought my stomach meridian chi was flowing backwards! I got no relief there, though.

Through electrodermal testing I discovered high levels of mercury in my stomach, throat and esophageal lining. I didn't know what to do about it, and it was a terrible thing to choke so easily. Some days I couldn't even drink raw milk! In fact, the choking started right after I started drinking raw milk. I

wasn't taking Iodoral back then. Somehow I knew that the raw milk was causing my body to detoxify the mercury, so even though I got that terrible symptom, I kept drinking it, at least when I could swallow! As the mercury has moved out of my body that was one of the first symptoms to disappear—thank heavens, as swallowing is important!

I believe that those doctors who had an adverse reaction to Iodoral may have been detoxifying mercury. Dental mercury poisoning is usually found concentrated in the head, although it spreads all through the body. I believe the surface of the gut (from the mouth all the way down) is one of the first areas to detoxify. For me, as my body has detoxified mercury, the symptoms have moved from the top down. They have also moved from the inside (bones and joints) out (connective tissue, now fatty tissue, nerves, and endocrine glands). It would be interesting to me to find out if those doctors who experienced dysphagia had ever had dental mercury put into their teeth.

Without raw milk, I don't think I'd be alive today, because on some days it was the only thing I could consume. The raw milk nourished me and helped with detox. I also had to get rid of lead, organophosphate pesticides and cadmium, and make up a lot of deficiencies, especially minerals. I am doing this through a WAPF kind of diet, very high in saturated fats and minerals, lots of cod and skate liver oil, and lots of butter oil, sea salt, and most important, raw milk.

The Iodoral has also been wonderful, as it has brought me back to life, energy-wise. I take several tablets a day, from one to ten or more, depending on what my body seems to want through muscle testing. I also take a lot of cod and skate liver oil and the butter oil blend every day. Every once in a while my body takes a break and doesn't want the vitamins. I noted with interest that Edgar Cayce recommended taking a break in the Atomidine protocol you mentioned on page 43.

By the way, my husband recovered from osteopenia in less than one year when we switched to a high animal fat diet with cod liver oil (he won't drink raw milk). He was tired all the time and overweight when we were eating our "healthy" organic diet devoid of bone broth, low in fat and meat, and high in soy and grains. Now he's trim and fit, and a lot happier, too. We have more money now, because he has so much energy that he works two jobs and travels all over Florida giving lectures about butterflies just for fun (he's a lepidopterist).

WAPF has helped countless people around the world become healthier and happier, and now it's the environment, too, not just for pastured animals, but for butterfly conservation!

> Maria Minno Gainesville, Florida

MOLE PATROL

Thank you for your suggestion to put tincture of iodine on moles (Summer, 2009). I followed your suggestion and can testify that it works. Raised moles shrivel up and come off after about three weeks of application (one time per day). Flat moles (dark spots) take longer but eventually flake off or fade away.

Susan Greenburg Los Angeles, California

DEAFNESS CURED

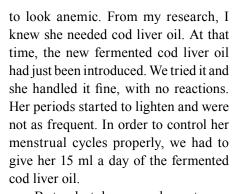
When my daughter turned eleven she developed a condition called allergic Eosinophilic Esophagitis (EE). Her throat would close around food so that no food or water could pass into the stomach. Dairy, soy, gluten, MSG, eggs and peanuts would trigger this reaction. At first we tried the doctor-and-drug route, but that only made my daughter sicker. She developed complications from the meds she was put on, the worst being damage to her liver.

I learned about Weston Price about the same time that I had given up on the doctors. I started to manage her EE with traditional foods. Even though she could not eat any gluten, we found that properly prepared sourdough bread was fine for her. She could not drink pop, but kombucha actually helped her detox after an allergic reaction.

However, we had problems with cod liver oil. We started her on high vitamin cod liver oil, but she developed hives. Her liver had been damaged from the steroids the doctors used to treat her EE. Because the liver damage was so severe, she could not break down the vitamin D. So, we stopped the cod liver oil and continued on the diet. I thought maybe she just didn't need the cod liver oil. Wrong!

When she was about thirteen, she started menstruating. Her cycles were heavy and frequent. She would cycle multiple times in a month. She started





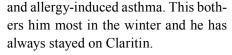
But what happened next was amazing. My daughter had been diagnosed by the children's hospital in Indiana to be deaf in her left ear. Because of tumors (cholesteatomas) that had grown in her ear canal, she had part of her ear canal removed, leaving her ear canal like that of an infant. Her ear drum had been operated on so many times, that she was legally deaf in that ear. After about four months on the fermented cod liver oil, we brought her for her regularly scheduled hearing test and ear check. (The doctors were always looking for more ear tumors.) But we didn't expect to hear what we heard. They told us that she had normal hearing for speech sounds in the left ear! They no longer pushed the need for a hearing aid! I didn't believe it and thought that maybe they had made a mistake. But we have had two years of follow-up appointments where her hearing has

remained at this level. The only thing we can attribute with this healing is the fermented cod liver oil (and prayer).

We are now on the Gut and Psychology Syndrome (GAPS) diet and my daughter continues to improve, although she still has EE. However, we are hopeful that the combination of diet and fermented cod liver oil will lead to total healing. After all, who would have dreamed that the search for a cure for difficult menstruation would lead to the healing of a child's hearing? I am so thankful for all you good folks at the Weston A. Price Foundation! Keep up the good work!

> Elizabeth Bridgewater Atlanta, Indiana

> > Latteria



Since drinking raw milk he has been allergy-free, and medication-free as well. In addition, his digestive system (previous gas problems) also is greatly improved. The addition of raw milk in his diet is the only change so it is obvious the raw milk is responsible for his improved health.

> Vicki Wilson Whitsett, North Carolina

RAW MILK IN ITALY

In Italy, in the past three years, *latte crudo* (raw milk) machines have sprung up all over the country and now raw milk makes up ten percent of the entire nation's milk market!

In Parma, which is a city of 200,000, there are four machines easily accessible within the town's historic center. Each machine is filled by different local dairy farmers' daily output and you purchase the milk in whatever increment of a liter that you would like. The cost is only one Euro per liter. The milk is filtered and chilled and that's all. It's very popular here now!

> Rani Narulla Parma, Italy

ALLERGIES GONE WITH RAW MILK

My daughter in Boone, North Carolina has been purchasing raw milk for the past year from a small local dairy farmer. My ten-year-old grandson has suffered from a large range of allergies

REGLAN SIDE EFFECTS

I work with the Tardive Dyskinesia Center. I came across the WAPF website while searching for digestive disorder resources and wanted to connect with you.

We provide educational information on tardive dyskinesia, a movement disorder caused by the medication Reglan. Reglan is recommended to patients who suffer from digestive disorders such as GERD.

Tardive dyskinesia (TD) is a result of damage to the bodily systems that process dopamine, and is typically caused by exposure to certain neurological medications—including Reglan. The symptoms of TD, which are irreversible and incurable, mimic those of Parkinson's disease. TD victims suffer from involuntary, repetitive movements which often continue after the drug is no longer used.

We feature the most up-to-date information on TD, its causes, and all known treatment options. Additionally, we distribute free wristbands to all of our users in hopes of raising TD awareness. Please visit our website at tardivedyskinesia.com.

> Chase Peterson Melbourne, Florida

EVERYTHING-FREE

I qualified as a naturopath in 2002, and I have worked in almost every facet of the field since then, from private clinic to retail dispensaries, and I currently work in naturopathic distribution. I worked hard all the way through college, alongside embracing wholeheartedly the principles of a "naturopathic diet"—wheat-free, glutenfree, sugar-free, dairy-free, yeast-free, egg-free, meat-free, taste-free, just about everything-free.

As I ate this way, slowly depleting my health, I learned how to "fill in the

gaps" with synthetic supplements. After all, it was foods like liver, butter, eggs and seafood that contained the highest density of important nutrients, and I couldn't possibly eat these because of the quantities of (shock, horror!) saturated fats and (boo, hiss!) cholesterol. I was also taught that eating animal products was not ecologically sustainable, and that every bite of animal food would contain a host of antibiotics, hormones, and pesticides to destroy my health.

Despite being taught what not to eat and why I shouldn't eat it (and subsequently which supplements I would require), I was left bereft of any information about what I should eat, where to buy it, or how to prepare it.

Years of chickpeas and brown rice followed; low energy, poor concentration and depression resulted, not to mention a painfully sensitive digestive system and quite a stubborn and nasty case of dermatitis. I was forced to rethink my nutrition from scratch as a part of my own, somewhat ironic, health crisis and myriad questions I was forced to start asking about standard naturopathic theory. This was when the Weston A. Price Foundation information showed up.

So many of the questions I had been asking were answered by these principles! What engaged and fascinated me the most, and continues to do so, is that the WAPF body of work provides us with nutritional principles based on anthropological evidence, rather than pure theory. We need only look at Price's magnificent photographs to see real nutrition in action, and to understand how important it is for us to nourish ourselves. Not only this, but the Foundation has pulled together a supporting group of brilliant scientific minds to back up Price's data in a very real and grounded way.

As I began to gradually integrate the principles into my lifestyle, I noticed my health, energy and headspace improving with a steady, gentle and powerful swiftness. I'm still on this journey, and with each passing day, week, month, I feel healthier, stronger and more vital.

In private practice, I noticed that it was clients who made nourishing changes in their diets who got the amazing results, not those who popped pills with compliance.

Over the last twelve months specifically, I've been able to fully integrate the principles into my life, and it's trial, error and experience (including a few exploding sauerkraut lids, moldy soaked grains, bizarre cultured growths and assorted other miniature disasters!) that bring me to heading up the Sydney chapter. I've had first hand experience in how overwhelming it can be when we first access this information: how do we bring these foods and techniques in with ease? It's my job to help make the transition easier, and also to initiate networking and community building so that we can start to support each other in wellness.

> Gemma Davies, BA, ND, DBM, DRM, Chapter Leader Sydney, Australia

GRATEFUL AND PLEASED

A thorough study of Weston Price's research as well as the work of Mary Enig and others clearly demonstrates



with overwhelming evidence that ancestral, primitive diets represent the way our bodies evolved to eat. Our digestive systems were designed over thousands of years to assimilate foods of the Earth, certainly not the "foods" big business has designed for us to eat. Now is such a critical time to get the word out as autoimmune illnesses, digestive problems, obesity and behavioral problems are rampant.

On a personal level, my daughter just had her third baby. She has been putting the principles of traditional diets into practice for the last three years raw milk, raw cheese, grass-fed butter, cod liver oil, coconut oil, mostly all organic meats, fruits and vegetables.

Her previous two pregnancies had complications-premature deliveries due to placental problems, and the babies had low birth weights (although now her two little boys are very healthy and have exceptional diets). Her third baby, Aviana Hayden Skaggs, born April 6, 2009, went full term with a healthy birth weight of over seven pounds. In three days she gained back her original birth weight, which the pediatrician was amazed to see. She is a voracious nurser and a very calm baby. Already in two weeks she is sleeping through the night except to nurse, and then she goes right back to sleep.

We are so very grateful and pleased to see that a few adjustments in one's diet can produce such positive, healthy results. Also, my daughter has never felt so good after having a baby.

Thank you, WAPF, for having the courage to take on the diet dictocrats and

doing so in such a calm, non-threatening, lovely manner.

> Anne Greenwood Rimrock, Arizona

A VISIT TO CUBA

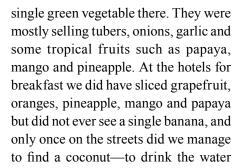
Recently my husband and I visited Cuba on a sustainable agriculture research delegation. While there we had hoped to gather material for an article on traditional Cuban foods. We were to meet with a mother-daughter team in Havana who are reportedly good, traditional Cuban cooks but the meeting did not happen.

Nevertheless, we learned enough on this trip to realize that this meeting probably would not have provided us with much information. Fifty years of Castro and socialism seems to have effectively wiped out any semblance of good food or anything much of pre-revolution interest in cuisine. I understand a commonly told Cuban joke is, "What are the three biggest failings of the revolution?" Answer: "Breakfast, lunch and dinner."

The food was miserable overall—I just hope home cooking is better than what we experienced. We found only one type of white bread, although shaped and baked in various forms, but all tasting exactly the same—squishy and bland. There was one type of cheese, always sliced extremely thinly (maybe because it was precious), which did have a decent taste; a few luncheon meats (ditto on the amazingly thin slices); vastly overcooked fish, beef, chicken and pork, ubiquitous; monotonous black beans; and white rice. I don't think there's much access to herbs and spices as even finding salt and pepper on the table was a challenge! "Salads" consisted of shredded cabbage, sliced tasteless pale tomatoes, cucumbers (I think we saw lettuce and olives once) with (sometimes) cruets of vegetable oil and distilled white vinegar as dressing. Otherwise the raw vegetables were served dry without anything resembling vinaigrette. Frozen or canned vegetables were served alongside the cooked-tosmithereens meat or fish, but only if we were lucky.

Our guidebook told us that lobster (which we had once in Old Havanafresh and rather tasty but also horribly overcooked) and beef are state controlled and hefty fines are levied if they are sold outside of state channels. I did ask our Cuban tour guide about fishing and boats, and he assured me Cubans can and do own boats and are allowed to fish, but for their personal consumption only. You'd never know it; looking out over the gorgeous, calm waters for those ten days I saw only two boats! On any other Caribbean island, there'd be marinas and boats galore. Thank heavens eggs were always available for breakfast, and there was some butter-the butter in packets came from New Zealand. And Cubans consume a lot of sugar.

Even if one has extra money, access to a varied source of nutritious food does not seem possible. Of course I don't know about black market possibilities, but even the best farmers' market we saw in Havana was very lacking in variety. I don't think I saw a



inside through a straw. Peanuts are grown on the island, but I never saw peanuts or peanut butter.

However, I must add that we totally enjoyed everyone we met. Everyone was warm, gracious, friendly. We noticed a perceivable *joie de vivre* even though their living conditions are certainly lacking, with little hope of betterment. They go about their business with overall good cheer and smiling faces. Especially the

young people, wow! The school kids were positively adorable and even the teenagers looked so much more alive than our youth—they did not have that slouching, sad look we see in our teenagers here.

Another interesting factor in researching indigenous foods and preparation methods is that the last indigenous peoples, the Tainos, were effectively wiped out during the time of Spanish colonization and little is left of their culture. I bought one book ("Sustainable Agriculture and Food Security in an Era of Oil Scarcity, Lessons from Cuba" published in the UK) before we left that has some info on even earlier peoples, the Guanahatabeyes and the Ciboneyes, but with little info on their agricultural practices and nothing about food preparation except one item: a ment, the agricultural tours were wonderful. We visited large cooperatives in the countryside, small, intensive raised-bed urban gardens, government and university research stations, small and family-owned farms. There really is a concerted move towards sustainable agriculture, increasing diversity in their farming systems and food sustain-



bread called casabe. This was made from cassava. "The bitter variety was grated, leached and toasted on ceramic griddles" to produce this bread.

The Cuban are guaranteed a stipend of rice, beans, sugar, cigarettes(!) and something like 4 ounces of lard per month. If you have children under seven, you get a certain amount of cow's milk. After seven years old, the ration for children switches to soy milk. Argh.

While the food was a disappoint-

ability. However, there is a problem getting younger folks interested and involved in farming, and inefficiencies in transportation and distribution continue to be a problem. Apparently a huge amount of produce never makes it to the consumer.

We did see a very interesting type of pasturing for dairy cows, using edible-leaf trees. This was at the Indio Hatuey agricultural research station, where they planted both the grass and the trees. They

selectively cut off branches for the cows to eat the leaves, which are said to be high in protein. The trees regrow, and the limbs help shade the cows from the tropical sun. They were cutting limbs as our group watched, and as soon as the cows heard the chain saw start up, they were on the move towards it, and went straight for the leaves. I asked whether the milk was sold raw, and they said yes, but that most folks boil it at home.

With the thawing of relations with



the U.S., Cuba faces a huge decision: will more freedom mean that Cubans consume more processed food, or will they return to their culinary traditions?

> Lynn Wright Fort Jones, CA and Tucson, AZ

FRUCTOSE QUESTIONS

In the section "The Big Dirty Secret about HFCS" (Spring, 2009) the authors take the stance that the fructose found in HFCS is D-fructose, while the fructose found in fruits is L-fructose or levulose. There is some confusion here.

Levulose is actually another name for D-fructose, and it is the kind that is found in fruit. L-fructose is not found in nature to any large degree. I have looked into the matter and it would appear that D-fructose (or levulose) is the form of fructose found both in fruits and HFCS. L-fructose does not occur in nature, and production in the lab is apparently a proprietary production. See the following link for some background information: www.freepatentsonline.com/4734366. html.

Dr. Matthew Marturano Troy, Michigan

Thank you for pointing out this error in labeling of fructose; we have made the correction on our website. Regarding the main type of fructose in HFCS, insiders have told us that it is indeed an artificial L-fructose of reverse polarity, not the natural D-fructose (levulose) that occurs in fruit. The industry has gone to great lengths to hide this critical difference, but one clue comes from the fact that D-fructose has a caramelization or darkening point of 183 degrees F while HFCS has a darkening point of 138-140 degrees F (causing problems for HFCS in higher temperature applications such as candy making). Meanwhile, evidence of HFCS dangers accumulates: a high-fructose diet in rats causes memory problems (Neurobiology of Learning and Memory, July 2009) and fructose raises serum uric acid levels and inhibits nitric oxide bioavailability (American Journal of Physiology, Renal Physiology, October 18, 2005). The heat-formed contaminant hydroxymethylfurfural (HMF) is very toxic to honeybees and may explain why use of HFCS in beehives has led to dieoff of bee colonies (not to mention contamination of the honey they produce). A switch from HFCS to sugar by some food manufacturers may explain the current sugar shortage.

SPECIFIC CARBOHYDRATE DIET AND CELIAC DISEASE

I was grateful to read the review by Jill Ebbott on Elaine Gottschall's book, *Breaking the Vicious Cycle*. However, neither of those two authors dealt with the issue of whether celiac disease, as an auto-immune disorder, can really be completely overcome. According to the father-son gastroenterology team in the 1950s who developed the Specific Carbohydrate Diet (SCD), it can, but current information and research would be nice.

I spent eleven months following the SCD described in Gottschall's book. It did improve my digestion, but not to the point where I can comfortably and confidently eat gluten. I have been off gluten for too long to be blood tested for celiac, but even if I were and it was positive, I am not convinced that it is a permanent condition. I have learned from WAPF the amazing benefits of probiotic foods and tend to believe that they hold the key to our problem.

> Debbie Eaton Poway, California

In addition to probiotic foods, nourishing bone broths can help heal a gut damaged by gluten. For an inspiring article on recovery from celiac disease, see www.westonaprice.org/moderndiseases/healing-celiac-disease.html.

ANOTHER VIEW ON FOOD SAFETY

Having had a farm destroyed by the government's pathogenic organism-contaminated sludge disposal policy, I can say you are right to oppose the proposed food safety act.

Almost thirty years ago, FDA, USDA, and EPA agreed to poison farmland by using farms as a cheap disposal option for contaminated sewage sludge, rather than putting it in a landfill as the law required. EPA created a massive public relations program though the Water Environment Federation (WEF) to convince farmers and the public that pathogen-contaminated sludge was a good fertilizer.

Part of that program included the use of the term "coliform" for gram negative enteric bacteria such as *E. coli*, salmonella, shigella, etc., which grow

best at 97 degrees Fahrenheit, and the term "fecal coliform" for one type of thermo-tolerant *E. coli* that continue to slowly replicate at 112.1 degrees Fahrenheit. It is the government's position that neither coliform nor fecal coliform are human pathogens. *E. coli O157:H7* does not show up in FDA's fecal coliform test for food contamination.

EPA has been fully aware since its early 1980s studies that wastewater (sewage) treatment plants create and release antibiotic-resistant bacteria, in both sewage effluent and sludge. At the same time studies show that disinfectants used in drinking water treatment plants also created antibiotic resistant bacteria. Furthermore, over the years, studies have clearly shown that bacteria will be taken up internally by plants and fruits.

The food safety bill is just a method of covering up bad government disposal policy by blaming the victims. The human victims as well as farmers and the corporate victims will continue to pay as the FDA, USDA and EPA expand their kingdoms.

It doesn't take a genius to figure out there might be a connection between the government spreading pathogenic organisms in the environment and the dramatic increase in sickness and associated deaths. For example, hospital stays due to methicillin resistant *Staphylococcus aureus* (MRSA) infections have risen from 1900 in 1993 to 368,000 in 2005.

A good book on this subject is *Toxic Sludge is Good for You!* by John Stauber. Also, please see our website at www.thewatchers.us where we have posted the 1981 Health Effects project summary "Sewage Sludge Viral and Pathogenic Agents in Soil-Plant-Animal Systems,"www.thewatchers.us/PDF_ files/1981-sludge-study.pdf. We have posted a petition to ban sludge with a goal of getting one million signatures: www.thepetitionsite.com/2/help-bansludge#signatures.

> Jim Bynum, VP, Help for Sewage Victims Smithville, Missouri

A DENTAL HISTORY

I wanted to share my experience of dental health with everyone in hope of spreading knowledge among the community. I was lucky enough to grow up in the home of a health nut and avoided most of the fake foods during my childhood. But I had a secret stash of candy for a few years, which seemed to be harmless enough and only resulted in a few cavities as a teenager.

It was during my years in college in my mid-twenties, when I ate more of the standard American diet that my teeth really suffered. My gums began to bleed, I had enough tartar buildup for four cleanings per year, and I needed to have fillings at almost every dental appointment for several years. Even flossing twice per day didn't help. Fortunately, I avoided sugar and cheap grains more than the average person, but something was very wrong. My first and only crown came at age 31 after breaking a tooth while eating popcorn. That was the point that scared me into searching for answers.

The first major change was the complete elimination of soy. I had gotten into the habit of eating protein bars for snacks, thinking that protein is good. I was dismayed to read the label and find that I had been eating soy protein isolate.

Two things resulted. First, my intestinal bloating and gas went away. Second, my next dental cleaning was easy because there was a drastic reduction in tartar after stopping the protein bars.

The second major change in dental health came with the purchase of an expensive vibrating toothbrush from the dentist. This really reduced the bleeding of the gums.

The third major change was reading the book *How to Save Your Teeth* by David C. Kennedy, DDS. Using his suggestion of baking soda and salt as tooth powder further reduced the bleeding of the gums.

The fourth and final major change has been the daily consumption of homemade yogurt from raw milk. The bleeding gums have not bled in six months and there has been virtually no buildup of tartar on my teeth. I hope this will help me keep all of my teeth and lead to a long life of dental health.

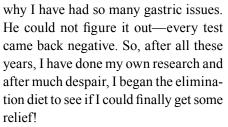
> Bruce Summers Columbia, Missouri

ALLERGY TO SOY

After two or three years, I am finally sure that a majority of my health issues are a result of soy allergy.

I have spent so much money with a gastroenterologist trying to determine





First I eliminated gluten for a month, as well as soy. This is next to impossible—soy is so often in the hidden ingredients that it was easier going gluten-free!

Now that I'm off soy, I realize that I have hit on my problem. My mother has always said that she had trouble with soy, but it doesn't seem to be as severe as my trouble—excessive, non-stop belching that goes on for days when I eat soy. My father had the same symptoms as I, but never figured out the soy connection. Like me, he kept taking Prilosec and antacids but they were only band-aid remedies.

I noticed this problem had gotten worse through the years and now I suspect it's on account of the use of fillers today that are being added more and more, in order to adjust to inflation and stretching foods of real substance to make them go further! What a travesty!

My problems with excessive gas and belching, along with abdominal swelling and pain, all began with pre-menopause and got worse when I was finished and

Please send letters to the editor to info@westonaprice.org, with "Letter to the Editor" in the subject line; or send by mail to the Foundation's address. Letters published in *Wise Traditions* will also appear on the website www.westonaprice.org.

through menopause. My gynecologist even tested me with ultrasounds of the reproductive organs to rule out cancer. I just can't tell you how much time and money I've spent to find out what was wrong with me!

I am now free of the belching and gastrointestinal trouble for the first time in years. I accidentally ate something that I was told had no soy in it, but within twenty minutes, I had a full outbreak of gas!

I am quite sure that the soy lobby works nonstop promoting soy—more and more of everything contains soy. Thanks for all you are trying to do to persuade Washington to stop pushing soy on us! If more people knew they had soy issues, they'd get on the bandwagon to eliminate it!

> Kay Davis Wilmington, North Carolina

SHARING MY STORY

I am interested in promoting the Weston A. Price Foundation message while educating my local community about imitation foods—I call them plastic foods—and in support of locally and ethically raised meats, which I now distribute in our area via my modified CSA (Community Supported Agriculture) program.

I have started a meat riot against CAFOs (Confined Animal Feeding Operations), which are slowly killing our communities by causing degenerative disease. We have medical proof because we have saved our two-year-old daughter's life as she battles esthesioneuroblastoma, using ethical local foods and natural medication. We converted her solid mass tumor into a cyst over the past eighteen months after chemo was killing her.

I urge your members to support my meat riot by sourcing their meats directly from local farmers, ranchers and anglers who practice sustainable farming methods. Please visit my website www.farmtoforkmeat.com so you can read about my mission.

> Niti Bali Raleigh-Durham, North Carolina

BAD CHOICE

I invite all WAPF members to write to Commissioner Margaret Hamburg at FDA (commissioner@fda.hhs.gov), to protest the appointment of Michael R. Taylor, formerly of Monsanto, as senior advisor to the commissioner. Here's what I wrote:

"Your appointment of Michael Taylor is a slap in the face of every consumer who held out hope that during your tenure the FDA would move from promotion of industry profits to protection of consumers. Your press release reads like it was written by Monsanto—with no mention of Taylor's loyalty to that firm and its industry associates.

"My heart goes out to all who believed that this would be a time for change—for their hearts will surely be broken."

> Adrienne Samuels, PhD Chicago, Illinois

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

Sally Fallon Morell and Mary Enig take on the Diet Dictocrats

BLAME

"Millions of Children in U.S. Found to Be Lacking Vitamin D," says a Washington Post headline (August 3, 2009). Who's to blame? "Unhealthy lifestyles" say the experts, by which they mean, "... children spending more time watching television and playing video games instead of going outside, covering up and using sunscreen when they do go outdoors, and drinking more soda and other beverages instead of consuming milk and other foods fortified with vitamin D." "Study finds rise in student injuries in gym class," says a Yahoo!News article, quoting a study published in the September, 2009 issue of Pediatrics. Who's to blame? "... lack of adult supervision... . a decline in school nurses and larger class sizes. . . Classroom teachers who aren't trained in P.E. [and] might not recognize situations that can cause injury." Who's really to blame? A generation of government officials promoting the agendadriven, unscientific USDA dietary guidelines and creating a fear of the very foods that children need for vitamin D and the development of robust, injury-proof bodies-namely butter, egg yolks, lard, liverwurst and cod liver oil.

WANT TO LOWER YOUR CANCER RISK? JOIN A STUDY!

Promoters of vegetarianism are making much of a report published in the British Journal of Cancer (2009 101:192-197), noting that in two studies following more than 61,000 vegetarians over twelve years, vegetarians had less blood, bladder and stomach cancer than meat and fish eaters. But vegetarians had higher rates of colon, rectal and cervical cancer. Rates of breast and prostate cancer were similar in both groups. Actually, the differences in the various rates of cancer were incredibly small, and overall the reduced risk of cancer was larger among fish-eaters (18 percent) than among vegetarians (12 percent). The meat-eating subjects were older and the risk ratios were adjusted for age, so a direct comparison between absolute rates of cancer cannot be made. There was no difference in all-cause mortality between the groups. But the key finding may be that simply being involved in the study is associated with a very large difference in mortality, unlike the small differences in cancer found among diet groups. The first study was the EPIC-Oxford cohort in which both vegetarians and non-vegetarians had a 30 percent reduced risk of cancer compared to the general population and a 50 percent reduced risk of all-cause mortality compared to the general population—but there was no difference between the two groups. That means that simply being in the study was associated with a large reduction in mortality risk, but being vegetarian was not. The other study was the Oxford Vegetarian Study, which found the exact same thing. In a paper showing the standard mortality ratios of both the Oxford Vegetarian Study and the Health Food Shoppers Study (www.ncbi.nlm. nih.gov/12001975?), the mortality rates were 52 percent of those in the general population within the first study and 59 percent of those in the general population within the second study, but there was no difference in mortality rates between vegetarians and non-vegetarians in either study. Why? One explanation is that in calling for subjects that meet various parameters (such as not smoking), the study selects for more motivated people. More motivated people die less often of cancer and all causes than do less motivated people.

A "NEU" REASON NOT TO EAT MEAT?

In a recent E-Zine (February 8, 2009), Dr. Gabe Mirkin notes that 72 percent of patients admitted to American hospitals for their first heart attack have blood cholesterol levels in the normal range (American Heart Journal, January 28, 2009). According to Mirkin, "This means that the cholesterol guidelines are missing the majority of patients who have heart attacks because either 1) the guidelines are not low enough or 2) something other than a bad LDL cholesterol is causing most heart attacks in the United States." That "something," according to Mirkin, is inflammation and the solution, he says, is to avoid meat (while continuing, of course, to take cholesterol-lowering statins). According to Mirkin, meat contains a molecule called Neu5Gc that humans do not have, so the immune system of humans "attacks this protein as if it [were] an invading germ and eventually attacks the host itself to destroy the blood vessels and increase risk for heart attacks and strokes." Just one problem with Mirkin's theory: one-time consumption of 150 mg of Neu5Gc, the quantity found in five kilograms of beef, produced no noticeable adverse effects and did not affect antibody levels to the substance. There is as yet no evidence connecting the consumption of red meat, dairy, or other dietary sources of Neu5Gc to antibody lev-

els or tumor growth (www.pnas.org/content/100/21/12045. full). In fact, some evidence indicates that very high natural levels of antibodies to Neu5Gc might actually inhibit tumor growth and be protective in humans (www.pnas.org/content/105/48/18936.full).

WEIGHTY FINDINGS ON MSG

Numerous animal studies have indicated that MSG is a factor in weight gain, independent of the number of calories consumed. Now we have confirmation that MSG causes weight gain in humans. Researchers at the University of Carolina at Chapel Hill studied 750 Chinese men and women, ages 40-59, living in three rural Chinese villages. Most of the study subjects prepared their meals at home without commercial processed foods and about 82 percent used MSG. Those participants who used the highest amounts of MSG

had nearly three times the incidence of overweight as those who did not use MSG, even when physical activity and caloric intake were accounted for (Obesity (Silver Spring). 2008 August; 16(8): 1875-1880.). Americans consumed about one million pounds of MSG in 1950; today that number is three hundred million pounds. Almost all processed and fast food contains MSG, and the food industry certainly knows that the additive they use to make their food taste good is a major cause of the current obesity epidemic.

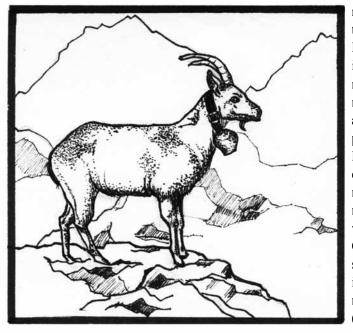
NO REPLY

National Public Radio (NPR) recently aired a report about the Greek island of Icaria, inspired by the work of author Dan Buettner, who has traveled the globe visiting "Blue Zones," areas where people tend to have a long lifespan. In Icaria, nearly one out of three people make it to their nineties. Ac-

cording to Buettner, the diet of the Icarians is as politically correct as politically correct can be: olive oil, fruits, vegetables and herbal teas. The Icarians do not eat fish because "pirates pushed the culture up in the highlands and villagers couldn't depend on the sea as much as might be expected." We emailed Mr. Buettner to ask him what kind of meat and dairy products the islanders consumed—after all, the island territory is perfect for sheep and goats, animals whose meat and milk are extremely rich in saturated fats. Unfortunately, Mr. Buettner did not reply. Wikipedia notes the presence of domesticated animals on the island, including herds of goats that disturb the tranquility of the island with their clanking bells.

AN EXPLANATION

The Weston A. Price Foundation has borne the brunt of considerable criticism for its claim that the number of mothers



who don't have enough breast milk to successfully breastfeed their babies is underestimated. Breastfeeding advocacy groups insist that the vast majority of mothers can produce adequate milk to nourish a growing baby, and that any problems with supply are due to poor technique. But new research reveals an environmental factor that could make nursing difficult for many mothers. Scientists at the University of Rochester Medical Center found that dioxin causes so much damage to the cells involved in milk production that rodents exposed to the pollutant (a common component of chlorine-based pesticides) could not

nourish their offspring. Exposure to dioxin during pregnancy impairs the normal development of the mammary glands, resulting in diminished supply during lactation. (www.sciencedaily.com, June 14, 2009). The discovery underscores the importance of making the environment for pregnant women as chemical-free as possible; it also points to the need

for plentiful vitamin A in the diet, because vitamin A offers a strong protection against dioxins and related chemicals. Surely this is a better strategy than pretending the problem doesn't exist.

SOME FACTS ABOUT FLU VACCINES

Swine flu is in the news these days, and rumors are swirling. Is the flu a dangerous threat, an artifact of biased reporting, the result of laboratory manipulation to create a bioweapon, or simply the illness that occurs when people are exposed to pollution and toxins? No answers are forthcoming, but we do have some hard facts that should make people pause before they line up to get a flu shot: the flu vaccine does not work, and it contains dangerous, potentially life-threatening additives. A review of fifty-one separate studies published in 2006 concluded that flu vaccines worked no better than a placebo in 260,000 children ranging in age from six to twenty-three months. A report published in 2008 found flu vaccines in young children made no difference in the number of flu-related doctor and hospital visits. They are equally useless for adults, giving little or no protection against infection and pneumonia. And two recent studies show that children receiving a flu vaccine had an increased risk of severe asthma attacks. The additives in flu vaccines include mercury (in thimerosol, used in multi-dose vials), aluminum hydroxide (a neuro-toxin), formaldehyde, MSG (used in the growth medium) and various other adjuvants, including squalene (which when injected into animals renders them crippled and paralyzed). In early trials, the vaccine has caused animal deaths in the Czech Republic and human deaths in Poland. The 1976 swine flu vaccine caused 25 deaths and 500 permanent injuries in a pandemic that never materialized. (For an excellent review, see the report prepared by Dr. Mae-Wan Ho and Professor Joe Cummins at www.i-sis.org.uk/fastTrackSwineFluVaccineUnderFire.php.) Nevertheless, health officials throughout the world are pushing forward with mass vaccination plans aimed at health workers, pregnant women and children six months and older. The vaccines are mandatory in Greece and possibly mandatory in the UK and in some U.S. States. Our advice: just say no! (If you need a religious exemption, see www.cuwisdom.org/membersh.php.) Meanwhile, be sure to build up your natural immunity to pathogens and toxins by

following the principles of a nutrient-dense diet that includes cod liver oil, animal fats and organ meats, bone broths and coconut oil.

ARTIFICIAL SWEETENER UPDATE

The artificial sweetener aspartame (sold as Equal and Nutra-Sweet) is a diabolical poison, no doubt about it, confirmed by new evidence. In 2005, scientists in Italy reported a rigorous three-year study on 1,800 rats concluding, "Aspartame causes significant increases in lymphomas/leukemias and is a multipotential carcinogen." The findings were ignored by health officials in both Europe and the U.S. But on May 14, 2009, the National Cancer Institute confirmed the link between formaldehyde, one of the breakdown products of aspartame, and cancer, reporting a 37 percent increase in death risk from lymphoma and leukemia in workers exposed to formaldehyde (doorway.com, May 27, 2009). The industry knows it has a problem with aspartame and is actively seeking a replacement. Ajinomoto, a leading producer of aspartame, has asked the FDA for approval of a new no-calorie sweetener derived from the same amino acids as aspartame plus vanillin (artificial vanilla) called Advantame (www.foodnavigator-usa.com, April 8, 2009). The company notes that the sweetener "blends very well with sugar and high fructose corn syrup." The main alternative sweetener, Splenda (made from chlorinated sugar), has its own dangers. A recent study shows that Splenda has a negative effect on gut flora. Subjects at Duke University took various doses of Splenda over a twelve-week period. Test showed numerous adverse effects on gut flora. Even twelve weeks later, levels of some of good flora were still depressed (J Toxicol Environ Health A. 2008;71(21):1415029). The latest news is that sewage treatment fails to remove sweeteners from waste water. Researchers detected acesulfame, cyclamate, saccharine and sucralose downstream of sewage treatment plants. Manufacturers are wringing their hands-not out of concern that the sweeteners may do harm, but because the findings "might become a primary issue for consumer acceptance" (www.foodnavigator.com, June 18, 2009).

STATINS FOR THE MILLIONS

Last year, the American Academy of Pediatrics (AAP) issued new guidelines recommending cholesterol-lowering drugs

for some children as young as eight years old, "to ward off future heart problems." The group also now recommends lowfat milk for one-year-olds and cholesterol testing for all children by the age of ten (Pediatrics, 2008 Jul 122;(1):198-208). The combination of lowfat diet and cholesterol-lowering medicine will ensure blighted life for these youngsters, but of course increased profits for the drug companies. A number of physicians have expressed outrage (New York Times, July 8, 2008), noting that there are no data on the side effects of taking statins-which include impotence-for forty or fifty years (if the children live that long!). But someone has to pay for drug company advertising and lobbyists, so why not start with children. The elderly need to pay also. An article from the American Journal of Cardiology (2009;104:354-358) suggests "universal statin therapy" in the elderly. Here's the logic: since it is difficult to identify individuals with elevated C-reactive proteins, and since a recent study (called the JUPITER study) showed that treatment of older adults with elevated C-reactive protein "significantly" reduced the risk of cardiovascular disease, and since the statins "do no harm," why bother with expensive testing and just put all the elderly on statins! And all this market expansion is working! A survey of nine countries finds "improvement" over a tenyear period, with 73 percent of patients surveyed (most of whom were taking a statin) reaching their "target level" for LDL-cholesterol. Countries surveyed included Spain, South Korea, Brazil, Canada, France, Mexico, the Netherlands and Taiwan (Daily Health News, June 22, 2009).

JUPITER SCUPITER

The JUPITER trial that has the statin-pushers so excited looked at patients with no evidence of pre-existing cardiovascular disease and low-to-normal LDL, with elevated C-reactive protein (CRP, a marker for inflammation). Those receiving the statin Crestor (Rosuvastatin)—JUPITER stands for "Justification for the Use of statins in Primary prevention: and Intervention Trial Evaluating Rosuvastatin"—reduced the risk of sudden death by 47 percent, cut the risk of heart attack by 54 percent, the risk of stroke by 48 percent and total mortality by 20 percent, according to news reports. When you look at the actual numbers, however, the differences were very small. For example, .77 percent of the Crestor group experienced a cardiac event, compared with 1.36 percent of the placebo group. This means you need to treat 120 patients for nearly two years for a single patient to benefit. Even the appearance of slight advantage in the Crestor group should be called into question because the study was funded by AstraZeneca, the company that makes Crestor, and the lead researcher is a coinventor of a CRP test-so there was plenty of temptation to cook the books. Most concerning was the fact-overlooked in news reports-that those taking Crestor reported an increase in diabetes compared to the placebo group (www.bottomlinesecrets.com, June 9, 2009). Diabetes greatly increases the risk of heart disease and stroke. One more thing: JUPITER was slated to be a five-year study, but was terminated at two years, ostensibly to give the placebo group the advantage of taking Crestor. Perhaps the real reason was that the sponsors could not afford to find out what happens to patients taking Crestor for as long as five years.

OILED AGAIN

"High Fat Diet May Make You Stupid and Lazy," screamed the headline. "A new study on rats finds that 10 days of eating a high-fat diet caused short-term memory loss and made exercise difficult," said the copy. There's just one problem with the press release: the rats in the experiment were not fed fat, they were fed an oil. The fatty acid composition of the "high-fat" diet that caused memory loss and muscle weakness was 27% saturated, 48% monounsaturated and 25% polyunsaturated, which would be liquid at room temperature (http://www.fasebj.org/cgi/rapidpdf/fj.09-139691v1.pdf). The predominant fatty acid in the mix was monounsaturated, the kind of fatty acid in olive oil, peanut oil, canola oil and

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.

high-oleic safflower oil, the kind that is supposed to be so good for us. The problems encountered in the rats are typical of those encountered in diets high in industrially processed vegetable oils. So while the Diet Dictocrats are urging you to avoid meat, sausage and cheese, the foods you really need to avoid are cooking oils, commercial salad dressings, fried foods, chips, snack foods and bakery products like donuts and cookies. If anything will make you stupid and lazy, it is foods like these.

COD LIVER OIL WINS AGAIN

Using data from the Norwegian Women and Cancer cohort study, researchers explored the relationship of supplement use and survival of cancer patients with solid tumors. They found that women who took cod liver oil were 44 percent less likely to die from cancer than those who did not take supplements. (Women who use supplements other than cod liver oil were 30 percent less likely to die.) Use of cod liver oil was also found associated with improved survival rates for patients with breast and colorectal cancer. Overall, consumption of cod liver oil for a year prior to diagnosis was associated with a 23 percent reduction in the risk of death in patients with solid cancers (*International Journal of Cancer* 2009 Sep 1;125(5):1155-60). For a list of other studies showing benefit from cod liver oil, see *Wise Traditions*, Spring, 2009

A GROWING ECONOMIC SECTOR

Now for the good news. According to a new USDA report, from 1997 to 2007, direct farm sales grew by 104.7 percent in the U.S. while total agricultural sales increased by only 47.6 percent (www.ams.usda.gov/AMSv1.0). From 2002 to 2007, nearly 300,000 new farms were started in the U.S., many of them small and operated by younger farmers. The USDA census shows the number of small farms earning under \$50,000 has risen 6 percent over the last decade. Local and regional sales by farmers directly to household consumers rose 49 percent to \$1.2 billion in 2007. The number of farmers markets has increased from 1,755 in 1994 to 4,685 in 2008 (St. Louis Post-Dispatch, May 28, 2009). In the state of Iowa alone, direct meat sales now exceed \$53 million annually and the number of CSAs in Iowa has risen from two in 1995 to more than fifty today. By one estimate, if Iowans consumed 10 percent or more of their produce from local farmers, it would create \$54 million in farm revenues (www.practicalfarmers. org). This real growth is not reflected in the stock market or even the GNP, but it is very real, improving the health and quality of life for both buyers and sellers. 999

FOURTH ANNUAL SWISS TRIP

Judith Mudrak, Southampton, New Jersey chapter leader, with her group in Switzerland. Judith leads an expedition to the Swiss Alps every summer, to visit the areas that Dr. Weston Price described in his book *Nutrition and Physical Degeneration*. Pictured here is the WAPF gang in front of the capitol building, along with Swiss officials and Mayor John F. Minch of Berne, Indiana! Judith provides Raw Alpine Swiss cheese to enjoy at our *Wise Traditions* conference.



LEFT: Headresses crown the best milkers!

RIGHT: Rob Hetherington of Australia checks the Brix reading on high mountain milk.



RIGHT: The group samples fresh and smoked meat after a lecture on meat preservation at the alimentarium (food museum).



Wise Traditions

From Attention Deficit to Sleep Apnea The Serious Consequences of Dental Deformities

By Louisa Williams, MS, DC, ND

Dr. Williams will present an all-day seminar on November 13, 2009 as part of *Wise Traditions* 2009, the tenth annual conference of the Weston A. Price Foundation. ritually everyone in the Weston A. Price Foundation is well aware of the incomparable anthropological research conducted by Dr. Price. In the 1930s, this dedicated holistic dental physician spent his summers studying fourteen traditional cultures around the world. In his subsequent book, *Nutrition and Physical Degeneration*, Price wrote that none of these native peoples were vegetarian, but in every case consumed some combination of meat and organ meats, fish, shellfish, eggs, and raw milk, cheese and butter.

He further found that these groups, who were not yet exposed to the refined and toxic foods of modern civilization, displayed three exceptionally healthy characteristics:

- 1. They had almost no cavities—in general, less than 0.5 percent
- 2. They had normal facial and dental bone development with room for all thirty-two teeth
- 3. They were observed to be very "happy and contented" with "a high sense of humor," and often displayed "superior intelligence."¹

Contrast these signs of optimal mental and physical health with today:

- 1. Dental cavities are quite commonplace, and are even considered by the general populace to be an unpleasant but inevitable aspect of growing up.
- 2. Similarly, extraction of the wisdom teeth (third molars) is now a normal rite of passage for nearly all teens and young adults, since almost no one has the craniofacial

and dental bone development required to house all thirty-two teeth.

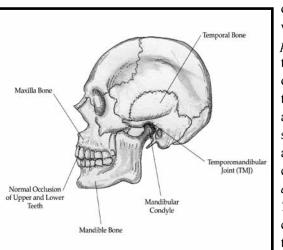
3. Finally, the very large percentages of both children and adults who are prescribed SSRI drugs such as Prozac, Paxil and Zoloft, clearly demonstrate that anxiety and depression in this country have become truly epidemic. Additionally, the growing number of chil-

dren prescribed Adderall, Concerta and other medications for ADD (Attention Deficit Disorder), ADHD (Attention Deficit Hyperactivity Disorder), and other learning and behavioral disorders, vividly illustrates the serious challenges younger generations are currently experiencing both psychologically and intellectually.

Fortunately, more and more people are becoming aware of the crucial importance of a traditional nutrient-dense diet, thanks in large part to the teachings of the Weston A. Price Foundation (WAPF) and the Price-Pottenger Nutritional Foundation (PPNF). However, few are aware of the serious ramifications of the dental arch deformities that result in dental malocclusions (bad bites) from the modern nutrient-deficient diets. This article explores this subject in depth, and provides guidelines for the prevention and treatment of the dental consequences of dietary malnutrition.

DENTAL MALOCCLUSIONS

Your *occlusion* is the way that your upper and lower teeth fit together. A *malocclusion*, often referred to as a *bad bite*, occurs when the teeth do not occlude, that is, do not fit together properly, upon closing. When the teeth do not occlude properly, the jaws then begin to move



The occlusion is the way the upper and lower teeth fit together. The temporomandibular joint, or TMJ, is a ball-and-socket hinge-like joint that becomes secondarily malaligned from a malocclusion, or bad bite.

out of alignment too, which pulls the temporomandibular joint, the jaw joint or TMJ, out of its normal position. This can create another closely related syndrome, well known among holistic dentists, called temporomandibular dysfunction, or TMD. TMD syndrome can also develop from trauma, such as head injuries or whiplash accidents that overstretch the delicately balanced ligaments and discs in the temporomandibular joint.

CAUSES OF MALOCCLUSIONS

The major cause of malocclusions is inadequate nutrition in one's formative years, as Dr. Price so incontrovertibly proved in the early twentieth century. This malnutrition and the ensuing dental malocclusions result from insufficient maternal nutrition before and during pregnancy, and inadequate nutrition during breastfeeding (or toxic formula replacements) during infancy and early growth.

PRE-CONCEPTION AND PREGNANCY

Once again, the wisdom from our ancestors proves true. Price found that traditional cultures followed special preconception diets, often one and even two years before birth. These diets included some combination of grass-fed meats and organ meats such as liver, eggs from pastured The major cause of malocclusions is inadequate nutrition in one's formative years, as Dr. Price so incontrovertibly proved in the early twentieth century.

BOTTLE FEEDING AND PALATE DEVELOPMENT

Does bottle feeding contribute to poor palate development? Many insist that it does, that the breast acts as a kind of orthodontic apparatus. The theory is that bottle-fed babies have significant mechanical and structural challenges due to the abnormal muscular action bottle-feeding imposes on the tongue. According to this point of view, when babies are breastfed, the infant obtains milk by a natural peristaltic, or wave-like motion of the tongue in order to compress the soft breast nipple against the hard palate, which in infants is actually quite malleable. This natural tongue movement is said to mold the palate into a "U" shape and support the proper development of the jaw.² By contrast, according to this theory, the bottle-fed infant must employ a more forceful squeezing or "piston-like" tongue movement to obtain milk or formula from an artificial nipple, leading to a narrow and unnatural "V-shaped" hard palate.³ Bottle-feeding is also said to disrupt normal swallowing habits.

Proponents of this theory point to a 1981 study published in the *American Journal of Preventive Medicine*, "Does Breastfeeding Protect Against Malocclusion? An Analysis of the 1981 Child Health Supplement to the National Health Interview Survey." ⁴ This study did find an association of bottle feeding with malocclusion: children breastfed twelve months or more had a reported malocclusion incidence of about 16 percent, whereas those breastfed zero to three months had a reported malocclusion incidence of 33 percent. A serious flaw with the survey is the fact that the incidence of malocclusion was self reported by the parents, not determined by an orthodontic examination.

The authors cite another study, carried out in Czechoslovakia, which found a slight association between bottle-feeding and dental occlusions: among those breastfed less than three months or not at all, 36.4 percent had anomalies; among those breastfed four to six months, 32.1 percent had anomalies; and among those breastfed longer than six months, 24.2 percent had anomalies.⁵

By contrast, an informal survey of WAPF members or children of WAPF members who were adopted and fully bottle fed found that six out of seven had naturally straight teeth.⁶ Holistic dentist Raymond Silkman reports little correspondence between cranio-facial development and the length of time the child was breastfed. He has seen severe dental malocclusion in some fully breastfed children, noting that this usually occurs when the mother is a vegetarian or vegan.⁷

The problem with the published surveys is that it is impossible to separate the physical effects of bottle feeding from the nutritional deficiencies of the formula. The real question is, is it the bottle that causes dental deformities or what's in the bottle? Clearly bottle-feeding does not necessarily condemn a child to having a narrow palate—nor does breastfeeding guarantee normal development. The experience of mothers feeding nutrient-dense raw milk baby formula to their adopted infants indicates that the key factor to normal facial development is nutrition, not the physical action of sucking on a bottle.

When properly nourished, a child will grow to conform to the genetic blueprint of a U-shaped palate and wide jaw. This pattern can be interrupted by the application of constant pressure—think of foot-binding in Asia or the custom of flattening the baby's head with a board in South America. Bottle feeding is not a constant activity and when the baby is well-nourished, it is unlikely to contribute to palate deformation; but when the baby is not properly nourished, the physical action of bottle feeding may be a contributing factor, especially if the baby also sucks his thumb or a pacifier for many hours of the day. (Regarding thumb sucking, at least three large studies found no significant difference in thumb-sucking habits between bottle-fed and breast-fed infants.⁸)

The wide variation in dental malformations, seen below, do not point to bottle feeding or thumb sucking as a major cause of palate malformation, in spite of what the dentist might believe. It is interesting to note that most baby mammals suck on a very narrow nipple, not a full breast, yet malocclusion is rare in the animal kingdom. Sally Fallon Morell



Wise Traditions

chickens, raw milk and butter, cod liver oil, fish eggs, fermented foods (cheese, yogurt, sauerkraut, etc.), soaked nuts and freshly ground grains, and fresh fruits and vegetables. These foods supplied important nutrients essential for proper infant development such as vitamins A, D, E, and K_2 in grass fed animal fats, vitamins A, D, E, and K_2 and omega-3 fatty acids in cod liver oil, and biotin in liver and eggs yolks.

PESTICIDES

Another pernicious influence on normal jaw and tooth development is the extensive use of pesticides, insecticides and other toxic chemicals since the Second World War. These chemicals have a twofold effect—both on the mother's nutrient status and the baby's developing health. Unfortunately, little research effort has been conducted on this issue, and appropriate longitudinal (long-term) studies to accurately measure the full effect of these chemicals on tooth and bone growth would be quite costly. Certainly, the chemical companies are not interested.

However, there is some research evidence that these chemicals greatly contribute to bone and teeth deformities. In one study in Ireland, the use of fungicides to combat potato blight in the 1980s was linked to a high incidence of various physical malformations, including bone and facial deformities in babies.⁹ In another six-year investigation, published in *Wise Traditions*, herbicides and fungicides were found to be culpable in causing severe bone and dental abnormalities in horses, deer, elk, antelopes, birds and other animals. Astonishingly, this study that identified numerous malformations including overbites and overjets ("buck teeth"), underbites ("bulldog appearance"), crooked and crowded teeth, and cleft palates, was conducted in Bitterroot, Montana – ironically advertised as the "Last Best Place" on earth due to the purported clean air and water.¹⁰

One explanation is that pesticides greatly use up our stores of vitamin A, so critical for proper bone formation. In fact, the toxicity of these chemicals derives from the fact that they disrupt vitamin A pathways.

DENTAL FILLINGS

Ironically, another major contributor to malocclusions is modern dental care. When poor nutrition causes dental cavities, dentists repair this hole with a filling, inlay, onlay, or crown. These dental restorations—ranging from the smallest, a filling, to the largest, a crown—are not always placed at the correct height to correspond to the original tooth When too high, they create interference with the rest of the bite and can hit the opposing tooth too hard, which over time inflames the surrounding nerves, ligaments and gum tissue in both teeth.

The opposite can also occur. That is, the dental restoration can be placed too low. In fact, to avoid the former problem of interference from restorations that are too high, many dentists are currently taught in dental school to slightly "dish out" the filling. Although this solves the problem of interference, after the placement of several dished out fillings, the patient's original tooth height is significantly reduced. This can eventually lead to a mild to moderate malocclusion as the teeth no longer occlude, that is fit together, appropriately.

Additionally, in a vain attempt to find their original bite, patients will often begin to clench and grind their teeth, which only compounds the problem more by further eroding the height of the teeth. The answer to the too high or too low problem, of course, is a well-made (and non-

THE VISIBLE RESULTS OF TRADITIONAL AND MODERNIZED DIETS



LEFT: Photographs by Dr. Weston Price show the excellent dental development is isolated Swiss villagers; all members of the village enjoyed excellent facial structure and freedom from dental decay. The diet consisted of raw dairy products and sourdough rye bread.

RIGHT: Compared to images of splendid facial development (above) the photos of modernized Peruvians (below) show the serious effects of a modern refined diet to normal craniofacial and dental development.

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toxic) dental restoration—filling, inlay, onlay or crown—that is carefully sized to copy the original tooth's architecture as exactly as possible, and placed by a well-trained and technically skilled holistic dentist.

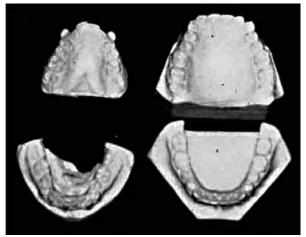
THE GREAT IMPOSTER

Since malocclusions and the related jaw joint disorders (TMD) create such a wide range of disturbances in the body, this syndrome has been labeled the "Great Imposter." TMD mimics many other chronic issues, which also have numerous symptoms, such as food allergies and candida (dysbiosis) syndrome. Further, since malocclusions cause so many diverse signs and symptoms, often quite distal and remote from the head and neck, many doctors who are not familiar with this syndrome do not recognize it, and therefore neither accurately diagnose it nor treat it through an appropriate referral.

AUTONOMIC FAILURE

In one dramatic animal study from Japan that will make animal lovers cringe, researchers ground approximately 3 mm off the upper and

lower teeth of beagle dogs on one side (the right side) of their mouth to determine the systemic effects of malocclusions. The results were dramatic. Every one of these dogs subsequently exhibited numerous signs of "autonomic failure," including weight loss, hair loss and the loss of luster of their coats, as well as excessive salivation and lacrimation (tearing). Additionally these dogs demonstrated significant motor and postural abnormalities including resting tremors, muscle weakness, abnormal sitting postures, inability to walk straight, and lameness.¹¹ Of course, pain is difficult to measure in animals, but it is highly likely with these abnor-



V-shaped upper palate (left) of a modernized adult compared to the U-shaped palate of a primitive adult raised on nutrient-dense food. The narrowing of the palate is due to nutritional deficiencies.

mal musculoskeletal signs that these dogs suffered from chronic joint and muscle pain. Using this research example, those individuals with chronic shoulder, hip, knee, or back pain who have unsuccessfully tried many treatments and suspect they may have a malocclusion, should consider consulting a holistic dentist or orthodontist to see whether functional appliance therapy is indicated (see Treatment secion, page 23).

RESPIRATORY DISTRESS

Mild to major respiratory and breathing problems are also classic symptoms of malocclusions. In fact, it is no mystery that crooked and crowded teeth (malocclusions) and sleep apnea have both continued to rise at an unprecedented pace. This respiratory nightly distress and resulting insomnia is closely tied to a narrow, "V-shaped" palate, which pushes up on the floor of the nasal cavity, reducing one's breathing efficiency. This forces many children (and adults) to open their mouth at night to receive more oxygen.

Raymond Silkman, a holistic dental physician and WAPF contributor, has described this mouth-breathing habit as a chronic distress signal to the autonomic nervous system—similar to what happened to the dogs in the Japanese study. Dr. Silkman has found that these mouth-breathing patients live with a kind of permanent tension, and chronically experience a sense of being on "high alert" from their amped-up sympathetic nervous systems.¹² The resulting mild to major systemic anoxia (lack of oxygen) has a negative effect on every cell in the body, and has been further linked to chronic anxiety, certain types of headaches, hypertension, reduced heart rate

> (bradycardia), blood-clotting dysregulation, enuresis (bedwetting), and chronic nose, ear and sinus infections.¹³

INTELLIGENCE QUOTIENT

Another dental pioneer akin to Dr. Price was Dr. A.C. Fonder, author of the renowned holistic dental text, *The Dental Physician*, who studied the effect malocclusions had in schoolchildren. In a group of one hundred schoolchildren, Fonder found that in the "remedial" group of forty-seven children who scored below average on I.Q. and achievement tests, one hundred percent of them had minor (17 percent) to severe

(83 percent) dental malocclusions. This was in striking contrast to the other fifty-three "above average" students in the study, who had only one severe (2 percent) malocclusion, forty-three minor (81 percent) malocclusions, and nine ideal occlusions (17 percent).¹⁴

PSYCHOLOGICAL PROBLEMS AND HEARING

In this same study, the remedial group of students all exhibited (100 percent) psychological problems, with a significant percentage (31.9 percent) having serious issues. Whereas the advanced students, with mostly minor to no malocclusions, had no (0 percent) serious psychological problems, and the majority (74 percent) of these high-performing students demonstrated no mental or emotional issues at all.¹⁵

Finally, knowing that one's hearing capacity is closely correlated to intelligence as well as closely associated with the proper functioning of the neighboring jaw joint (TMJ), Fonder additionally measured the audiometric, or hearing acuity, of these two groups. The results were again striking: Eighty-three percent of the remedial group of schoolchildren with serious psychological problems had a 15-40 percent loss of their overall hearing acuity. Once again, in contrast, 100 percent of the advanced students with ideal occlusions had above average hearing acuity.¹⁶

SOME NOTEWORTHY SYMPTOMS FOR SELF-DIAGNOSIS

Although a definitive diagnosis of a malocclusion can only be made by a specially trained dentist or orthodontist (and a few holistic physicians), there are some significant signs and symptoms that can help individuals decide whether it is likely enough to warrant an appointment. These include difficulty breathing and related insomnia and sleep apnea, difficulty swallowing (such as difficulty swallowing pills), pain upon opening or closing the jaw (or a history or having the jaw locked open or closed for a period of time), tension headaches, and chronic neck (and even middle or lower back) pain. A "noisy" jaw joint—that is, popping, clicking, cracking, or crepitus (grating sound) is also an indicator of a possible malocclusion and TMD. (It should be noted, however, that the authors of one journal article estimated that from 60-80 percent of the population makes some kind of noise when moving their jaws. Therefore, individuals should only count this sign as significant when the TMJ noises are especially excessive and/or loud.)

Further, all parents of children with cognitive, behavioral, or other neuropsychiatric symptoms, including ADD (Attention Deficit Syndrome), ADHD (Attention Deficit Hyperactivity Syndrome), OCD (Obsessive-Compulsive Disorder), Tourette's, Autism and Asperger's, Down's Syndrome, should consider having a consultation with a holistic dentist who is trained in functional orthodontic therapy. This is especially warranted when the child has crowded teeth, a narrow ("V- versus U-shaped") palate, or one or both parents have significant malocclusions.

Finally, one of the almost "pathognomonic" signs (that is, a sign that is so characteristic of a particular syndrome that on that basis alone a positive diagnosis can be made) of a significantly disturbing occlusion, is being unable to find your bite. In fact, the typical response to this query during a physical exam is "which bite?" Thus, since these patients don't have a comfortable place to rest their teeth, they search for one of several bite positions, or find an adaptive but unsatisfying place to rest their teeth. This dysfunctional bite position can also be helpful diagnostically, since a malocclusion is further confirmed when it is accompanied by various facial grimaces and other signs of disturbance and general disquiet in one's expression.

HOW TO CHOOSE A HOLISTIC DENTIST

When choosing a dentist it is important to note that in addition to whether or not the dentist uses mercury amalgams versus less toxic materials, dental consumers can also differentiate between holistic and not-so-holistic dentists through their choice of various dental restorations. That is, when a cavity needs to be filled it is essential that dentists be conservative with their drilling and leave the tooth as intact as possible. Thus, the best holistic dentists will avoid crowns—which can remove up to two-thirds of the tooth—until it is absolutely necessary. For example, when a cavity or hole in the tooth needs treatment, a regular (non-toxic) filling should be placed. If that is not sufficient, then an inlay should be considered. However, if decay is significant and the cavity is too big, then a larger onlay is often required. Finally, if these restorations are not enough, then a crown should be placed—but only as a last resort. Therefore, always consider getting a second opinion if your dentist doesn't offer fillings, inlays or onlays, but immediately recommends a crown, which is both more costly and more damaging to your tooth.

It should also be noted that a further differentiation between conventional and holistic dentists can be made through how readily they prescribe root canals. In fact, it is imperative that patients try to get a second opinion (from a holistically oriented dentist or doctor) if they are told they need a root canal. In too many cases, inflamed teeth are irreparably damaged from a root canal procedure, when they could have been easily ameliorated through holistic treatment (homeopathy, herbs, clearing toxic dental metals in or around the tooth, etc.). Particularly egregious is the practice of prophylactically performing a root canal procedure before placing a crown, based on the flawed reasoning of preventing future infection in the tooth. In actuality this simply destroys a vital tooth and virtually ensures some level of chronic bacterial outflow from this iatrogenically induced (dentist-induced) "dental focal infection."

TREATMENT OF A MALOCCLUSION

There are two major pathways of treatment for malocclusions: conventional orthodontic care and functional orthodontic care. With conventional orthodontic care, the "cure" can often be worse than the disease. It consists of the extraction of four or more teeth—typically the first bicuspids—followed by the placement of braces and then retainers to hold the teeth in place. The sacrifice of these four healthy bicuspid teeth is done to alleviate the common problem of crowding secondary to jawbone underdevelopment, brought on by faulty infant and childhood nutrition. In contrast, functional orthodontic care rarely calls for extractions; instead, the dentist applies oral appliances or splints, to assist Mother Nature and encourage the growth of underdeveloped dental arches. Over time, these functional appliances gently move and expand the upper and lower dental arches, allowing the teeth and bones to grow according to—or at least more closely approximating—their original genetic blueprint of development.

THE FAMOUS BRITISH IDENTICAL TWIN STUDY

The negative consequences of conventional orthodontia were dramatically demonstrated in what holistic dentists commonly refer to as the "British twin study." In this clinical study, identical twins with Class 1 malocclusions (crowded teeth) were treated in two very different ways. The first twin, termed "OE" for "Orthodontic Extraction," was treated in the conventional orthodontic manner, with extraction of her four bicuspid teeth followed by braces. The other twin, termed "OF" for "Orthodontic Functional," had no tooth extractions and was fitted for a functional appliance (the so-called Fraenkel appliance) to expand and develop her teeth and jawbones.¹⁷ Treatment lasted for thirty months for both twins. As can be seen in the before-and-after photos, the results were dramatic.

Dr. H.L. Eirew, who published this clinical study in the *International*

Journal of Orthodontics,¹⁸ made the following observations: "Twin 'OF,' treated by a Fraenkel appliance, shows a pleasing round arch form. The upper dental arch was widened by 4-5 mm between the first premolars [bicuspids] and by 2 mm between the first molars. Lower arch development was similar. . . Facially the girl is good looking, with a rounded facial form matching her attractive rounded dental arch. She is happy with the result of her orthodontic treatment and considers the effort to wear the appliance well rewarded. . .

"Twin 'OE,' treated by extractions shows some relief of crowding and incisal irregularity. She still [however] has a tapering archform accentuated by a narrow arch width. There has been no lateral development. Residual extractions spaces are still visible after more than 3 years. The cheek teeth have slipped out of correct occlusion and contact on both sides. The deep bite persists. Dental arch appearance is poor. . .

"Her facial deterioration has been *quite disastrous*. In the years from 12 to 14 she has become a 'little old woman' in relation to her sister. The changes shown resemble those seen in the elderly when bone resorption follows multiple tooth loss"¹⁹ [emphasis by author].

Most distressing of all was the emotional effect orthodontia had on twin OE. Dr. Eirew

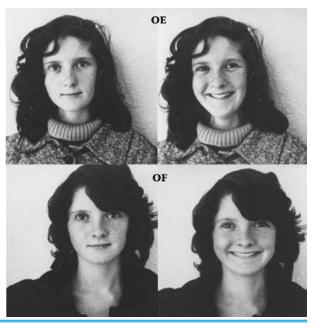


THE FAMOUS IDENTICAL TWIN STUDY

LEFT: Before photos of the identical twins. The twin in the upper photos received conventional treatment involving extraction of the teeth. The twin in the lower photo received treatment with an expansion apparatis.

RIGHT: After photos of the twins. Note the wider and more attractive facial structure of the twin who received the expansion apparatus.

Reprinted with kind permission of Dr. Terrance J. Spahl.



Wise Traditions

noted that she was "acutely aware of the marked difference in appearance between herself and her sister, and that she has developed a considerable inferiority complex."²⁰ In fact, twin OE was so distraught as the "ugly sister," that she dropped out of the study and further investigation of the two cases had to be discontinued.²¹

THE MIRACLE OF EXPANSION APPLIANCES

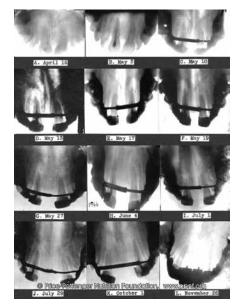
Dr. Weston A. Price, the quintessential holistic dental physician, not only specialized in nutrition and the treatment of dental foci (such as failed root canals), but was a trailblazer in functional orthodontics as well. In another dramatic functional orthodontic case, Price widened the narrow upper arch of a Down's Syndrome teen approximately 1/2 inch with a palatal expansion rod device located between his upper teeth. In so doing, the new maxillary bone filled in rapidly. This space was later maintained with a fixed bridge that had two additional teeth attached.²²

Once again, the results from expansion of the palate were striking. This sixteen-year-old patient was previously measured with an I.Q. of that of a four-year-old, and he was so seriously physically and mentally impaired that he typically played all day with blocks on the floor. After six months of palate expansion however, he was able to go to the grocery story and bring back correct change to his mother, change trains and make transfers on streetcars accurately and safely, and read children's stories and newspaper headlines. This teen's physical appearance also dramatically transformed. He grew three inches in four months, developed whiskers, and his genitals developed from those of a child to a man. These hormonal maturation changes were the direct result of the stimulation of the pituitary gland through the expansion of the sella turcica-the saddle-shaped depression in the sphenoid cranial bone that houses the pituitary. In Down's syndrome, the failure of the development of the middle third of the face and the pituitary has been well documented. Finally, this teen's severe sleep apnea was relieved when the expansion device opened up his completely occluded left nostril so he could breathe properly.²⁴

PRIMARY MOLAR BUILD-UPS IN YOUNG CHILDREN

For those parents who are concerned about their children's compliance in wearing oral appliances, as well as the cost, an alternative is available for certain malocclusions and age groups. Since potential Class II maloc-

TREATMENT OF DOWN'S SYNDROME WITH AN EXPANSION APPARATUS



ABOVE: The progress of palatal expansion over a six-month period through an expansion rod in Dr. Price's Down's Syndrome patient.

RIGHT: The before and after photos of the dramatic effect of palatal expansion in a Down's Syndrome teen.

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clusions (overbites) can be detected as early as ages four or five (or even earlier), a simple build-up of plastic composite material on the child's primary (deciduous or baby) lower molars can encourage a normal occlusion over time, or at least greatly reduce the need for later expansion appliances and possibly even braces. Further, this technique has the great benefit of compliance, in that composite material properly fitted and intermittently equilibrated (shaved down as needed), does not require any effort or willpower on the part of the child. Dr. Merle Loudon, a Washington state holistic dentist, enumerates the advantages of this simple method in his study published in *The Functional Orthodontist* journal:

"Primary crown buildups can result in many added benefits for a young, overclosed patient. Early treatment can save months of later orthodontic vertical treatment. Temporomandibular condylar [TMJ] position may be greatly enhanced. The return to a normal tongue position will allow for *normal growth of the mandible*."²⁵

CONTACT INFORMATION FOR

FUNCTIONAL ORTHODONTIC TREATMENT

Individuals or parents of children who suspect that they have a moderate to major malocclusion, that is, one that warrants functional orthodontic intervention, should contact the following three dental associations in the U.S. to find a nearby holistic dentist or orthodontist who specializes in the treatment of malocclusions and TMD: The American Academy of Craniofacial Pain (www.aacfp.org), the American Academy of Gnathological Orthopedics (www.aago.com), and the American Association of Functional Orthodontics (www.aafo.org).

CONCLUSION

Due primarily to the serious nutritional deficiencies in our formative years of development, dental malocclusions have become pandemic in our modern world. These "bad bites" have been correlated with local symptoms such as neck and jaw pain, headaches, ear, nose and throat problems and sinus infections, as well as loss of hearing acuity. Disturbances to the brain and nervous system are also characteristic of this "great imposter" syndrome, including learning and behavioral disorders, sleep apnea, chronic anxiety and depression.

Although very few of us have perfect bites anymore, those individuals who think they may have significant malocclusions should consider consulting with a holistic dentist or functional orthodontist. Parents of children who suspect this dysfunction in their children should especially consider this treatment, since along with a nutrient-dense diet it can greatly augment their children's dental and craniofacial development and support the full expression and functioning of their brain and nervous system.

Dr. Louisa Williams practices in San Rafael, California, and is director of the Marin Naturopathic Medicine clinic. For more information about her work go to www.marinnaturopathicmedicine.com, or call (415) 460-1968. For information about her book, Radical Medicine, please go to www.radicalmedicine.com.

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100 Years Before Weston Price

The Observations of George Catlin

by Nancy C. Henderson, MFA

n 1860, after thirty years of travel as an artist and ethnographer, after observing over one hundred fifty tribes of Native Americans in both North and South America, after completing over five hundred paintings and publishing several books on his travels in the American frontier and in Europe, George Catlin wrote a short book of observations on the health practices of the American Indians. The forty-page volume became a best-seller and Catlin made sure it was kept in print until his death in 1872; yet the book is almost unknown today, even among the historians who oversee his collection, now housed in the Smithsonian Museum.

The book was called *Shut Your Mouth (... and Save Your Life)*; its subject was the superb health of the Native Americans. While Catlin does not give precise details on native diets the way Dr. Price did, he does provide a fascinating corroboration of Price's findings, one that we come close to explaining only today, after one hundred fifty years of intervening scientific discoveries. George Catlin's message is timely, and may well provide a missing link for those who have followed Dr. Price's principles and protocol for some time, but with less success than they had hoped.

ON A MISSION

George Catlin's artistic career was inspired by a delegate of fifteen "noble and dignified" Indians visiting Philadelphia. The attorney-turnedpainter then headed west to document the rapidly disappearing Native Americans, "on a mission of becoming their historian."¹ Making his base in St. Louis, he took five trips between 1830 and 1836, the first accompanied by General William Clark of Lewis and Clark fame. Catlin visited eighteen relatively isolated tribes on the upper

Missouri River, including the Pawnee, Omaha, Ponca, Mandan, Cheyenne, Crow, Assiniboine and Blackfeet. Many later trips ranged from the Aleutian Islands to Patagonia.

In the years before photography-and during the time the U.S. government had openly instituted a policy of eradicating the Native Americans-Catlin was the first American artist to travel west of the Mississippi and paint portraits of the American Indians from life in their native habitat. His over five hundred paintings-from portraits to battle scenes-along with hundreds of artifacts and volumes of notes about native traditions amassed during his first six years of study, formed his "Indian Gallery," which eventually

came to rest in the Smithsonian Museum.

Like so many early observers, Catlin was struck by the beauty of their teeth. Welcomed by the American Indians—before other white men had given them reason to be distrustful—Catlin lived with them as their guest and ate their food. A naturally gifted linguist, he was able to gain access to their sacred rituals, hunting techniques and games. Driven by his own passion, as a "friend to the Indians" before they were "lost forever," Catlin's entire thirty years of travel in North and South America were entirely self financed.²

SUPERB HEALTH

As a pioneering anthropologist, Catlin recorded his observations of Native American physical characteristics in a manner remarkably similar to those of Dr. Price in his classic book *Nutrition and Physical Degeneration*, one hundred years later.³ Like so many early observers, Catlin was struck by the beauty of their teeth. "These people, who talk little and sleep naturally, have no dentists nor dentifrice, nor do they require either; their teeth almost invariably rise

"Stu-mick-o-suchs (Buffalo Bull's Back Fat)." He was the head chief of the Blackfoot tribe, a plains Indian nation near the Canadian border. As the buffalo was the most important food source of the plains indians, and the back fat (tallow) the most highly prized portion of the buffalo bull, the name Buffalo Bull's Back Fat was a title of the greatest distinction. Painting by George Catlin, 1832

from the gums and arrange themselves as regular as the keys of a piano; and without decay or aches, preserve their soundness and enamel, and powers of mastication.²⁴

Like Dr. Price, George Catlin looked at skulls, noting "the beautiful formation and polish of the teeth in these skulls." Like Price, he was concerned about the effects of western diets on their health: "... the most beautiful of them, which had chewed Buffalo meat for 25 years or a half Century, are now chewing Bread..."

Their traditional food was simple: "Food of this tribe, fish, venison, vegetables. . . This Tribe I found living entirely in their primitive state; their food, Buffalo flesh and Maize, or Indian corn."

Catlin's interest in skulls led him to conclude that the death among Native American children was very low. In searching through a graveyard, "I was forcibly struck with the almost incredibly small proportion of crania of children; and even more so, in the almost unexceptional completeness and soundness (and total absence of malformation) of their beautiful sets of teeth, of all ages."

"Shar-re-tar-rushe, an aged and venerable Chief of the Pawnee-Picts, a powerful Tribe living on the headwaters of the Arkansas River, at the base of the Rocky Mountains, told me in answer to questions, 'we very seldom lose a small child—none of our women have ever died in childbirth—they have no medical attendance on these occasions—we have no Idiots or Lunatics —nor any Deaf and Dumb, or Hunch-backs,

and our children never die in teething." The food of this tribe was "buffalo flesh and venison."

In contrast, Catlin observed, "in London and other large towns in England, and cities of the Continent, on an average, one half of the human Race die before they reach the age of five years, and one half of the remainder die before they reach the age of 25 yeas, thus leaving one in four to share the chances of lasting from the age of 25 to old age." He noted statistics describing 20,000 idiots and 35,000 lunatics in England. "The contrast between the two societies, of Savage and of Civil, as regards to the perfection and duration



"Pigeon's Egg Head (The Light) Going to and Returning from Washington." Pigeon's Egg Head (also known as The Light or Wi-jun-jon) was a respected Assinboine tribal chief invited to Washington in 1831 to represent his tribe. Catlin describes how this proud leader was corrupted with "gifts of the great white father," including two bottles of whiskey in his pockets. Painting by George Catlin, 1837-38.

of their teeth, is quite equal to their Bills or Mortality."

Like Price, Catlin was struck by the beauty, strength and demeanor of the Native Americans. "The several tribes of Indians inhabiting the regions of the Upper Missouri. . . are undoubtedly the finest looking, best equipped, and most beautifully costumed of any on the Continent." Writing of the Blackfoot and Crow, tribes who hunted buffalo on the rich glaciated soils of the American plains, "They are the happiest races of Indian I have met—picturesque and handsome, almost beyond description."

"The very use of the word savage," wrote Catlin, "as it is applied in its general sense, I am inclined to believe is an abuse of the word, and the people to whom it is applied."

Like Price, who argued against genetics as a cause of human disabilities, Catlin did not think that the diseases of civilized man were due to inherent flaws in the human physical makeup. "This enormous disproportion might be at-

> tributed to some natural physical deficiency in the construction of Man, were it not that we find him in some phases of Savage life, enjoying almost equal exemption from disease and premature death, as the Brute creations [animals]; leading us to the irresistible conclusion that there is some lamentable fault yet overlooked in the sanitary economy of civilized life."

"I offer myself as a living witness, that whilst in that condition [living among them], the Native Races of North and South America are a healthier people, and less subject to premature mortality (save from accidents of War and the Chase, and also from Small-pox and other pestilential diseases them) than any Civilized

introduced amongst them) than any Civilized Race in existence."

As did Weston A. Price one hundred years later, Catlin noted the fact that moral and physical degeneration came together with the advent of civilized society. In his late 1830s portrait of "Pigeon's Egg Head (The Light) Going to and Returning from Washington" Catlin painted him corrupted with "gifts of the great white father" upon his return to his native homeland. Those gifts including two bottles of whiskey in his pockets.

SHUT YOUR MOUTH

Returning from his last voyage in 1860,

Like Price, who argued against genetics as a cause of human disabilities, Catlin did not think that the diseases of civilized man were due to inherent flaws. Catlin wrote: "If I were to endeavor to bequeath to posterity the most important Motto which human language can convey, it should be in three words—Shut your mouth."

Catlin did not completely understand the fact that nutrient-dense diets allow for the development of wide faces with broad nostrils and maximum airway capacity from nose to lungs. Such development allows the well-formed indiof embracing her infant in her sleeping hours, in the heated exhalation of her body, places it at arm's length from her, [in the cradleboard] and compels it to breathe the fresh air, the coldness of which generally prompts it to shut the mouth

... The results of this habit are, that Indian adults invariably walk erect and straight, have healthy spines, and sleep upon their backs, with Robes wrapped around them, with the head supported

vidual to breathe in sufficient oxygen through the nostrils, making mouthbreathing unnecessary. However, he did observe one interesting practice among nursing mothers in all Native American cultures he visited, in both North and South America: In Shut Your Mouth he wrote: "All Savage infants amongst the various Native Tribes of America, are reared in cribs (or cradles) with the back lashed to a straight board; and by the aid of a circular, concave cushion placed under the head, the head is bowed a little

forward when they sleep, which prevents the mouth from falling open; thus establishing the early habit of breathing through the nostrils. . . I was soon made to understand, both by their women and their Medicine Men, that it was done to insure their good looks, and prolong their lives."

In fact, Catlin believed that the habit of sleeping with the mouth closed actually contributed to the optimal development of the teeth: "An Indian child is not allowed to sleep with its mouth open, from the very first sleep of its existence; the consequence of which is, that while the teeth are forming and making their first appearance, they meet (and constantly feel) each other; and taking their relative, natural, positions, form that beautiful and pleasing regularity which has secured to the American Indians, as a race, perhaps the most manly and beautiful mouths in the world."

Catlin notes: "The Savage Mother, instead

by some rest, which inclines it forward. . . and their sleep is therefore always unattended with the nightmare or snoring."

Catlin contrasted the universal Native American wisdom of creating a life-long nasal breathing habit both day and night in his illustration of the sleeping habits of "Civilized Man... their mouths wide open—the very pictures of distress—of suffering, of Idiocy, of Death. There is no animal in nature, excepting man, that sleeps with its mouth

open. . . If man's unconscious existence for nearly one-third of the hours of his breathing life depends, from one moment to another, upon the air that passes through his nostrils; and his repose during those hours, and his bodily health and enjoyment between them, depend upon the soothed and tempered character of the currents that are passed through his nose to his lungs, how mysteriously intricate in its construction and important in its functions is that feature, and how disastrous may be the omission in education which sanctions a departure from the full and natural use of this wise arrangement!"

THE BREATHING PRINCIPLE

One hundred fifty years ago, George Catlin made a critical observation regarding the hierarchy of physiological functions required for health. "Man can exist several days without food, but about as many minutes without the action of

An Indian child is not allowed to sleep with its mouth open, from the very first sleep of its existence.



"Chee-ah-ka-tchee, wife of Not-to-way," Painting by George Catlin, 1835-36.

his lungs. . . Rest assured that the great secret to life is the breathing principle."

According to Dr. Raymond Silkman, "Airway capacity is the biggest and most important part of the well-being of a human being. . . It is important to stress the fact that breathing through the mouth and breathing through the nose have extremely disparate effects on the body. We are not designed to breathe through our mouths.

The body is able to live by breathing through the mouth, but it suffers greatly for doing it."⁵

To summarize his excellent article, published in Wise Traditions Winter/Spring 2006, Dr Silkman compares an underdeveloped cranium to an "over-packed suitcase," and discusses how the resultant problems can affect the entire body. Lack of oxygenation or nourishment to cranial tissues and organs and improper drainage of waste products through the lymphatic system, in turn cause nerve conduction issues, hormonal imbalances and negative effects on brain function and mental clarity. Salivary pH drops or becomed acidic in mouth breathing. A forward head posture can develop, which in turn causes spinal misalignments, fatigue and fibromyalgia. The maxilla (upper

jaw bone) also becomes underdeveloped, affecting the eyesight and facial aesthetics and further narrowing the nasal passages, which do not drain or function properly.

Mouthbreathing can further depress the development of the maxilla—and this underde-

velopment is the main cause of mouthbreathing in the first place. With underdevelopment of the maxilla—due to poor nutrition before conception and *in utero*—obstruction of the nasal passages sets the stage for sleep apnea, TMJ issues and migraine headaches. With mouth breathing, the lungs cannot oxygenate properly, thereby affecting the heart and even setting the stage for cancer. Cancer thrives in an anaerobic environment. Thus, having an underdeveloped facial structure negatively affects every cell in the body.

Many people struggling with their health may pass over the im-



"Shon-ta-yi-ga, Little Wolf, a Famous Warrior." Painting by George Catlin, 1844

portant clues in Dr. Silkman's article because they do not think that they breathe through their mouths. But as Catlin points out: "Few people can be convinced that they snore in their sleep, for the snoring is stopped when they wake, and so with breathing through the mouth, which is generally the cause of snoring." The obvious daytime mouth breathers are easy to spot, but the unconscious nighttime mouth-breathing habit can be present without detection, even with a spouse along side at night. And mouth breathing even at night can undermine our health. As Catlin puts it, ". . . he renews his disease every night."

Catlin's book helped explain my own health problems, which persisted even though I was following a nutrientdense diet, as I did not get the benefit of good airway development when starting life. Conversely, good facial structure

from birth, which allows a person to breathe comfortably through his nose, can explain how a person remains healthy even while living a sedentary life, smoking, drinking and consuming junk foods. Blessed with optimum airway capacity, they function well even in the absence of good nutrition. Many older folks fit into this category, as before 1940 many westerners consumed a fairly good diet and enjoyed excellent facial development.

THE DANGERS OF MOUTH BREATHING

- The tongue no longer provides support for the upper jaw with resulting reduced upper arch size.
- The vault rises leading to reduction in the size of the nasal passages contributing to congestion of nose.
- The pH of saliva elevates leading to increased rate of caries.
- A tendency to upper respiratory tract infections often resulting in tonsillitis and enlarged adenoids.
- The medullary trigger resets at lower level leading to hyperventilation.
- The alkalinity of blood increases so less oxygen released from the blood. This is known as the Bohr Effect.
- Oxygen circulates the blood in the form of oxy-haemoglobin but reduced levels of carboxy-haemoglobin mean that less oxygen is released from the oxy-haemoglobin to enter the tissues so cells die.
- Smooth muscle spasm. Gastric reflux, asthma and bed wetting are commonly associated with chronic mouth-breathing.

SOURCE: http://www.sleephotline.com/Sleep/categories/Breathing-Sleep.html

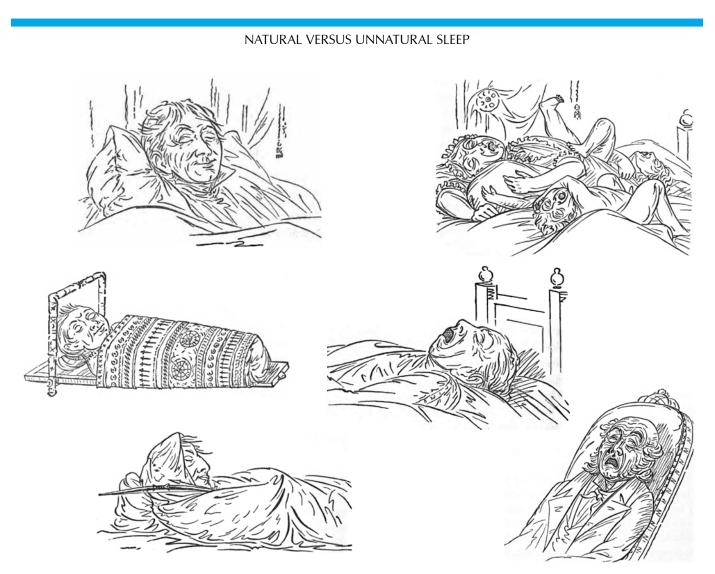
THE MYSTERIOUS REFINING PROCESS

Wrote Catlin: "The mouth of man. . . was made for the reception and mastication of food for the stomach, and other purposes, but the nostrils, with their delicate and fiborous linings for purifying and warming the air in its passage, have been mysteriously constructed, and designed to stand guard over the lungs. . . we are again more astonished when we see the mysterious sensitiveness of that organ instinctively and instantaneously separating the gases, as well as arresting and rejecting the material impurities of the atmosphere. . . The atmosphere is nowhere near pure enough for man's breathing until it has passed this mysterious refining process."

Today we know that nitric oxide is a critical component of that mysterious refining process. Dr. Silkman writes, "Breathing through the nose creates an avenue of air that's moisturized, humidified and even somewhat filtered. Furthermore, when we breathe through our nose, the air passing through the nasal airway and contacting the turbinates—shelf-like bony structures—is slowed down. This allows the proper mixing of the air with an amazing gas produced in the nasal sinuses called nitric oxide (NO). Nitric oxide is secreted into the nasal passages and is inhaled through the nose. It is a potent vasodilator, and in the lungs it enhances the uptake of oxygen. Nitric oxide is also produced in the walls of blood vessels and is critical to all organs."

NATURAL AND WHOLESOME AIR

Catlin describes how Native American infants were trained to have good breathing practices from an early age. "I, who have seen some



Amusing drawing of "natural" and "unnatural" sleep from Catlin's *Shut Your Mouth*. Says Catlin, "Unnatural sleep, which is irritating to the lungs and nervous system, fails to afford that rest which sleep is intended to give. . . They should first recollect that their natural food is fresh air. . . "

thousands of Indian women giving the breast to their infants, never saw an Indian mother withdrawing the nipple from the mouth of a young infant, without carefully closing its lips with her fingers... It requires no more than common sense to perceive that Mankind, like all of the Brute creations, should close their mouths when they close their eyes in sleep, and breathe through their nostrils... But in civilized societies, how often do we see the tender mother (if she gives the breast at all) lull it to sleep at the breast, and steal the nipple from the open mouth, which she ventures not to close, for fear of waking it and if consigned to the nurse, the same thing is done with the bottle.

"The Savage infant. . . breathing the natural and wholesome air, generally from instinct, closes its mouth during sleep; and in all cases of exception the mother. . . enforces Nature' Law ... until the habit is fixed for life. . . When I have seen a poor Indian woman in the wilderness, lowering her infant from the breast, and pressing its lips together as it falls asleep, fix its cradle in the open air, and afterwards looked into the Indian multitude for the results of such a practice, I have said to myself, 'glorious education! such a Mother deserves to be the nurse of Emperors.'

"But when we turn to civilized life, with all of its comforts, its luxuries, its science, and its medical Skill, our pity is enlisted for the tender germs of humanity, brought forth and caressed in smothered atmospheres which they can only breathe with their mouths wide open. . . They should first be made acquainted with the fact that their infants don't require heated air, and that they had better sleep with their heads out of the window than under their mother's arms."

Do modern childrearing practices contribute to the scourge of sudden infant death syndrome (SIDS)? In the *Archives of Pediatrics and Adolescent Medicine*, October 2008, researchers reported that infants are less likely to succumb to SIDS with a fan on in the infant's room.⁶ Furthermore, new studies show that swaddling, with the infant placed on the back, reduces SIDS.⁷ These studies prove the wisdom of the self-contained cradleboard, which protects the infant, as opposed to having the infant sleep with the mother and father, where it might be crushed in sleep or suffocated with loose bedding as it rolls over.

From Catlin's observations of the universal use of cradle-boards among Native Americans, we can hypothesize that rearing infants in them would be less stressful for the infant, the mother and other family members. The large numbers of historical photographs showing Native Americans with contented and captivating infants in cradleboards also supports this theory.⁸

SLEEP APNEA

George Catlin's comments on nightmares and the associated "night



"Aissiniboine Mother and Child" Photograph by Edward Curtis, 1928



"Nez Perce Babe" Photograph by Edward Curtis 1911

CRADLEBOARDS: A UNIVERSAL PRACTICE AMONG NATIVE AMERICANS

Studies show Catlin's advice to be sound: elevating the head at night is recommended by most sleep apnea websites as a way to reduce sleep apnea. terrors" actually describes sleep apnea: "... no person on earth who has waked from a fit of the nightmare will dispute the fact that when consciousness came, he found his mouth and throat wide open, and parched with dryness... Every attack of the nightmare, I proclaim, is the beginning of death!...Though the spasm lasted but a minute... death would have been the consequence... how awful to be so near death, and so often!"

"It is very evident that the back of the head should never be allowed, in sleep, to fall to a level with the spine; but should be supported by a small pillow, to elevate it a little, without raising the shoulders or bending the back, which should always be kept straight. . . When you lay your head upon a pillow, advance it a little forward, so as to imagine yourself in a gallery of a theater looking into the pit."

He continues: "Lying on the back is thought by many to be an unhealthy practice; and a long habit of sleeping in a different position from infancy to old age may even make it so; but the general custom of the Savage Races, of sleeping in this position from infancy to old age, affords very conclusive proof, that if commenced in early life it is the healthiest for a general posture that can be adopted."

Studies show Catlin's advice to be sound: elevating the head at night is recommended by most sleep apnea websites as a way to reduce sleep apnea.⁹ From my own experience, elevating the head also has the effect of reducing nasal

congestion, which seems to occur when I am in the reclining position. If blood flow to the sinus cavity causes congestion and obstructs nasal breathing when one is lying flat, with only a small pillow under the head, then mouth breathing is the only other option. The "lip seal" that holds the tongue forward and suctioned up in the maxilla at the roof of the mouth and out of the way of the airway, and which naturally occurs with closed-mouth breathing, will be lost. However, when one opens the mouth to breathe, the lip seal is broken. This releases the tongue and allows it to fall back into the throat to obstruct the airway and cause sleep apnea. In order to have a healthy night's sleep, it is critical to have clear and unobstructed nasal passages in order to breathe only through the nose. By the simple measure of elevating the head to an angle where nasal congestion does not occur and the mouth can be kept shut, snoring and sleep apnea in many cases can be prevented.

Catlin believed that mouthbreathing at night affected the whole facial structure: "The whole features of the face are changed, the under jaw, unhinged, fails and retires, the cheeks are hollowed, and the cheekbones and the upper jaw advance, and the brow and upper eyelids are unnaturally lifted; presenting at once the leading features and expression of idiocy. . . In all of these instances there is a derangement and deformity of the teeth, and disfigurement of the mouth and the whole face."

Both Dr. Price and George Catlin wondered

TREATING SLEEP APNEA

According to Dr. Steven Sue of Honolulu, when the mouth is closed and one breathes through the nose, a vacuum is formed which keeps the tongue up in the roof of the mouth, thereby preventing it from sliding back into the throat to obstruct the airway. "The lip seal is fundamental, almost invisible, and occurs naturally. It is found only in nose breathing! Zen masters since ancient times have known the secret. When the tongue is placed at the roof of the mouth, it prevents the tongue from falling into the back of the throat. The tongue is held forward and away from the back of the throat by the naturally occurring lip seal and a forward 'tongue suction.' Pacifiers and sippy cups keep the tongue low and away from the roof of the mouth. They encourage mouth breathing and tongue thrust; the same effects as thumb sucking and therefore, harmful to the developing child."

Dr. Sue has invented several dental sleep apnea appliances designed with a tongue shelf for the tongue to rest on, which positions the tongue up against the maxilla. The key by which the tongue is held in the optimal upper position is the "lip seal" on his custom-made dental orthotic device, which prevents the vacuum from breaking. A closed mouth and normal nasal breathing creates this vacuum. An open mouth—as a result of structural imperfections, habit or blocked nasal passages—has no vacuum to hold the tongue forward, and therefore is free to fall back into the airway to cause an obstruction.

SOURCE: nosebreathe.com

why tuberculosis claimed so many lives in modern man. In Catlin's day, the disease was called "consumption." Catlin lost his wife and one of his children to pneumonia, and in his book he ponders the cause of respiratory illness, linking it to mouth breathing: "I am compelled to believe ... that a great proportion of the diseases prematurely fatal to human life, as well as mental and physical deformities, and the destruction of the teeth, are caused by the abuse of the lungs, in the Mal-respiration of sleep."

"Infected districts communicate disease, infection attracts to it putrescence, and no other infected district can be so near the lungs as an infected mouth."

Sleep apnea is more than just a minor inconvenience. According to surveys, 30-60 percent of adults snore, depending on age.¹⁰ The statistics on sleep apnea in the US show eighteen to twenty million Americans—approximately one in fifteen people—have diagnosed sleep apnea. Undiagnosed sleep apnea afflicte perhaps another seventeen million people.¹¹

Recent studies have shown that Sleep Disordered Breathing is associated with Type II diabetes¹²—now epidemic of diabetes in this country. Up to 50 percent of people afflicted with diabetes have sleep apnea!¹³ Still more studies link sleep apnea with diabetes, obesity and GERD.¹⁴ Furthermore, people who suffer from sleep apnea are up to four times more likely to have a stroke and three times more likely to have a heart attack.¹⁵ Drowsy driving leads to at least one hundred thousand car crashes and over fifteen hundred deaths each year, according to the National Highway Safety Administration.¹⁶

A PHILOSOPHY OF LIFE

For the Native Americans, emphasis on conservation of breath at night and during the day was more than practical wisdom-it was a philosophy of life. As Catlin observed, "The American Savage often smiles, but seldom laughs; and he meets most of the emotions of life, however sudden and exciting they may be, with his lips and his teeth closed. He is, nevertheless, garrulous and fond of anecdote. Civilized people, who, from their educations, are more excitable, regard most exciting, amusing, or alarming scenes with the mouth open; as in wonder, astonishment, pain, pleasure, listening, etc. . . [But] the Savage, without the change of a muscle in his face, listens to the rumbling of the Earthquake, or the thunder's crash, with his hand over his mouth; and if by the extreme of other excitement he is forced to laugh or to cry, his mouth is invariably hidden in the same manner."

Catlin notes: "The proverb, as old and unchangeable as their hills, amongst the North American Indians; My son, if you would be wise, open first your Eyes, your Ears next, and last of

ADVICE FOR TODAY'S MOTHERS

Native American childrearing practices fly in the face of modern customs, and even may strike us as cruel to children. Childrearing experts today believe that infants should at all times be able to move their hands and legs freely, and while frowned on by government officials, sleeping with baby in close contact is highly encouraged in many circles.

The superb physical development of Native Americans is proof that confinement in a cradle board—usually until the second birthday—does not in any way hinder physical development. And while Indian mothers slept with their babies nearby, they did not snuggle them during the night.

According to health workers who have lived with tribes that still use cradle boards, the number one reason given for their use is safety—to keep the babies away from camp fires, and from wondering away while their mothers were working. (In European countries, babies were also swaddled to keep them safe; often the swaddled infants were hung on a hook near the hearth!) Modern mothers do not face the challenge of keeping babies away from fires, so do not need to restrain their infants in a cradle board. Nevertheless, swaddling cloths that keep baby's arms and legs from moving are coming back into use, as they can have a very calming effect on the infant. And all mothers are now advised to put their infants on their backs to sleep, to reduce the risk of SIDS. Comfortable inflatable head rests are now available for babies, to help keep them on their backs with heads tilted slightly forward. Put to bed in this manner, wrapped in a warm swaddling cloth and with a window open to allow fresh air into the room, babies can receive all the benefits of the cradle board in a modern setting.

And now to answer the question you have all been wanting to ask: Native American mothers didn't use diapers, of course. Instead, they wrapped the baby in soft, absorbant spagnam moss, replacing it about once every twenty-four hours.

Sally Fallon Morell

"Guard your

youth," said

Wabashaw,

"and in age

you may

mature a

will be of

service to

thought that

your people."

the old chief,

tongue in

all, your Mouth, that your words may be words of wisdom, and give no advantage to thine adversary"

In his 1902 book, *The Soul of an Indian, an Interpretation*, Dr Charles A. Eastman, of the Santee Dakota writes the following: "The man who preserves his selfhood ever calm and unshaken by the storms of existence—not a leaf, as it were, astir on the tree, not a ripple upon the surface of the shining pool—his, in the mind of the unlettered sage, is the ideal attitude and conduct of life. . . . 'Silence is the cornerstone of character. Guard your tongue in youth,' said the old chief, Wabashaw, 'and in age you may mature a thought that will be of service to your people.'"¹⁷

Where the yogis of India practice pranayama, the control of the breath, during conscious waking hours, our own American Indian yogis appear to have used control of the breath in the unconscious state while sleeping—by rote habit fixed during infancy—and to have achieved a fortunate conservation of life force to enhance their lives.

George Catlin could have been writing about esoteric yogic breathing practices when he states, "The lungs should be put to rest as a fond mother lulls her infant to sleep."

"We are told that the breath of life was breathed into man's nostrils—then why should we not continue to live by breathing in the same manner?"

Scholar Fiona MacDonald explains the history of the breath,¹⁸ noting that the ancients commonly linked the breath to a life force. The Hebrew Bible refers to God breathing the breath of life into clay to make Adam a living soul (*nephesh*, roughly "breather"). For the Greek philosopher Anaximenes (about 550 BC), the breath or *pneuma* was the primeval life force that bound the universe together; inhaling it invigorated the body. Similarly, in Indian yogic philosophy, *prana* is the cosmic energy that fills and maintains the body, manifesting in living beings as the breath. The fourth step in Raja Yoga is *pranayama*, or breath control, practiced because the breath is believed to influence markedly a person's thoughts and emotions. Similarly, modern medicine relates hyperventilation to a disturbed psychological state.¹⁹

VITAL CAPACITY

The forty-year Framingham study,²⁰ provides a surprising validation of Catlin's conclusion that "the great secret to life is the breathing principal." Researchers in the famous Framingham heart study found that "force vital capacity," the maximum volume of air that a person can exhale after a maximum inhalation, is the primary predictor for longterm heath and vitality.²¹ Framingham researchers William B. Kannel and Helen Hubert state: "This pulmonary function measurement appears to be an indicator of general health and vigor and literally a measure of living capacity."²² According to Dr. Kannel, "Long before a person becomes terminally ill, vital capacity can predict life span."²³

Some 80-90 percent of all of the body's metabolic energy production is created by oxygen, with only 10-20 percent created from food and water. Furthermore, the respiratory system is responsible for eliminating 70 percent of the bodily metabolic waste. In 1924, Nobel Laureate Dr Otto Warburg linked lack of oxygen with cancer. "Summarized in a few words, the prime cause of cancer is the replacement of the respiration of oxygen in normal body cells by a fermentation of sugar."²⁴

HABITS AGAINST NATURE

"Life in all its fullness is Mother Nature obeyed," wrote Dr. Price. Catlin formed a similar opinion: "Most habits against Nature, if not arrested, run into disease."

"Air is an Elementary principal, created by the hand of God, who. . . creates nothing but perfections. . . sleep, which is the great renovator and regulator of health, and in fact the food of life, should be enjoyed in the manner which Nature has designed."

Like Price, Catlin discusses the issue of heredity versus environment. "No diseases are natural," he writes, "and deformities, mental and physical, are neither hereditary nor natural, but purely the result of accidents or habits."

So wrote Dr. Price: "Neither heredity nor environment alone cause our juvenile delinquents and mental defectives. They are cripples, physically, mentally and morally, which could have and should have been prevented by adequate edu-

HOW TO DETERMINE YOUR VITAL CAPACITY

Vital Capacity is a measure of the amount of air that the lungs can hold; in a clinical setting this is determined using lung volume bags. But it is possible to measure your vital capacity using a balloon, a piece of string and a ruler. The procedure is to blow into a balloon several times to loosen it, then to blow in with one long exhalation, then tie the balloon off and measure the circumference at the widest point. The vital capacity is then determined by comparing the diameter of the balloon to fixed numbers on a graph.

For further information, visit wiki.answers.com/Q/How_do_you_measure_vital_capacity_at_the_bedside or www. teachingk-8.com/archives/integrating_science_in_your_classroom/measuring_lung_capacity_by_john_cowens.html.

cation and by adequate parental nutrition. Their protoplasm was not normally organized."

Catlin believed that a change in childrearing practices could remedy the health problems of civilized man. "I have lived long enough, and observed enough, to become fully convinced of the unnecessary and premature mortality in civilized communities, resulting from the pernicious habit above described; and under the conviction that its most efficient remedy is in the cradle." Of his book Shut Your Mouth, he said, "If I had a million dollars to give, to do the best charity I could with it, I would invest it in four millions of these little books, and bequeath them to the mothers of the poor, and the rich, of all countries. I would not get a monument or a statue, nor a medal; but I would make sure of that which would be much better-self credit for having bequeathed to posterity that which has a much greater value than money."

We know from the work of Weston Price that attention to mouth closing from infancy is *not* enough to ensure proper facial development—diet is the key factor, starting from before conception. Nevertheless, Catlin's observations provide the capstone to Price's great edifice of nutritional research. By focusing on sleep positions that keep the mouth closed, and by insisting on cool, fresh air while sleeping, we can augment the benefits of a good diet.

We need to learn from the Native Americans and place more emphasis on optimizing "the breathing principle." Breathing is something we do thirty thousand times a day, and breathing improperly, even for the one-third of our lives spent asleep, may undermine our vitality and even shorten our lifespan. Catlin observed that the American Indians practiced calm nasal breathing both day and night. Spiritual seekers for centuries have claimed that mastering the breath unlocks the mysteries of the universe. But, according to respiratory physiology expert Roger Price, learning to breathe properly is a fundamental, "mainstream" issue, not one to be avoided because it is a "sacred" issue or an "alternative care" issue.25

Thus, the Breathing Principle is a subject worthy of study, beginning with Catlin's command, "Shut your mouth!" Nancy C. Henderson, MFA, has a Master's degree in Fine Art and thirty years of professional fine and commercial art experience—including portrait painting. As an infant, she was unable to nurse properly without colic; subsequently, her mother nursed her for 6 weeks before giving up and bottle feeding her. Nancy developed a narrow palate that did not allow room for six adult teeth—along with many GAPS syndrome symptoms. Her story in overcoming reduced airway issues including sleep apnea is on her website, along with a longer version of this article: web.me.com/ nancychenderson.

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What Should I Do to Be a Nutritionist? Making Sense of All Those Confusing

Degrees and Credentials

By Kaayla T. Daniel, PhD, CCN

very month we get letters from members asking how to become a nutritionist. Many of our members want to learn more about Dr Price's dietary laws in an academic setting while also gaining the credentials needed to be licensed and work professionally. We wish there were a simple answer.

First, let's look at the term "nutritionist."

A nutritionist can be anything from a PhD-trained professional to the friendly multi-level marketer down the street who is all too eager to testify to the healing powers of his or her brand's (and only that brand's) vitamins, shakes and energy bars. Assistants in the supplement sections at Whole Foods and other marketplaces probably call themselves nutritionists. So might your Uncle Harry if he both eats and has read a few diet books. "Nutritionists" may have advanced degrees or no degrees. They can be licensed professionals, gifted educators, idiot proseltyzers or opinionated people.

The term "nutritionist" is so vague, it is meaningless. To improve their credibility, some professionals have banded together to form organizations in which members are required to attain certain levels of expertise or competence, as determined by completing coursework, passing examinations, obtaining continuing education credits and otherwise proving their mettle. Indeed, nutritionists today can earn all sorts of certifications, some of which are respected, some less so or not at all. (We'll discuss some of these later in this article.) Those who earn the right—or just pay the right fees—may be the only ones allowed to put certain trademarked initials after their name, but there's nothing to stop people from calling themselves "nutritionists."

The only thing that's certain is that "nutritionists" cannot call themselves "dietitians." The terms are not interchangeable.

DIETITIANS

The term "dietitian" (sometimes spelled dietician) can be used only by someone who has completed coursework approved by the American Dietetic Association (ADA). Registered Dietitians have jumped through additional ADA hoops, including completion of an approved internship and passing of the ADA's CDR (Commission on Dietetic Registration) examination. Thereafter, they must keep up continuing education requirements and remain paid up members in good standing.

RDs can be licensed in any state that has licensing requirements, which is close to fifty at this writing. Because the ADA has a hammerlock on licensing in many of these states, it's a valuable credential to have. Registered Dietitians can open a private practice or work for doctors, hospitals, schools, nursing homes and other institutions. Most such employers will only consider RDs for these positions.

The initials RD after the name confers credibility with mainstream publishers, and being an RD will also increase the likelihood of being quoted as an expert in the mainstream media. Subscribers to the ProfNet service—a networking service that matches reporters and producers with "experts" in many different fields—notice that many of the inquiries request a response only from RDs or MDs.

TRAINED TO DISPENSE PROCESSED FOOD

Registered Dietitians generally get a bad rap in the alternative medical and nutrition communities. After all, they are the people who serve up white bread, jello and foods fried with *trans* fats in school and hospital cafeterias, who help doctors enforce lowfat, low-cholesterol diet plans and advise weight loss patients to drink caloriefree diet sodas. Indeed, the ADA thinks that plenty of processed, packaged and fast foods, are just fine in the context of a varied diet. As Mary Enig, PhD, MACN, is fond of saying, "Dietitians are trained to dispense processed food."

Although there's an excellent chance that

processed food would be poor nutritionally, the ADA generally advises against vitamins, minerals or other supplements. It also sees no reason to go organic, grassfed or non-GMO. As for raw milk, the very idea is unsafe, unsanitary, outdated, illegal and otherwise beyond the pale.

Jonny Bowden, PhD, CNS, celebrity nutritionist and fitness trainer and author of *The 150 Healthiest Foods on Earth* and numerous other books, pulls no punches when he writes about the ADA on his website www.jonnybowden. com. "The American Dietetic Association at this point has no useful purpose on the planet except to protect its union members and shill for its flatliner positions, which are now running about two decades behind their sell-by date."

But as with any other profession, there is the herd that kowtows to the party line, and the leaders who have imagination, intelligence, conviction and courage. As Bowden puts it, there are RDs who "are brilliant and forward thinking.... but they will be the first to tell you that their organization—the ADA—is beyond horrific when it comes to advancing the health of America."

This new breed of dietitian somehow survives in the belly of the beast. They may complete the required coursework and internship biting their tongues the whole time, be alternately bored and irritated at ADA conferences and dismiss the outdated information in some if not all of the official Position Papers. They are often gravely disturbed by the fact that ADA's sponsors include Kelloggs, Nestles, General Foods, PepsiCo and other mega corporations. Furthermore, some are troubled by the fact that industry scientists, such as soy industry lobbyist and spokesperson Mark Messina, PhD, are hired to speak at conferences as if they are impartial experts.

Even so, most of these RDs value their credential.

SUPPLEMENTING ADA DOGMA

Many RDs are frustrated by the ADA's opposition to routine supplement use, and say they learned in school to keep their mouths shut about vitamins in order to get their degree. The ADA has been saying "just eat right" for years. But Americans are not eating right. For the average American, the problem is the Standard American This new breed of dietitian somehow survives in the belly of the beast. Diet (SAD) with all its processed, packaged and fast foods. For health conscious people lowfat, plant-based and even high-soy diets are fashionable. Both lead to deficiencies and imbalances that benefit from correction through supplements. That may be true even among those who use a nutrient-dense traditional diet for healing, especially if they cannot obtain raw milk or the other recommended healing foods. The reality is in this world many people do need supplements.

Rather than wait for the lumbering ADA to get on board, increasing numbers of dietitians have taken the steps to educate themselves about proper supplement use. For some this means self study, for others trainings and seminars that cover the latest findings in scientific journals and state-of-the-art laboratory testing. Most of these people agree that one-size-fits all prescriptions can look good on paper but are often outright wrong or inadequate on a person-by-person basis.

According to the International and American Association of Clinical Nutritionists (IAACN) Clinical Nutrition Certification Board (CNCB), clinical nutritionists use "case history, anthropomorphic measurements, physical signs, laboratory tests, and nutrition/lifestyle analysis" in order to assess an individual patients' needs for dietary and nutritional optimization. From this assessment, a prescription can be made and, if needed, a proper referral to a physician or other medical professional.

Both the IAACN and the American College of Nutrition (ACN) count RDs in their midst. At CCN conferences the RDs even make it a point to get together one night. Although the numbers are small compared to the total forty-four thousand RDs in the ADA, they are making their voices heard both within and without their organization.

ALTERNATIVE VIEWS

"RDs are changing," says Deborah Ford of Van Wert, Ohio, "A lot of us are now into functional and integrative medicine. I call myself RD/Clinical Nutritionist so I won't be tagged as one of the outdated, old-style RDs. No white shoes and hair net here."

Ford opened the Good Earth Health Food

Store thirty-three years ago. Soon afterwards, her state passed a licensing law that made it illegal for anyone but an RD to dispense nutritional advice. "I had been reading journals. I knew my stuff, but every time someone came in I felt like I might soon be on the butcher block," says Ford. Rather than just hope for the best or try to get around the law by calling herself an "educator," Ford went back to school to take all the pre-med and nutrition courses necessary to became an RD. She then decided to "sink my teeth into the science" and went on to earn a Master's Degree in Human Nutrition at the University of Bridgeport, and then topped that with the Certified Clinical Nutritionist (CCN) credential.

Ford has not chosen to leave the ADA behind; instead she has helped it move forward. "The ADA is moving slowly and I've had to learn to be patient, but as with any old organization, changes comes slowly," she says. "As alternative medicine has become more and more evidence based, ADA has been forced to take it seriously. They can no longer sweep it under the carpet." Indeed, Ford is active in an ADA practice group studying complementary medicine, herbs and genetics, and notes that attendees at some ADA conferences start the day with yoga sessions, "and they get credit for that!"

DIETITIAN OF THE YEAR

Betty Wedman-St. Louis, PhD, RD, LD, was recognized by the ADA as "Young Dietitian of the Year" in 1974 and won the Allene Van Son Award from the American Association of Diabetes Educators in 1987. She worked at ADA headquarters for two years and is widely recognized in the RDA ranks as the author of a series of practical books for diabetics, including *Fast and Simple Diabetes Menus*, *Diabetes Meals on the Run*, *Diabetic Desserts* and the *Quick and Easy Diabetes Menus Cookbook*. She started on the establishment academic path, earning her BS in Foods and Nutrition from the University of Minnesota and MS in Foods and Nutrition from Northern Illinois University.

In mid-career, Wedman-St. Louis fell ill due to sick building syndrome and multiple chemical sensitivities. Rather than give in to a life of fatigue and debility, she determined to find out what was making her sick, why this was happening and how to reverse it. Her successful struggle to heal herself led to a firm commitment to understand the science behind her recovery and use it to help others. To this end, she earned a PhD in Nutrition and Environmental Health from Union Institute and University and has become a leading advocate for the growing numbers of people suffering from multiple chemical sensitivities. Her book Environmental Illness-The Growing Health Effects of Chemical Pollution is a comprehensive guide to healthy living through clean air, pure water and nutritious food. Today she teaches in the alternative medicine program at Everglades University in its Sarasota, Florida branch, works privately with clients and writes books. Of particular interest to WAPF members will be a book an how the small amounts of non-irradiated herbs and spices as used traditionally in cooking can promote health and healing.

QUACKS, QUACKPOTS AND QUACKBUSTERS

As these examples make clear, many RDs today remain open to new

REGISTERED DIETITIAN MEMBERS OF WAPF

The Weston A. Price Foundation has a surprising number of members who are registered dietitians. In addition, the ADA now allows continuing education units (CEUs) for dietitians at our *Wise Traditions* conferences.

Adirondack WAPF member Ruth Pino is a chef who owned her own catering business before she returned to school to become an RD. "I was tired of catering to the rich. I wanted to do something more meaningful," she said. Pino completed her bachelor's degree at Plattsburgh State University in upper New York State and researched her internship options very carefully, ultimately choosing an independent study program through Sodexo Foods. She spent the majority of her time working on a wellness policy for the Saranac Lake school system in Saranac Lake, New York, which led, in turn, to her current part-time job as the Acting Food Service Director. She also teaches at Paul Smith's College.

Pino has made great strides in improving the quality of school lunches just by providing training to her food service staff. "Staff is the most expensive part of the food service budget," she says. "So improving food quality while staying within budget really boils down to having a well-trained staff that knows how to prepare whole foods." Pino has replaced chicken nuggets and patties with whole chicken breast, french fries with mashed potatoes and canned vegetables with frozen. If Pino's current position turns into a full-time position, her next goal is to prepare all of the salad dressings and soups from scratch. One of the challenges she faces is introducing new food to children. "We did a baked fish one day that failed miserably. The students did not recognize it and did not eat it. For most of them the only fish they have ever seen was deep fried."

Another frustration is the National School Lunch program requirement that saturated fat comprise no more than 10 percent and total fat no more than 30 percent of the menu. Keeping whole milk on the menu makes it very difficult to stay within the requirement, but getting rid of it makes it hard to keep the calorie count high enough. "Without whole milk it is difficult to get enough calories into the meals for the kids. That leads many food service professionals to add cookies and other inferior foods to make up the calories without exceeding the fat requirements"

Pam Schoenfeld, formerly a WAPF chapter leader in New Jersey, also chose to become an RD despite the ADA's demonization of fats, cholesterol and organic and its support of processed, packaged and fast foods, She completed a BS in Nutrition Research at the University of Maryland, extra required courses at the College of Saint Elizabeth in New Jersey, and a rigorous internship with the University of Medicine and Dentistry of New Jersey. She passed the CDR (Commission on Dietetic Registration) examination this summer. She is currently enrolled in a Masters in Nutrition program at the College of St. Elizabeth, working part time for a doctor as a research assistant and exploring future career options.

Schoenfeld remains challenged by the schooling but still recommends an RD program. "To get through, you often have to spout back what you know not to be true, but if you can survive it, the time will come when you can make changes from within. It's frustrating that so many people drawn into this field are narrow-minded thinkers who refuse to consider any position outside the ADA's position papers. Even so, it's clear that most dietitians mean well. I prefer not to see them as the enemy but as misguided people whom I have the power to influence."

Schoenfeld's goal is to make a difference in the medical system. "We all know it isn't serving people well right now, but that's where the majority of people get their care. My style is to help a lot of people make small changes. If I succeed in this, it will have a multiplying effect and feel very worthwhile for me. Most people won't accept radical ideas and WAPF principles are radical for the average person. But I can point them in the right direction."

Schoenfeld cites two examples of the influence she has had to date. One involved having "some influence" on vegan parents whose child had been on an extremely lowfat diet and had been diagnosed with "failure to thrive." She was also instrumental in ordering a vitamin D test for a woman whose rib cage had unexpectedly broken during a lung transplant. The woman's vitamin D levels were not even detectable. She'd been on steroids for years and she almost never went outside, but no one had thought to check."

Kim Rodriguez, MD, RD, LD is a WAPF chapter leader in Aiken, South Carolina. In March, a local newspaper published an article about her work, "Registered dietician teaches the diet of Dr. Weston Price," and in May, she participated in a meeting of forty-three registered dietitians (mostly under thirty years old) as one of four speakers. The first speaker was from Ross Pharmaceuticals and gave a presentation on Ensure. The second discussed a new appetite stimulant called Megace XP. The third discussed menus for nursing homes and how to meet the ADA guidelines for vitamin A via betacarotene in vegetables. Then Kim gave a presentation on Dr. Weston Price and traditional diets; she discussed her history as an RD and the reasons she valued the principles of the Weston A. Price Foundation.

Afterwards, many came forward to say, "thank you for finally speaking up." Says Rodriguez: "It was almost as though every dietitian in the room knew—but was afraid to talk about it. There is lots of light in the American Dietetic Association's tunnel!" She has since given her presentation to one other groups of young RDs, again well received. "None of them feels good about recommending Ensure and hope one day the RD's role will not be what it is today." Martha Pickard, MS ideas, even ideas that the Mother House frowns upon. Most of these renegade RDs work quietly and don't attract the attention of the ADA, but a few have been publicly vilified as quacks. The most prominent of these was the late Shari Lieberman, PhD, CNS, FACN.

Dr. Lieberman earned her PhD in Clinical Nutrition and Exercise Physiology from the Union Institute, Cincinnati, Ohio, and her MS degree in Nutrition, Food Science and Dietetics from New York University. She was a Certified Nutrition Specialist (CNS), a board member of the Certification Board for Nutrition Specialists and a Fellow of the American College of Nutrition (FACN). In addition, she was a member of the New York Academy of Science and the American Academy of Anti-Aging Medicine (A4M). She was also President of the American Association for Health Freedom and received the National Nutritional Foods Association 2003 Clinician of the Year Award. Dr. Lieberman was also instrumental in creating and implementing master's programs in nutrition at the University of Bridgeport and New York Chiropractic College. These are two of the best regionally accredited programs available today for those who want to explore alternative non-ADA ideas in a rigorous long-distance learning programs.

In the early 1990s, however, Lieberman had not yet earned her PhD nor won her many other honors and still valued her RD credential. She lost it for a time when the ADA took issue with her promotion of megavitamin therapy.

As one of the coauthors of *The Real Vitamin* and Mineral Book (first published by Avery in 1990), Lieberman proposed the use of vitamin and mineral supplements not only to protect against disease but to reach the highest levels of mental and physical well-being. Lieberman recommended scientifically documented Optimum Daily Intakes (ODI), which were generally well above the government's Recommended Daily Intake (RDI). In contrast, the ADA's position—as stated on their website and in their press releases—was that 100 percent of the government standard was the most that anyone would require in a supplement, provided they needed a supplement at all, which would be unlikely.

In 1994, the American Dietetic Association struck, suspending Lieberman's RD credential

for three years because of her alleged failure to adhere to the ethical standards set by the ADA. At issue was Principle 7 of the 1985 ADA Code of Ethics, which states, "The dietetic practitioner practices dietetics based on scientific principles and current information."

The man behind the attack was not an ADA official all but Stephen Barrett, MD, the infamous "quackbuster." Barrett's website, www.quackwatch.com, has been heavily touted by the AMA, FDA and FTC, AARP and numerous other organizations with ties to the medical and pharmaceutical cartels. Over the years, Barrett has savaged many practitioners of alternative, complementary, integrative and holistic medicine, especially chiropractors. He was also outspokenly critical of two-time Nobel prize winner Linus Pauling.

Barrett calls himself a retired psychiatrist. However, in a 2007 court proceeding in Allentown, Pennsylvania, under heated cross examination, attorney Carlos Negrete exposed the fact that Barrett had never actually practiced psychiatry and had not even passed his credentialing exam. The legal team for that case included James Turner, Esq, counsel for the Weston A. Price Foundation.

Back in 1994, Barrett testified against Lieberman at a hearing he instigated before the ADA. In testimony, he represented himself as knowledgeable about nutrition despite his lack of any formal academic training or publications in that field. Despite this, the ADA found Lieberman guilty as charged and stripped her of her RD credential. Lieberman then launched a forty million dollar defamation lawsuit against the ADA. In court proceedings, it became clear that Barrett had falsified the charges against her and had no expertise. Learned testimony from heavily credentialed experts in nutritional science, convinced the ADA to settle the case.

The ADA reinstated Lieberman's RD credential and published a statement noting this fact in the ADA's *Journal* and *Courier*. Other details including any damages paid to Lieberman for humiliation and loss of credibility are not a matter of public record. As per the terms of the settlement, Lieberman could never speak of, or advertise, her win. For this reason, the victory has not freed other dietitians as much as might have been hoped.

"Shari became a hero in the alternative and complementary field," says Wedman-St. Louis, "but most dietitians never heard about it." Nor has it completely stopped ADA from disciplining other free-thinking members. "It's the same ADA," says H. Ira Fritz, PhD, CNS, FACN, "but they are now a lot more careful and seek better legal counsel." What everyone familiar with the case agrees on is that they were not smart to make an example of Shari Lieberman. She was just too smart, too feisty and too well connected to take it lying down.

THE RD ADVANTAGE

These stories make it clear that there are pros and cons to becoming—and being—an RD. Those who wish to make a difference in public hospitals or school cafeterias will have an extremely difficult time getting hired unless they take this route. Practitioners who want to receive referrals and listings with insurance plans need to consider this option as well. "In some corporate wellness plans, people are permitted to seek dietary advice, but usually only with an RD," says Deborah Ford, MS, RD, CCN.

QUESTIONS TYPICAL OF THE ADA'S CDR EXAM

- 1. Which of the following is typically *not* associated with failure to thrive in children?
 - a. Lack of fiber in the diet
 - b. Vegetarian diet
 - c. Chronic illness
 - d. Food restriction stemming from parents' excessive concern about atherosclerosis
- 2. A patient is receiving a nocturnal tube feeding from 7 p.m. to 7 a.m. The formula has a concentration of 1.5 kcal per ml and provides .795 ml of water per liter. What is the rate required to provide 1200 kcals and how much free water is provided during the nocturnal feeding?
 - a. 67 ml/hr and 636 ml free water
 - b. 75 ml/hr and 795 ml free water
 - c. 50 ml/hr and 650 ml free water
 - d. 75 ml/hr and 805 ml free water
- 3. A patient's labs show the following: low albumin, Transferin WNL and high sodium. What do you suspect?
 - a. protein stores are low
 - b. dehydration
 - c. edema
 - d. nothing wrong with these labs
- 4. Details on how a federal law will be implemented, and any penalties that may be imposed if the law is violated are published in:
 - a. Congressional Journal
 - b. Federal Reserve
 - c. Congressional Report
 - d. Code of Federal Regulations.
- 5. Which contains the most Vitamin A:
 - a. 1 cup steamed carrots,
 - b. 1 slice white bread
 - c. 1 poached egg
 - d. 1 slice lemon meringue pie .
- 6. You have a renal patient on hemodialysis treatment who needs to restrict potassium. Which food do you recommend:
 - a. 1/2 cup lowfat cottage cheese
 - b. Baked potato with skin
 - c. 1 cup 2% milk
 - d. 1 medium banana
- 7. The potatoes you are frying show an unusual increase in browning. What does this tell you about the potatoes:
 - a. They are old
 - b. They are contaminated
 - c. They were stored at a refrigerated temperature
 - d. They were not meant to be fried

8. For which of the following would be low fiber diet *not* be recommended:

a. nausea	c. diverticulosis
b. IBS	d. diverticulitis

- 9. What is Body Mass Index (BMI) for a woman 175 pounds and 5' 2"
 - a. 23.9c. 39.5b. 32.3d. 50.6
- 10. How many units must you sell to reach your break even point (BEP) if your selling price (SP) = \$7, the variable costs (VC) equal \$4.50 and the fixed costs (FC) = \$2000?
 - a. 800 c. 13000 b. 1000 d. 1800
- 11. Cook chill, cook freeze and sous vide are three methods of preparation used in :
 - a. Ready prepared food service
 - b. Conventional food service
 - c. Commissary food service
 - d. Assembly serve food service
- 12. If your patient is on a low-residue diet, what can she consume:
 - a. turkey c. milk b. wheat bran d. potatoes
- 13. In order for a product to be called "cholesterol free," what is the maximum amount of cholesterol this product can have per serving?

a.	0 mg	с.	5 mg
b.	2 mg	d.	10 mg

14. What are the minutes/meal yesterday if you had 6.3 FTEs who served 190 meals?

a. 15.9	с. 12.6
b. 17.8	d. 23.4

15. How much ground beef will you need to purchase if you need 68 portions of 4 oz each with 25% shrink-age?

a. 20 lb	c. 28 lb
b. 23 lb	d. 68 lb

16. According to HAACCP, roast beef should be cooked at

a. 145	с. 165
b. 155	d. 185

ANSWERS: 1. b 2. a 3. c 4. c 5. a 6. a 7. c 8. c 9. b 10. a 11. a 12. a 13. b 14. a 15. b 16. a

QUESTIONS TYPICAL OF A CCN EXAM

Most RDs would probably flunk this exam, but in all fairness CCNs wouldn't do well on theirs without a lot of studying on questions related to tube feeding, renal diets and cafeteria management. Check one or more:

- 1. One of the disposing causes to intestinal mucosal atrophy is said to be excess neurotensin production. The effects of neurotensin include
 - a. Diarrhea with digestive enzyme deficits
 - b. Increased anterior pituitary hormone release
 - c. Decreased glucagon release
 - d. Decreased cell proliferation
 - e. Hypergamic globulinemia
- 2. Common symptoms of the hypoadrenocortical state include
 - a. Fatigue
 - b. Mental depression
 - c. Flat glucose tolerance curve
 - d. Postural hypotension
 - e. Allergies
- 3. Aspartame disease can be mistakenly diagnosed as
 - a. MS
 - b. Parkinson's disease
 - c. Hodgkin's disease
 - d. Alzheimer's disease
 - e. ALA
- 4. Non steroidal anti-inflammatory drugs (NSAIDS) may cause which of the following:
 - a. Increase folic acid
 - b. Increase gut immunity or impermeability
 - c. Decrease leukotrienes
 - d. Increase phase 2 liver detoxification substances
 - e. Decrease N-acetyl glucosamine
- 5. Wheat/gluten-derived hexapeptides have an entertoxic effect on the intestinal wall. Which diagnostic test is most likely to discover if this may be a problem for your patient?
 - a. Comprehensive stool digestive analysis
 - b. Essential amino acid quantification
 - c. Functional nutrient status
 - d. Delayed hypersensitivity immunology
 - e. Viral antibody titers and cultures
- 6. The Neuroendocrine Theory of Aging proposes that the most accepted means to retard aging are:
 - a. Caloric restriction
 - b. Early detection of disease
 - c. Administration of antioxidants
 - d. Lowfat (<20) diet
 - e. Physical exercise

- 7. The Paleolithic or Stone Age diet was usually high in:
 - a. Calcium and protein
 - b. Calcium but not protein
 - c. Protein but not calcium
 - d. Neither calcium nor protein
- 8. Phytoestrogens are found in:
 - a. Soy and alfalfa
 - b. Licorice and cayenne
 - c. Corn and soy
 - d. Oranges and apples
- 9. Synthetic progesterone:
 - a. Reduces cases of uterine cancer
 - b. Increases cases of birth defects
 - c. May cause depression
 - d. Causes fluid retention
 - e. Decreases T3 uptake
- 10. The cytochrome P450 enzymes of the adrenal gland can be protected by:
 - a. BHA
 - b. Me2S0
 - c. Ascorbic acid
 - d. Vitamin E
 - e. Selenium
- 11. Zinc deficiency is often responsible for which of the following disease conditions:
 - a. Depressed cellular immunity
 - b. Intracutaneous delayed hypersensitivity reactions
 - c. Increased susceptibility to fungal infections
 - d. Increased susceptibility to viral infections
 - e. Chornic diarrhea of unexplained etiology
- 12. Which of these parsleys has a mobilizing effect on mercury, but carries side effects:
 - a. Fresh Chinese parsley (cilantro)
 - b. Petroselinum crispum
 - c. Fresh parsley
 - d. Dried cilantro
 - e. Parsley leaf

ANSWERS: 1. b and d 2. a, b, c, d and e 3. a and d 4. b 5. d 6. a, c and e 7. a 8. a 9. b, c, d and e 10. a, b and c 11. a, b, c, d and e 12. c

"If prevention becomes an important part of health reform, we know RDs will be part of the program. Prevention has been a big focus in the new health care reform, with RD visits allowed up to four times per year."

People who prefer to practice nutrition with a license should also weigh the RD option carefully as it is the ticket to licensing nearly everywhere. Although most nutritionists stay under the radar and never attract ADA whistleblowers, a few do, and not everyone is cut out to be a martyr. Although some states have loose requirements and lax enforcement, the trend today is towards licensing. The era of people talking about nutrition while calling themselves "educators" or "ministers" is coming to an end. The good news is that despite the ADA's best efforts, there may be other options for licensing.

LETTERS AND THE LAW

The ADA still lobbies for laws that make it illegal for anyone but an RD to dispense dietary advice, but they are enjoying fewer and fewer successes. "There has been an organized process by the American Dietetic Association to make everyone believe that they are the only credible source for nutrition advice," says Melvyn Grovit, DPM, MS, CNS, and President of the Certification Board for Nutrition Specialists of the American College of Nutrition (ACN). "Recently the ACN became affiliated with the American Association for Health Freedom (www.healthfreedom.net) to fight the choke hold that the ADA has on credible nutritionists (IAACN) in Dallas, Texas, has also actively lobbied for licensing of Certified Clinical Nutritionists (CCNs) and won victories in a few states.

Wedman-St. Louis PhD, RD, LD, speaks for many when she says, "I strongly believe that no one organization should have control over who is licensed." It's only right, after all, to allow highly educated and credentialed men and women to practice nutrition. Many of the leading figures in the field of nutrition are not dietitians. For example, Mary G. Enig, PhD, MACN and Vice President of the Weston A. Price Foundation, is licensed as a nutritionist in the state of Maryland. Marion Nestle, MPH, PhD, the Paulette Goddard Professor of Nutrition, Food Studies, and Public Health at New York University and author of *Food Politics* and *What to Eat*, is licensed in the state of New York.

LICENSING.

Licensing laws for nutritionists vary from state to state. RDs are shooins everywhere. As for just about everyone else, the rules are inconsistent, unpredictable and changeable. The time to investigate these laws is before going back to school and investing time and money in a degree, certification or other program. It's also a good policy to call the appropriate regulatory agency to learn whether new laws are in the works. Good to also check out neighboring states in case you might open an office there. It's a mistake to assume that you can practice as you please so long as nutritionists with few or no credentials are in business. Such people may either have been lucky enough not to attract attention or may have been grandfathered in.

Wedman-St. Louis, PhD, RD, LD, recommends the cautious approach. She advises her students at Everglades University to become an

RD or an LD/LN if they wish to practice nutrition. The latter stands for Licensed Dietitian or Licensed Nutritionist. "RD has reciprocity among the different states. You can easily move around. LD or LN is not reciprocal from state to state, and licensing requirements vary greatly," she explains. Some states, for example, accept a master's degree or PhD from a regionally accredited college whereas a nationally accredited or non-accredited school will not pass muster. In some states, such as New York State, the respected CNS credential will suffice.

In some states non RDs who meet educational and/or credentialing criteria must sit for a state exam, typically the very same Bachelor's level CDR exam required of RDs. This test can be challenging for test takers who have no plans to ever work in a hospital or manage a school cafeteria for they will need to be up to snuff on tube feeding, diabetic exchanges, food service management and other issues that will most likely be irrelevant to their practice. (See Sidebar below for sample test questions.) To learn your state's requirements, go online to www.cdrnet. org/certifications/licensure/agencylist.htm. However, it is wise to not trust any one source and check into the most current regulations in your state.

ACCREDITATION

Accreditation is the primary means by which colleges and universities assure quality to students and the public. Legitimate accrediting agencies are independent organizations approved by the U.S. Department of Education. Accredited status means minimum standards have been met in terms of faculty, curricula, student services, libraries and fiscal stability.

REGIONAL ACCREDITATION

Regional accreditation is the gold standard. Well-known, well-established brick-and-mortar colleges such as Harvard, Vassar, Stanford, Rice, Oberlin, University of Michigan, and the University of New Mexico at Albuquerque are regionally accredited. So are most community colleges. Regional accreditation is conferred by one of six regional accrediting bodies according to location. These are the Middle States Association of Colleges and Schools; New England Association of Schools and Colleges; North Central Association of Colleges and Schools; Northwest Commission on Colleges and Universities; Southern Association of Colleges and Schools; the Western Association of Schools and Colleges; and Accrediting Commission for Community and Junior Colleges.

NATIONAL ACCREDITATION

In recent years, national accreditation bodies have sprung up to meet the needs of newer schools, including long-distance learning institutions. The most respected of these is the Distance Education Training Council (DETC), which has been accrediting long-distance learning schools-formerly known as correspondence schools-since 1955. Both the Council for Higher Education Accreditation and the United States Department of Education recognize the DETC as a legitimate accrediting agency. DETC schools are often niche schools that offer specialized degrees or types of training. Although many graduates from DETC-accredited schools have used their degrees to advance in their careers, others have found to their dismay that the degrees carry little weight compared to those from regionally accredited schools.

One of the biggest problems reported with DETC accreditation concerns transfer of credits. Whereas credits from regionally accredited schools tend to transfer easily to other regionally accredited schools, credits from DETC-accredited schools may be viewed askance. Some schools accept DETC credits, some give partial credit and some will reject the transcript outright. According to DETC's own study of the transfer situation, students attempting transfer of credits succeed about two-thirds of the time. The DETC blames the rejected credits in part on anti-competitive business practices in higher education.

In the field of nutrition, a big problem is the unwillingness of some state licensing boards to accept a DETC-accredited education as valid.

The DETC has high standards and a thorough review process. However, it's buyer beware when it comes to some other national accrediting agencies. The worst of these are spurious, startup organizations founded only to give credibility to substandard programs and diploma mills. If a college says it's accredited, get the details, follow through to confirm, and carefully consider whether this form of accreditation will meet your specific career needs.

NON-ACCREDITATION

Many well-known schools in the alternative health, nutrition or fitness fields are either not accredited, or not optimally accredited. These include vocational schools such as Clayton College of Natural Health, Hawthorn University, Bouman College of Nutrition and Culinary Arts, the Optimal Performance Institute and others. Many people enjoy their coursework at these institutions, and use the knowledge, experience and degrees for career building. The cost can be substantially less than at accredited schools.

Compared to traditional schools with their AMA- ADA-approved curricula, non-accredited places are far more likely to be open-minded, forward thinking, willing to entertain opposite sides of an issue and respectful towards traditional diets. But those who compare required reading lists between regionally accredited and non-accredited institutions, will see why some non-accredited colleges don't get much respect. For example, a pathophysiology course offered at Santa Fe Community College at the associate's level required a dense and oversize 700-page textbook. A similarly named course at a "doctoral level" at non-accredited university required reading Ann Louise Gittleman's 208-page popular book Guess What Came to Dinner: Parasites and Your Health. However students at the community college spent months memorizing facts without clear practical application whereas Gittleman's readers were introduced to the role of parasites in allergies, chronic fatigue syndrome, bowel disorders and other ailments, to ways to parasite-proof food and water at home and while traveling, to methods of detection, to anti-parasitic treatments, and to herbal remedies. The ideal learning experience would be a course with a real textbook that would also allow students to explore the hard science behind Gittleman's book.

Accreditation can be a complicated, time-consuming and troublesome process, both to initiate and maintain. It requires a major commitment of time and money that smaller institutions may not be able to make. Despite castigation by Stephen Barrett of QuackWatch and other pro ADA/AMA groups, most of the non-accredited schools that permit the study of supplements, herbs, homeopathy, aromatherapy, iridology, reflexology and other alternative subjects are legitimate learning institutions. When choosing a school, lack of accreditation is a signal to "look out" but not an automatic disqualifier. The question is whether a non-accredited education will serve in terms of immediate and long-term career goals.

Karen Lyke, MS, CCN, DANLA, has chosen to earn a non-accredited doctorate after earning a long list of formidable credentials. She earned her Master of Science in Human Nutrition at the University of Bridgeport, a program she chose because the program is "substantial" and also regionally accredited. "It's important for holistic nutritionists to understand the science, to be able to communicate with people in all dimensions of the healing arts, she says. Lyke's credentials also include CCN (Certified Clinical Nutritionist) and DANLA (Diplomate in Advanced Nutritional Laboratory Assessment) from the Clinical Nutrition Certification Board (CNCB). She completed the (IFM) Institute for Functional Medicine's AFMCP (Applying Functional Medicine in Clinical Practice) foundation week in 2007, and regularly attends IFM, IAACN and National Autism Association symposia. Now living in northwest Ohio, Lyke has a small private practice and teaches at Hawthorn University. She is also now a candidate for Hawthorn University's Doctorate in Holistic Nutrition Education—a study experience she describes as "unique because it's not draining but exhilarating and enlivening."

DIPLOMA MILLS

Non-accredited schools are not interchangeable with "diploma mills." Diploma mills allow people to buy bachelor's, master's, doctorates and even law and medical degrees upon the payment of a fee. Transcripts and diplomas can be provided and may even look authentic. Some of these require a minor amount of work—perhaps a few months study or a short "dissertation." Others require only the fee. If it sounds too good to be true, it probably is!

The numbers of diploma mills diminished in the 1980s because of the "DipScam" (DiplomaScam) task force of the FBI. However some still exist, as is obvious to anyone who gets email: "GET YOUR DIPLOMA TODAY! If you are looking for a fast and effective way to get a diploma, this is the best way out for you. Provide us with degree you are interested in. Call us right now"

LONG-DISTANCE LEARNING

Many WAPF members have asked for an accredited long-distance learning program to study nutrition, preferably one that teaches Weston A. Price principles as the one true path. They may have a farm in a remote part of the country, be too busy raising children to attend school full time or be unable or unwilling to move. Some members who could attend a traditional college nearby have chosen not to do so because of the ADA- or AMA-driven curriculum.

Currently two distance-learning schools offer master's degrees in nutrition and hold the gold standard of regional accreditation. These are the University of Bridgeport in Connecticut and New York Chiropractic College. Though Dr. Weston A. Price's findings play a minor role at best in these programs, they place a value on whole foods, real foods and slow foods, and perceive the dangers of processed, packaged and fast foods. Both programs emphasize an integrative approach to health care with a focus on using diet and nutritional supplements to prevent, manage and reverse disease.

Since 1977, the Nutrition Institute at Bridgeport has offered courses in nutrition, clinical biochemistry, counseling, biostatistics and public health leading to an Master of Science degree in Human Nutrition. Substantial prerequisites in the sciences are required. In the weekend program, classes are held on the Bridgeport campus, one weekend per month for eighteen consecutive months. For the online degree program, students interact with professors and other students by email and through an online discussion board. They need show up on campus only once—for a final, comprehensive examination. Bridgeport's Human Nutrition Institute also offers an annual Practice Management Workshop and internship opportunities,

Martha Pickard, MS, of Gabriels, New York, is Grazing Program Coordinator for the Adirondack North Country Association. After studying environmental sciences at Paul Smiths College and Natural Research Management at Cornell, she entered the Master's Degree in Human Nutrition program at Bridgeport because it was the only program on the east coast that offered a holistic approach to nutrition, regional accreditation and an on-campus option. "I didn't feel that I would do well with an on-line program," she says. "I wanted to be in the classroom. I drove to Bridgeport one weekend a month for two and one-half years."

Pickard feels Bridgeport gave her a strong foundation in biochemistry and nutritional sciences. "The curriculum was not completely in-line with WAPF philosophy, but Price was discussed in several classes, and I was able to write my thesis on raw milk and child asthma and allergies." The biggest drawback was a lack of opportunity for hands-on clinical time." Supervised clinical time is now a priority for her as it is required for both her CNS credential and New York State license. Her desire to build a practice in line with WAPF principles led her to choose an internship with Kaayla T. Daniel, PhD, CCN, author of this article.

New York Chiropractic College offers Masters Degree in Applied Clinical Nutrition, which is open to other candidates besides chiropractors. The program focuses on nutrition and its application to disease prevention and management. Graduates are trained to practice in a wide range of clinical, consulting and industry settings. While a background in health care is not required in order to be accepted into the program, clinical experience may be necessary in order to be licensed. Students need to come to campus one weekend per month throughout the two-year program.

One college—Huntington College of Health Science—has been nationally accredited by DETC. It claims to be the first and only distance learning nutrition college to earn this accreditation. Huntington offers an Associate of Science degree in Applied Nutrition, a Bachelor of Health Science degree in Nutrition, a Master of Science degree in Nutrition, and many individual undergraduate and graduate courses. Founded in 1985 as the American Academy of Nutrition, it changed its name to Huntington in 2005.

For years, the Union Institute and University in Cincinnati was a respected choice for a regionally accredited, long-distance learning school offering a PhD. Although Union still exists, learners can no longer concentrate in Nutritional Sciences, Environmental Health Sciences, Exercise Physiology or similar fields. H. Ira Fritz, PhD, CNS, FACN, now emeritus professor at both Union and Wright State University in Dayton, was the "first core" mentor there for a number of superstars in the nutrition field including Lieberman, Wedman-St. Louis and Kathleen DesMaisons, a leader in the field of nutrition for addictions and author of Potatoes not Prozac. His reputation was so formidable that Robert Crayhon, MS, CNS, director of Crayhon Research and organizer of the BoulderFest conferences, nicknamed Union "The Fritz Institute." Kaayla Daniel, author of this article, received her PhD there under the guidance of Fritz. "He was well known at Union as a 'tough first core.' He required rigorous thinking and academic excellence. He was tolerant of alternative viewpoints but showed little tolerance for shoddy scholarship. Some Union learners sailed through easy programs, but not those of us who signed on with Ira."

What to do right now? "There really isn't a good choice," according to Fritz. He is not a fan of nationally accredited or non-accredited institutions. They are just not rigorous enough or credible enough. "Taking the route of least resistance may get you somewhere," he says carefully, then asks, "but is it really where you want to go? This obviously has to be answered on an individual basis, but as someone who looks at credentials, I don't recommend it."

Until a suitable, regionally accredited, long-distance PhD program becomes available, Fritz recommends completing a master's degree or PhD program at a traditional, regionally accredited school. For many alternative-minded people, the most viable option might be "biting the bullet" at a state college and earning, say, a Masters in Public Health or Health Education. These programs are widely available at state colleges, take about two years, and they cost considerably less than private colleges. Upon completion, graduates can then move on to become expert in alternative areas through any number of high quality certifying and credentialing groups.

AN UNUSUAL ADA-APPROVED OPTION

Bastyr University in Seattle is a regionally accredited school with rigorous programs at the bachelor's, master's and doctoral level in naturopathy, traditional oriental medicine, nutrition and other subjects. Those who think the programs will be easy because they are "alternative" will find themselves in for a lot of hard work, some of which will take place before they even begin. Depending on their previous science background, students are required to take some serious chemistry, biology and anatomy and physiology courses as prerequisites.

As part of its goal "to be in the forefront of developing the model for 21st century medicine," Bastyr recently introduced an ADA-approved dietetic program. Bastyr is the only school in the country with a whole-foods approach to nutrition that is approved by ADA for RD-track students. It offers a both a Bachelor and Master of Science Didactic Program in Dietetics as well as an approved dietetic internship. Although some students complain that the program is not sufficiently alternative, it can obviously go only so far and still be ADA approved. Bastyr does not offer online or long distance learning. Students will need to move to Seattle to enroll in this program.

MORE OPTIONS

The best route to practicing nutrition might be to not become a nutritionist at all. People leaning towards alternative medicine might be better off as a naturopath, oriental medical doctor, chiropractor or even MD. These licensed professionals can generally practice nutrition without fear, especially if it is within their "standard of practice," a term that refers to both the profession's definition of itself and pertinent licensing laws.

Naturopaths, for example, consider nutrition an integral part of their practice along with the many other modalities such as biofeedback, herbology or homeopathy. Although old-time naturopaths practiced freely without a license, sixteen states now require a license and more states will surely follow. Regionally accredited programs for obtaining an ND require science prerequisites typical of pre-med programs, take three to four years to complete and include some practicum. States that offer licensure may also require a post-graduate internship and a passing score on a professional board examination. Today three colleges offer regionally accredited naturopathy programs: Bastyr in Seattle, The National College of Natural Medicine in Portland and Southwest College of Naturopathic Medicine and Health Sciences in Phoenix. The National University of Health Sciences in Lombard, Illinois, is progressing towards regional accreditation.

Any Oriental Medical Doctor who is properly licensed can probably practice nutrition. OMDs focus on the restoration of health by promoting and regulating a harmonious balance of yin, yang and qi. Standard therapeutic methods include acupuncture-moxibustion, herbal medicine, nutrition, massage and other bodywork, and qigong.

For chiropractors, nutrition is not necessarily a part of their "standard

of practice." That might seem surprising given the frequency with which chiropractors practice nutrition as an adjunct to spinal adjustments, but the legality may depend on their degrees, credentials and state laws. Some might be able to practice applied kinesiology or muscle testing with no problems provided that they don't also sell supplements.

It's a rare MD who takes even one nutrition course while in medical school, but some go on to study the subject extensively and obtain genuine credentials in the field. Either way, the MD can dispense nutritional advice at will. "They can do what they want. They are Gods," says Wedman-St. Louis.

ALPHABET SOUP: CONFUSING CERTIFICATIONS

Hundreds of nutrition certification and accrediting programs and associations exist, running the gamut from well-known and respected to not worth a diddle. It's fine to be able to hang a handsome framed certificate in your office certifying that you are a Nutrition Specialist, Health Counselor, Integrative Health Pro, Certified Metabolic Typer Trainer or whatever, but what does it really mean? Will it help you get licensed, work with reputable laboratories, network with esteemed colleagues and attract clients? Will it serve as a fond reminder of an inspiring learning experience? Or will it just hang heavily on your wall as an expensively obtained piece of art?

Two very respected credentials are the Certified Nutrition Specialist (CNS) and the Certified Clinical Nutritionist (CCN). Both are backed by established organizations and can lead to licensing in some states. Both organizations count chiropractors, pharmacists, MDs, NDs, DCs and other health practitioners as well as qualified nutritionists in their ranks.

CERTIFIED NUTRITION SPECIALIST (CNS)

The Certification Board for Nutrition Specialists (CBNS) is the certifying arm of the American College of Nutrition (ACN). It allows nutritionists and other health professionals with master's and doctoral level degrees from regionally accredited institutions to earn the Certified Nutrition Specialist (CNS) credential. Candidates must pass a rigorous written examination covering the broad science of nutrition, including clinical and research applications. CNSs must then maintain their certification by earning extensive continuing nutrition education credits, generally through attendance at educational programs in nutrition, such as the annual scientific—clinical meetings of the American College of Nutrition. The ACN was formed fifty years ago to foster high quality nutrition education, provide a forum for information sharing and discussion, lobby for mandatory nutrition courses in medical schools, and advocate for nutrition-minded doctors and other health professionals. It publishes the peer reviewed *American Journal of Clinical Nutrition*.

The ACN honors nutritionists who are leaders in their field. Fellows of the American College of Nutrition are permitted to use the initials FACN. They hold doctoral degrees, expertise as practitioners or educators and a publication track record. Dr. Fritz is a FACN. So was Dr. Lieberman. Dr. Mary Enig has been honored as Master of the American College of Nutrition (MACN), a prestigious category for those who have made outstanding contributions over an extended period of time to the field of nutrition.

CERTIFIED CLINICAL NUTRITIONIST (CCN)

The Clinical Nutrition Certification Board (CNCB) is the certifying arm of the International and American Association of Clinical Nutritionists (IAACN). Certified Clinical Nutritionists (CCN) must meet numerous requirements, including completion of core science and nutrition credits at regionally accredited colleges, clinical experience or an approved internship, attendance at the Post Graduate Seminars in Clinical Nutrition Program put on by the CNCB and the passing of a rigorous examination. To keep the credential, CCNs must meet continuing education requirements, particularly attendance at annual conferences and be recertified every five years. Although the focus of the IAACN is on nutrition, very few nutritionists are included among its speakers, almost all of whom are male MDs, DCs and RPhs.

The IAACN is a professional association of clinical nutritionists founded in 1983. Its services include advocacy at both state and national levels. Initially a Florida State organization, its founders soon realized the need for national and international professional standards, and for regulation and protection beyond the state level. Today IAACN closely monitors legislation that impacts the field of nutrition and coordinates needed legislative action. It also publishes the peer reviewed *Journal of Applied Nutrition*.

INSTITUTE OF FUNCTIONAL MEDICINE

The Institute of Functional Medicine (IFM) was founded in 1991 by Jeffrey Bland, PhD and his wife Susan Bland, MA. The Institute trains physicians and other nutrition-oriented practitioners to identify and correct clinical imbalances underlying disease in order to help the body to then heal itself. IFM offers a symposium and courses eligible for credit. A six-day on site course, Applying Functional Medicine in Clinical Practice (AFMCP), which can cost over thirty-five hundred dollars, plus travel and hotel expenses, is the first requirement towards becoming an IMF certified practitioner. Six twoday onsite Advance Practice Modules costing up to seventeen hundred dollars each plus travel and expenses, follow. The topics are Restoring Gastrointestinal Equilibrium; Understanding Biotransformation and Recognizing Toxicity; Menopause, Andropause and Mood Disorders; Diabetes, Insulin Resistance and Vascular Dysfunction; Fatigue and Oxidative Stress; and Pain, Inflammation and Immune Dysfunction. Follow-up webinars with case studies follow each module. Candidates then must review, pass a challenging exam and present case studies to earn this credential.

. The Institute for Functional Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. Becoming a Certified Practitioner (CP) with the IFM is clearly a rigorous credential for anyone, and has attracted numerous CNSs, CCNs and other highly qualified candidates.

Membership is easy, becoming credentialed with IFM is time-consuming, difficult and extremely expensive. Not surprisingly, most who go all the way are physicians. Members, however, include many nutritionists who say they feel welcome, not only at conferences but all year through teleconferences and other educational opportunities.

THE COST

Indeed, expense is a major roadblock for many health practitioners interested in earning and maintaining credentials such as CNS, CCN and IFM's Certified Practitioner. What's more, not everyone wants to focus their nutrition practice upon laboratory assessments and supplement protocols. Pharmaceutical to nutraceutical, after all, represents continuation of a medical model. Some nutritionists actually want to focus on food!

Attendees at these professional conferences hear warnings against *trans* fats, sugar, artificial sweeteners and gluten, as well as against the overall category of processed, packaged and fast foods, but food always plays second fiddle to pills and products. Whatever food recommendations participants receive may be lowfat and plant-based. From a Weston A. Price Foundation point of view, such recommendations will almost certainly lead over the long term to deficiencies and imbalances that would require either supplements or dietary adjustment to correct. Yet WAPF principles are rarely mentioned at these conferences or in trainings. A lecture on depression, for example, would likely address diverse causes ranging from diet and drugs to stress, examine laboratory and other assessment options, and review the research on St. John's wort, SAMe, Vitamin D, folic acid, DHA and EPA, etc, but never mention cod liver oil.

NANP

The National Association of Nutrition Professionals (NANP), founded in 1985, is non-profit business league that is open to nutritionists, MDs, naturopaths, nurses, chiropractors and other health care practitioners, as well as independent consultants, marketing representatives, educators, authors, teachers, retail buyers, store owners, managers, chefs and others in the field of nutrition. Through its annual conference, trade publication *Nutrition Professionals Quarterly*, email updates and other means, NANP helps keep members apprised of state and national legislation, job opportunities, continuing education opportunities, upcoming events and news about holistic nutrition and whole foods.

Liz Lipski, PhD, CCN, and a special advisor to the NANP, is the Educational Director and the Director of Hawthorn University's Doctorate of Science in Holistic Nutrition Program. She supports NANP's acceptance of nutritionists with a wide variety of credentials, including degrees from non-accredited vocational schools such as Hawthorn, Clayton College of Natural Health, Bouman College of Nutrition and Culinary Arts, and others. Lipski received her PhD in clinical nutrition with a specialization in integrative medicine from the regionally accredited Union Institute. She has also served on the faculty and advisory board of IFM and spoken twice at IAACN conferences.

"The public has demanded holistically oriented nutrition professionals who have a recognized standard of care and scope of practice," says Lipski. "Yet many professional organizations exclude many qualified nutrition professionals, nutrition educators and chefs. NANP has come to fill this gap. It differs from others by focusing first on whole foods and lifestyle, and second on use of nutritional supplements, herbs and lab testing. As a coalition, we can effect more change for sustainable agriculture and organics, while having fun and continuing to learn."

In 2008 Lipski sat for NANP's certification exam, which she describes as "a comprehensive and fair test, not a slam dunk. I felt proud to have passed." Her goal is for the NANP credential to become respected and sought after worldwide. She also hopes it will become the title of choice among holistic practitioners. The NANP website explains why:

"Currently, holistically-trained nutrition professionals obtain their title from the school from which they received their nutrition education, including Certified Nutritionist (CN), Certified Nutrition Consultant (CNC), Certified Nutrition Educator (CNE), and Certified Nutritional Therapist (CNT). Not only has the myriad of nutritional titles fragmented the profession, but it has also discredited us by creating confusion among consumers and other health professionals. The credentialing board being created by the NANP aims to create one title/designation that is based on educational standards, a registration process, and passage of a national board exam, thereby aligning the credentialing of holistically trained nutrition professionals with the manner in which other types of health professionals are credentialed."

"As the NANP builds a strong presence, it will encompass RDs, CCNs, CNSs and many others, and will become extremely influential," says Karen Lyke, MS, CCN, DANLA. "A strong corps of holistic nutritionists will provide the twenty-first century's standard for real healing, health based on science and rigorous understanding of the natural forces from which all life stems."

CERTIFIED NUTRITIONIST (CN)

The Certified Nutritionist (CN) credential is a registered trademark of the American Health Sciences University, a distance learning school founded in 1980 and based in Oak Harbor, Washington. AHSU was nationally accredited by DETC, but one was shut down and is now reopened. Its MS program in nutrition is no longer available, but students can still enter a CN certification program. This involves taking six courses, passing an examination and completing what is called an "externship," an internship of one hundred fifty hours. The required "textbook" for each course is a single popular book, for examples, the useful-but-limited book *Breaking the Vicious Cycle* by Elaine Gottschall for the course "Intestinal Health through Diet," and the inaccurate book *Fats that Heal Fats that Kill* by Udo Erasmus for the course "The Importance of Fats and Oils in the Diet."

Despite these limitations, many holistic nutritionists have gotten their start with a CN credential from AHSU.

Jen Allbritton, CN, earned a BS in Kinesiology (the study of human movement) with an emphasis on nutrition, at the College of William and Mary in Williamsburg, Virginia. She later decided to earn her Certified Nutritionist credential from American Health Sciences University, a school that was then accredited through DETC.

Allbritton began her career as a nutrition coordinator for a popular health food chain in Colorado. She oversaw nutrition education, presented lectures to the community and wrote article for the company's monthly publication and the *Denver Daily News*. Once she became familiar with the Weston A. Price Foundation, she began to incorporate its principles into her work. "For the most part, the company I worked for followed the lowfat mantra. I was able to direct educational pieces towards traditional foods and highlight the benefits of saturated fats and fat-soluble vitamins." In 2005, after Allbritton and her husband adopted their second child, she left her job and volunteered to write the column "Growing Wise Kids" for *Wise Traditions*. "Having been a member of WAPF for years, I noticed the need for more information about incorporating traditional foods into family life. It has been a fun column to write, as it reflects where I am in life. Feeding my family nourishing traditional foods is a passion."

CERTIFIED NUTRITIONAL COUNSELOR (CNC)

The Certified Nutritional Counselor (CNC) is trademarked credential issued by the American Association of Nutritional Consultants (AANC). Those who earn this credential take a series of eleven open-book tests. To quality, candidates must have one year of previous education and/or experience in nutrition or another health-related field, pay a fee and successfully complete the certification exams. Test questions come from just eleven books. For "Children's Health" it's *Kid Smart* by Cheryl Townsley; for "Medical Chemistry," it's *Guide to Body Chemistry and Nutrition* by Bernard Jensen and for "Diet and Nutrition," it's the book *Diet and Nutrition: A Holistic Approach* by vegetarian Rudolph Ballentine.

The CNC credential has been labeled "bogus" by Quackwatch. Rather than call CNCs quacks, which would need to be determined on a case by case basis, it would be more accurate to alert consumers to the fact that CNCs *may* have marginal qualifications. Many well-known authors and practitioners display the CNC credential. These include Phyllis A. Balch CNC, co-author of the bestselling *Prescription for Nutritional Healing*, a reference guide that matches herbs and supplements to specific ailments and is frequently on display in the supplement sections of health food stores.

Another CNC is Jordan Rubin, NMD, PhD, CNC, author of the bestselling *The Maker's Diet* and other books, and an honorary board member of the Weston A. Price Foundation. In that Rubin's NMD (Natural Medical Doctor) and PhD also come from non-accredited colleges, he has often been attacked as having dubious credentials and limited credibility. As a popular writer, however, he has been a force for good, bringing news about Weston A. Price principles to thousands of people who wouldn't have otherwise heard about them. His Garden of Life supplement line offers some of the better products available in health food stores.

OTHER CREDENTIALS

There are literally thousands of credentials that can be earned or bought, far more than we can possibly investigate. Three that may be of interest to Weston A. Price Foundation members are the Certified Healing Foods Specialist (CHFS), the Nutritional Therapist Training (NTT) program of the Nutritional Therapy Association and the Health Counselor (HC) program of the Institute of Integrative Nutrition.

WAPF member Paul Yeager, author of *Immune: How I Beat AIDS in My Kitchen*, completed the CHFS program and declared it "awesome. . . There was a great reading list focusing on

Weston A. Price, Francis Pottenger, Elson Haas and Ann Wigmore and we got together for four days of teaching, discussion and hands-on demonstrations. We also had three conference calls prior to the meeting." Yeager is a gifted violinist who is deeply committed to holistic healing but currently working in website design and management. He regards himself as a "health educator," does not interface with clients and feels no need to enter any accredited degree program.

The NTT program is sponsored by the Nutritional Therapy Association, a membership group that has sponsored conferences featuring speakers such as Sally Fallon Morell, Natasha Campbell-McBride, Ann Louise Gittleman and others. The NTT credential can be completed either onsite over an eight-month period or online over a nine-month period. The program focuses on the work of Drs Price and Pottenger in a curriculum that also includes basic chemistry, anatomy and physiology, food science and nutrition. There is a reading list of fifteen required books, thirty-seven recommended books and six other "good resources." In addition, they have compiled a list of sixteen cookbooks, some of which are not cookbooks at all but vegan raw food guides. The book list includes works that have been given thumbs up, thumbs down and mixed reviews in Wise Traditions.

The instructor spent thirty minutes explaining the extraordinary properties of the yolk, then just two minutes on the white. He then told us how each morning he throws out the yolk and eats only the white!

The Institute of Integrative Nutrition program in New York City serves a buffet of nutritional ideologies. "We are the only nutrition school integrating all the different dietary theories-combining the knowledge of traditional philosophies with modern concepts like the USDA pyramid, the glycemic index, The Zone, the South Beach Diet and raw foods. We teach more than one hundred different dietary theories and address the fundamental concepts, issues and ethics of eating in a modern world." One week students might hear Sally Fallon Morell, another week it could be vegans Neal Barnard MD, Founder of the Physicians Committee for Responsible Medicine, or Michael Jacobsen, Executive Director of the Center for Science in the Public Interest. Best selling authors Barry Sears, PhD, Arthur Agatston, MD, Andrew Weil, MD, and Deepak Chopra, MD, have been at the IIN podium. Over a six-month period, students at IIN will study nutrition, counseling, business, eating habits, lifestyle choices and other topics that will lead to certification as a Health Counselor (HC).

OTHER APPROACHES

A few years back, WAPF member Daniel Corrigan of Huntington Woods, Michigan, began taking biology and chemistry classes with plans to enter an RD program. He soon came to the realization that an ADA-approved degree did not make sense for him. His moment of truth came with the discussion of the egg in a biology class. "The instructor spent thirty minutes explaining the extraordinary properties of the yolk, then just two minutes on the white. He then told us how each morning he throws out the yolk and eats only the white! Almost everyone in the class agreed that this was a good policy! This told me the extent to which media propaganda would always outweigh the facts." Corrigan decided to meet his longterm goal of making a difference for families with autism by using his computer skills. He is now building websites, including his own corriganics.com, designed to help parents prepare proper foods and heal the guts of their children. His interest stems from a godson diagnosed with autism, whose condition was completely reversed through WAPF-style dietary intervention.

Many people call WAPF president Sally Fallon Morell a nutritionist but she dismisses that claim straightaway. "I have no credentials whatsoever, "she laughs. "I cannot practice anywhere." Fallon Morell, who has an Master of Arts degree in English from UCLA, solved the problem brilliantly when she teamed up with Mary G. Enig, PhD, FACN, as coauthor of her book Nourishing Traditions, as well as dozens of articles on fats, oils and other topics written for the Wise Traditions and other journals. She originally hired Enig as an expert reader. "Mary bluntly said I'd come to the right conclusions but didn't have the science! She then pulled out charts and studies and patiently explained the chemistry of fats and oils. She spent so much time educating me that I couldn't afford to keep paying her. My solution was to make her a coauthor." The partnership benefited both enormously. Fallon Morell became a highly credible though controversial author. Dr. Enig saw her pioneering work reach a wider public.

Fallon Morell thinks some prospective nutritionists would be better suited in careers as personal chefs, cooking consultants or even lifestyle coaches. Such professions are completely unregulated. "Help people declutter their cupboards of junk food and restock with nutrient-dense foods," she says. "Teach them to cook proper meals. Or cook the meals for them. There are strict laws about opening catering businesses or restaurants, but no laws against working in other people's kitchens, no matter what the level of sanitation. There are plenty of well-to-do families that desperately need this kind of help and are prepared to pay well."

Clearly, there are many true paths to becoming a nutritionist. H. Ira Fritz, PhD, CNS, FACN, is a big believer in regionally accredited degrees and solid credentials, "The best and brightest don't need school, but they do need credentials." That said, he knows that education is ultimately less important than what's made of it. It's those triple-threat people with "integrity, intelligence and imagination" who will move the profession forward.

How to choose? "Follow your heart," says Liz Lipski, PhD, CCN, "but use your head to choose a program that will help you follow that dream."

Kaayla T. Daniel, PhD, CCN, is known as The Naughty NutritionistTM because of her ability to outrageously and humorously debunk nutritional myths. She will speak at the November 2009 Wise Traditions conference on "Sacred Foods for Fertility, The Healing Power of Broth" and "The Surprising Toxins in Plant Foods." In 2010 Dr. Daniel will take her three-day workshop on healing infertility nationwide. Dr. Daniel is available for nutritional consultations and can be reached at kaayla@drkaayladaniel.com or 505-266-3252. Dr. Daniel is deeply grateful to Martha Pickard MS for research assistance with this article. How to choose? "Follow your heart," says Liz Lipski, PhD, CCN, "but use your head to choose a program that will help you follow that dream.

ANNOUNCING! WAPF-ORIENTED COURSES FROM HAWTHORN UNIVERSITY!

Dr. Weston A. Price's last words were "You teach, you teach, you teach." In response to requests from hundreds of our members, the Weston A. Price Foundation will launch a series of five courses at Hawthorn University this fall. These courses will be:

Introduction to the Principles of Healthy Traditional Diets Traditional Nutrition for Fertility, Pregnancy and Early Childhood Myths and Truths about Vegetarian Diets Fats, Oils, Cholesterol and Fat-Soluble Vitamins Dirty Little Secrets of the Food Processing Industry

Completion of the set of five courses will lead to a certificate from the Weston A. Price Foundation. The introductory course will also be able to be included as an elective in the master's degree or doctoral programs at Hawthorn.

We chose Hawthorn University because it offers distance learning programs that are open-minded and non ideological, with a strong respect for traditional diets, for whole, organic and grassfed foods and for sustainable agriculture. Hawthorn graduates often join the National Association of Nutrition Professionals (NANP) and pursue careers in holistic health or related fields.

Course materials, including books, audio lectures on CDs, journal articles, websites, teleclass meetings, and hands-on and community-based assignments, will be all approved by the Weston A. Price Foundation, as will all course instructors. We think these courses will be a terrific opportunity for members who would like to study the principles of traditional diets along with the scientific research that backs them up in a guided and focused independent learning context. However, we urge prospective students to carefully consider how this program would fit in with their life plans and career goals. Hawthorn is not accredited, and its programs are not guaranteed to lead to state licensing Accordingly, it may not be the best choice for everyone. We ultimately hope to also offer these or similar courses at regionally accredited institutions.

Update on Codex Alimentarius What It Is; How It Works

By James Turner, Esq.

ignificant controversy and a lot of questions surround "Codex," the shorthand name for both "Codex Alimentarius" and "The Codex Alimentarius Commission." This commentary provides information to help clarify the meaning and significance of Codex and provide an update on the current situation.

The Codex Alimentarius (Latin for "food code," or "food book") is a collection of internationally recognized standards, codes of practice, guidelines and other recommendations relating to foods, food production and food safety. Its texts are developed and maintained by the Codex Alimentarius Commission. The Codex Alimentarius is recognized by the World Trade Organization as an international reference point for the resolution of disputes concerning food safety and consumer protection.

The Codex Alimentarius Commission, based in Rome, Italy, was created in 1963 by the Food and Agriculture Organization (FAO) and the World Health Organization (WHO) to develop the food standards, guidelines and related texts such as codes of practice under the Joint FAO/WHO Food Standards Program that make up the Codex Alimentarius. According to the Commission, its purposes are protecting the health of consumers, ensuring fair trade practices in the food trade, and promoting coordination of all food standards work undertaken by international governmental and non-governmental organizations. The U.S. Codex Office in the Food Safety and Inspection Service of the United States Department of Agriculture houses and provides staff support for the United States representatives to the Codex commission. The U.S. Codex Office staff also works closely with the U.S. delegates to various Codex Commission committees, as well as government agencies, members of Congress, non-governmental agencies and members of the public. The US Codex Office can be contacted at uscodex@fsis.usda.gov.

In its publication, "Understanding The Codex Alimentarius" the Commission lists over 4000 standards, guidelines and practice codes that it has promulgated in ten subject matter areas including: commodity standards; commodityrelated guidelines and codes of practice; general standards and guidelines on food labeling; general codes and guidelines on food hygiene; guidelines on food safety risk assessment; standards, codes and guidelines on contaminants in foods; standards, guidelines and other recommendations on sampling, analysis, inspection and certification procedures; maximum limits for pesticide residues; food additives provisions; and maximum limits for veterinary drugs in foods (ftp://ftp.fao.org/codex/Publications/understanding/Understanding EN.pdf),

Each one of the areas addressed by Codex involves controversies but one, the Guidelines for Vitamin and Mineral Food Supplements, adopted in 2005, has been especially controversial.

VITAMIN AND MINERAL SUPPLEMENTS

In 1996, the German Codex delegation put forward a proposal that no herb, vitamin or mineral should be sold for preventive or therapeutic reasons, and that supplements should be reclassified as drugs. This proposal set off massive global outrage among supplement producers and consumers whose protests halted its implementation. The intention behind the German proposal continues to color the global supplement debate today. Through its prism, each guideline looks like another effort to restrict consumer access to supplements.

Between 1996 and 2005, Codex committees worked to develop what became the official Codex Guidelines for Vitamin and Mineral Food Supplements, adopted in Rome on July 4, 2005. These Guidelines have also been the subject of considerable controversy. The Guidelines do not ban any supplements, but subject them to labeling and packaging requirements, set criteria for establishing maximum and minimum dosage levels, and require that safety and efficacy be considered when determining ingredient sources. They also assert that consumers can get the nutrients they need from food. Each of these aspects of the Guidelines alarms and angers significant numbers of supplement users.

Organized supplement producer groups generally support the Guidelines. FAO and WHO state that the Guidelines are "to stop consumers overdosing on vitamin and mineral food supplements." The Codex Alimentarius Commission (CAC) has said that the Guidelines call "for labeling that contains information on maximum consumption levels of vitamin and mineral food supplements." The WHO has also said that the Guidelines "ensure that consumers receive beneficial health effects from vitamins and minerals" In the context created by the 1996 German proposal, however, these official sentiments sound to many supplement consumers like efforts to restrict their use of food supplements.

The International Alliance of Dietary/Food Supplement Associations (IADSA), originally created in 1997, just after the German proposal to severely restrict dietary supplements, brought together the food supplement sector in Codex Alimentarius discussions. Its member associations include the manufacturers of the vast majority of supplements worldwide. The Alliance supported the 2005 Guidelines, under discussion by Codex committee members for more than ten years, because they reversed a number of the requirements of the original German proposal. Specifically, the 2005 guidelines eliminated herbs from the definition of food supplements, recognized vitamin and mineral supplements as a food rther than a drug category, and eliminated restricting vitamins and minerals in supplement products to the low amounts contained in the Recommended Dietary Allowances. IADSA also expected the guidelines to expand global markets for supplement makers.

Consumers and some producers, however, feared that the Guidelines would eliminate im-

The Guidelines do not ban any supplements, but subject them to labeling and packaging requirements, set criteria for establishing maximum and minimum dosage levels, and require that safety and efficacy be considered when determining ingredient sources.

portant supplement products and smaller producers. The debate presents a clash between the principle of biochemical individuality—each individual has a unique nutrient intake need versus the notion of a standard that works for most individuals. The first concept, biochemical individuality, leads to a highly diverse supplement market. The second, dietary standards that fit most individuals, leads to a narrower market that producers believe will reach more consumers by making more sales.

While Codex worked on its supplement Guidelines, the European Union adopted and advanced a directive on dietary supplements. This directive, set to become final on January 1, 2010, seemed to reflect the thinking of the earlier German proposal, further upsetting supplement consumer groups. The fact that some officials simultaneously occupied key positions in Germany, in the EU, and in the Codex bureaucracy further inflamed the situation. Opponents of the Codex supplement Guidelines noted similarities between the EU's Food Supplements Directive and the Codex Alimentarius Guidelines for Vitamin and Mineral Supplements and the original German proposal, creating even greater concerns about future access to supplements.

DSHEA

In this context many dietary supplement supporters, both consumers and producers, feel that only the U.S. Dietary Supplement Health and Education Act (DSHEA) stands between consumers and the effort of regulatory authorities to take supplements they want and need away from them. DSHEA, enacted in the U.S. in October 1994, acknowledged that millions of consumers believe dietary supplements may help to augment daily diets and provide health benefits. Congress's intent in enacting DSHEA was to meet the concerns of consumers and manufacturers and to help ensure that safe and appropriately labeled products remain available to those who want to use them. Congress stated that there may be a positive relationship between sound dietary practice and good health, and that, although further scientific research is needed, there may be a connection between dietary supplement use, reduced health care expenses, and disease prevention.

The provisions of DSHEA define dietary supplements and dietary ingredients; establish a new framework for assuring safety; outline guidelines for literature displayed where supplements are sold; provide for use of claims and nutritional support statements; require ingredient and nutrition labeling; and grant FDA the authority to establish good manufacturing practice (GMP) regulations. The law also requires formation of an executive-level Commission on Dietary Supplement Labels and an Office of Dietary Supplements within the National Institutes of Health.

Thus, DSHEA amounted to positive recognition of dietary supplement consumers and producers and provided the primary protection against the loss of access to these products by consumers.

No formal rules of the World Triad Organization or guidelines of Codex or any combination can force the United States to change the provisions of DSHEA. Only formal legal action within the united Stated can change DSHEA for American consumers and producers.

THE REGULATORY TRIANGLE: AMERICAN, EUROPEAN AND INTERNATIONAL LAW.

The United States Dietary Supplement Health and Education Act of 1994 (DSHEA), the Directive 2002/46/EC of the European Parliament and Council of 10 June 2002 relating to food supplements, and the Codex Guidelines for Vitamin and Mineral Food Supplements create a regulatory triangle that must be sorted out to understand the national and international dietary supplement controversy. The same frame work applies to all issues created by or contained within any guidelines, standards or codes of practice created by Codex.

The relationship between Codex and DSHEA is tangential. The same is true of the European Union (EU) Supplement Directive, the third part of the international supplement regulatory triad affecting American food consumers. The EU Directive is tangential to both DSHEA and Codex. Together these laws, regulations and guidelines create a complex matrix navigable by well-heeled corporations and trade associations that see markets as the essential form for control-

No formal rules of the World Triad Organization or guidelines of Codex or any combination can force the United States to change the provisions of DSHFA. ling modern civilized behavior. The matrix is virtually impenetrable by underfunded individuals, citizens groups, and anyone else who puts health and well-being ahead of market efficiency and money. Here is how it works:

Each nation has its own food rules-laws, regulations and accepted practices. The US has DSHEA. In order to promote international trade, Codex tries to get national acceptance by its more than one hundred seventy country members of common guidelines for international trade purposes. These rules are totally voluntary but are accepted as one way to satisfy the treaty-created World Trade Organization requirement, which stipulates that no WTO member country can use its food rules to intentionally exclude the food products of another country. Codex could have adopted the more open provisions of DSHEA as its international guidelines for supplements but did not. Instead, it adopted a significantly more restrictive set of principles.

The EU also adopts food regulations—the Dietary Supplement Directive, for example, final provisions of which will become effective in the EU on January 1, 2010—and urges countries to conform their products to these provisions. The Directive is significantly more restrictive than the Codex Guidelines. Countries tend to resist pressure from each other, including pressure from the EU. Failing to pressure countries into following its Directive, the EU then goes to the voluntary Codex organization and uses that system to get voluntary acceptance of EU provisions for regulation of supplements.

Codex adopts guidelines and asks its member countries to replace their food rules with them. The initial German supplement proposal sought heavy, European-style restrictions on supplements. The 2005 Codex Guidelines appear to be as far as the EU initiatives could go in the face of solid global opposition, including oppossition from both the manufacturers and consumers of supplements worldwide. The EU now seems to be using its Directive to gain more supplement restrictions than the Codex Guidelines gave it. Some of its provisions appear to be an interference with international trade rules but it is unlikely that supplement manufacturers will, and consumers lack the resources to challenge it

The U.S. and other countries use the same stratagem for their special interests. For example, when high fructose corn syrup—now linked by some to the U.S. obesity and other epidemics, particularly in children—was first proposed as a food additive, FDA was reluctant to approve it. (Sugar and artificial sweetener interests opposed it.) The corn growers went to Codex and got a "purely voluntary" Codex standard that permitted its use.

Corn industry lobbyists then came back to the FDA, effectively saying, "Codex Alimentarius, the international voice of food standards, has adopted high fructose corn syrup, so it must be good; and besides, your policy is or should be to harmonize your laws with the international preferences," that is, adopt Codex guidelines in place of your own food rules. FDA acquiesced. High fructose corn syrup became ubiquitous. Americans, especially children, got less healthy.

Forces seeking to level the playing field for dietary supplements in international trade are attempting the same strategy. In response, the forces seeking the broadest degree of supplement product diversity—products designed to respond to the biochemical individuality of all persons—have thus far persuaded Congress to prohibit FDA from harmonizing its supplement rules with Codex. The struggle over undermining or strengthening that prohibition goes on today. The battle lines are drawn around several issues.

SPECIFIC CONFLICTS

Europeans say individuals can get all the nutrients they need from food. They say only certain supplements, those proven safe and effective, can be sold (a positive list). They also say certain other substances cannot be sold (a negative list). The U.S. has no positive list. It does not assert that all necessary nutrients are in food. Nutrients are presumed safe unless FDA proves them harmful. Congress set these policies through DSHEA. FDA, however, disagrees with DSHEA and continues to try in every way to undermine it.

FDA is the food safety consultant to the U.S. representative to Codex on matters of food, including supplements, safety and quality. It joins with the EU—which has twenty-seven Codex country votes—to attempt to move the whole world toward the EU position, namely that you can get all the nutrients you need from food; that supplements must have upper limits because they are dangerous in high doses; and that risk assessment used on inherently dangerous chemicals like drugs and food additives should be used on vitamins and minerals. Codex has adopted such a voluntary proposal with support from the international dietary supplement industry, led by the large companies in the American supplement industry.

Smaller companies in the global supplement industry, many of whom are already suffering from the effects of the Codex rule, are creating different products for U.S. and European markets. They are marginalized in the global debate by their lack of money for lobbying. Now Codex is putting heavy pressure and large resources into getting nations to adopt the Codex supplement Guidelines worldwide. The U.S. will not adopt the Codex Guidelines if DSHEA and the anti-harmonization legislation remain in place. As a result, various "Save DSHEA" and anti-harmonization campaigns have gotten underway. The entire issue is complicated by the fact that many large dietary supplement manufacturers—particularly those that are subsidiaries of pharmaceutical companies—support adopting the Codex supplement standard worldwide. Adopting that standard would create a unified international market for their supplement products, which would not necessarily be an optimal situation for human health but which would make a great deal of business sense for manufacturers.

In fairness, it must be said that the Codex standard being pushed by the large dietary supplement manufacturers is significantly better than that proposed by the Codex staff at the beginning of the process. Still, that standard is loudly opposed by vocal elements of the health freedom community who, while arguing animatedly among themselves, unanimously support the importance of biochemical individuality and letting individuals pursue what they consider to be optimum nutrient intakes for themselves.

DIVERSE VIEWS

Much of what makes interested consumers uneasy results from this three-way fight between the large supplement manufacturers and the factions of the health freedom community who are abetted by most small manufacturers and retailers. Here are some examples of the various positions in the supplement debate.

The International Alliance of Dietary/Food Supplement Associations (IADSA) supports the 2005 Codex Guidelines. According to IADSA representatives, "You can't underestimate the impact of these guidelines. They create a global category of vitamin and mineral supplements—in many countries there is no such category in place." In IADSA's view, Codex Guidelines, although not binding, tend to influence less liberal markets and those without a regulatory framework in place, particularly common in supplements. In 2005, more than sixty countries worldwide, including China, India, Taiwan and Mexico, more than 50 percent of the global population, were considering adoption of new or amended regulations for vitamin and mineral supplements.

The National Health Federation (NHF) opposes the 2005 Codex Guidlines. NHF is a Codex-recognized consumer organization with the right to attend and speak out at Codex meetings. According to NHF, "Codex guidelines and standards will inevitably supersede domestic laws, including the Dietary Supplement Health and Education Act of 1994."

Commenting on Codex, the National Health Federation "opposes the current Codex member states who wrongly believe that consumer health will be enhanced by: (1) denying that dietary supplements can benefit normal, healthy people; (2) incorrectly defining dietary supplements as only those vitamins and minerals that the body cannot manufacture itself; (3) restricting the upper limit amounts of vitamins and minerals, particularly by referring to currently crude and archaic medical beliefs about nutrients; (4) restricting any physiological benefit information for consumers; (5) restricting the lower limit amounts of vitamins and minerals that may be consumed by individuals; and (6) creating "positive" and "negative" lists of dietary supplements" (http://www.thenhf.com/codex_overview.htm).

The National Health Federation "supports a Codex process that will free up health knowledge and products for the entire world. A free-market system of choice and knowledge would avoid the errors of central planning that sets standards, however well intentioned, into stone. With the doubling time of knowledge constantly accelerating, mankind cannot afford the "luxury" of getting stuck in health standards established in the 20th Century while new health knowledge and products are discovered almost daily. We also wish that such discoveries continue. The best way to ensure such progress and advancing health is to keep the planners and bureaucrats from straitjacketing dietary supplements with medievalist thinking and restrictions."

The Alliance for Natural Health (ANH), based in the U.K., also opposes Codex, noting, "There are strong links between the interests of Codex and those of the World Trade Organization (WTO), which can impose heavy fines and sanctions against non-compliant countries. Genuine concern for consumer health and welfare comes second to serving the interests of multinational food and drug companies. Codex poses a direct threat to our freedom to access natural foods, herbs and dietary supplements and to take personal responsibility for our own health and welfare."

ANH manages a food/dietary supplement campaign focused on reversing Codex policy on food/dietary supplements that set very low maximum daily doses for supplements as foods; uses flawed risk assessment methods; forces therapeutic nutrients into drug category; and sets requirements for clinical trials to substantiate health claims that would be too expensive for small companies. The bottom line is that the Codex approach provides a passport system for big corporations and acts as an obstacle to freedom of speech for smaller ones. The ANH campaign also opposes setting of unnecessarily low Nutrient Reference Values, which seriously understate requirements for long-term optimum health for given subpopulations, age groups and genders.

Another group, the Natural Solutions Foundation (NSF), which has applied for Codex NGO status, opposes Codex, warning, "More and more people are turning to natural health products globally. The 'wellness' trend is a major trend in today's society. The more natural health products people use, the fewer drugs they buy. The pharmaceutical industry, which is part of the 'Sickness Industry', fears the inevitable shift toward natural health care. Instead of accepting the will of the people and rethinking the future of the pharmaceutical industry, the industry has decided upon an unethical course of action: the use of deception and deceit to eliminate natural health products completely. Codex Alimentarius is a shrewd vehicle for protecting the pharmaceutical industry from the loss of income it stands to suffer due to the inevitable growth of natural healthcare" (http://www.healthfreedomusa. org/?page id=157).

NSF argues that DSHEA protects America from Codex Alimentarius., noting that "The Dietary Supplement Health and Education Act (DSHEA, 1994), an American law classifying our supplements and herbs as foods (which can have no upper limit set on their use), was passed by unanimous Congressional consent following massive grass-roots support organized by health food stores. Millions of American activists told Congress, in no uncertain terms."

Many other groups take stands that are variations of these positions.

2009 AMENDMENTS TO THE CODEX SUPPLEMENT GUIDELINES

In 2009, Codex adopted amendments to the supplement guidelines that included Recommendations on the Scientific Substantiation of Health Claims; Nutritional Risk Analysis Principles; Provisions on Gum Arabic; the definition and table of conditions of dietary fiber; and the use of eight food colors in food supplements. These amendments were also met with controversy, generally reflecting the positions of the various groups on the underlying supplement Guidelines. Some consumer advocates questioned the idea of adding food colors to supplements, the standard adopted for substantiation of health claims, and the use of risk analysis approaches originally designed for evaluating toxic substances rather than the biochemistry analysis they say is more appropriate for nutrients.

IADSA said of the 2009 amendment that the new Nutritional Risk Analysis Principles

provide "a solid framework for the potential future application of the risk assessment method by Codex for the use of vitamins, minerals and other substances in food supplements." IADSA, along with the major supplements companies, welcomed the risk analysis amendments as being in line with its own recommendations. The Natural Solutions Foundation condemned the risk analysis approach. This debate will continue in the various forums attempting to regulate dietary supplements.

Codex is a forum in which large debates about pubic food policy, which are dominated by powerful economic interests and governments, are conducted. Consumer, citizen, and small business groups are essentially blocked from serious influence on these debates within Codex. However, the excluded groups have demonstrated the ability to influence international food policy by their actions at the grass roots and community organizing level. It is here that the concerned citizens who lack the power of institutions and money can make a significant difference. Consumers can get a safer, more reasonably priced, healthy food supply if they demand it.

James S. Turner Esq., original Nader's Raider, partner for thirty-five years in the Washington D.C. Law firm of Swankin and Turner, wrote the Chemical Feast, the Nader Report on Food Protection at the Food and Drug Administration which Time Magazine said ". . . may well be the most devastating critique of a U.S. Government Agency every issued." He is Board Chair of Citizens for Health and served as Special Counsel to the U.S. Senate Select Committee on Nutrition and Human Needs and the Government Operations Subcommittee on Government Research. He graduated from the Ohio State University College of Arts and Sciences in 1962 and OSU's Moritz College of Law in 1969. Born in Columbus and raised in Cleveland Ohio he now lives in Washington DC with his partner Betsy E. Lehrfeld.

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Farm and Ranch

THE SCANDAL OF SEWAGE SLUDGE Jim Bynum, Vice President, Help for Sewage Victims

The House recently passed a new food safety bill (HR 2749) giving the Food and Drug Administration (FDA) new power and more money. According to recently discovered documents, such legislation will do nothing to protect our food. Since 1980, it has been the official national policy to dispose of sewage waste on grazing land, fruits and vegetables, parks school grounds and home lawns. The policy was signed by EPA, FDA and USDA based on the premise that EPA had a mandate from Congress under Public Law 92-500 (Clean Water Act) to prevent the release of sewage effluents (water and sludge) into surface water. At that time there were more that three thousand municipal sewage treatment land application sites in operation. However, most states balked at using land treatment systems without additional secondary treatment and EPA refused to fund those treatment systems.

SEWAGE TREATMENT PLANTS MASS PRODUCE BAD BACTERIA

Shortly after the national policy was created in 1980, EPA studies documented the creation of antibiotic-resistant bacteria in sewage treatment plants. According to EPA, in 1982 "present-day conventional waste water treatment. . . poisons the rivers and streams." Not only that, but drinking water treatment plants were picking up the antibiotic-resistant bacteria and adding chlorine-resistance to their armor. Furthermore, Milwaukee's Milorganite and Chicago Metropolitan Sewage District's sludge as well as 50 percent of the other municipalities could not meet the national policy requirement.

ECOSYSTEM HARM

Studies show that the public health and ecosystems are harmed by toxic sludge. Documents show that when sludge is used for fertilizer:

plants. 1. The chemical buildup in animals may affect

the first and second generation, as well as those who eat certain animal parts.

- 2. Bacteria are viable for more than seventy weeks on grazing land.
- Composting causes bacterial desiccation (dry up) but this only lasts until proper moisture is available.
- 4. There are even problems with land filling sludge.

Accoring to EPA, "Environmental and public health risks [of sewage sludge used for fertilizer] include leachate contamination of water and soil resources, destruction of native fauna and flora, obnoxious odors, aerosol and dust generation, pathogen transmission, and other related nuisances... The risk of transmitting disease is of major concern for the various sludge disposal practices. The direct pathways for disease transmission from sludge land filling operations include aerosols, vector transport, direct contact, groundwater and surface runoff."

The solution to costly sewage cleanup has been to use the exclusions in the environmental laws that allow municipalities to dispose of sewage effluents and sludge where it wasn't regulated: "A key advantage of land application is that it usually takes place on privately owned land. Thus, the municipalities can avoid the high cost of acquiring land for disposal sites, or constructing expensive sludge processing facilities." Bacteria survival in sludge and the associated animal infections were never a consideration in these studies.

THE SALMONELLA-SLUDGE LINK

Switzerland documented the first a positive association of Salmonella in sludge and a cycle of infection existing from man-sludge-animalsman almost forty years ago. The shigella gene was transferred into *E. coli* to create the O157: H7 variant about thirty-five years ago and the

Wise Traditions

Shortly after

the national

policy was

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1980, EPA

documented

the creation

of antibiotic-

studies

resistant

sewage

bacteria in

treatment

first documented infection was a naval officer in Oakland, California in 1975.

Farmers know that the colibacillus (*E. coli*) may cause the scours (diarrhea) or death in young calves as well as mastitis in older cows. It does the same to humans. What the farmer doesn't realize is that the fecal coliform test used to prove that sludge and biosolids are safe only reveals a few *E. coli* that have inhibited growth at the test's high temperature. All other enteric bacteria (coliform) growth is suppressed at the high temperature. At normal temperatures, *E. coli* will triple every hour, multiplying into millions in just a few hours.

Sludge or biosolids is basically a biofilm created by bacteria encapsulating bacteria, viruses, and organic materials. Antibiotic-resistant biofilms will also grow in your body, on your teeth (called plaque) and in water pipes, as well as on your fruits and vegetables. In the body, biofilms cause chronic inflammation, heart attacks, strokes, lung disease and other illnesses.

SLUDGE FUNDS

With the above documented facts in mind, Congress has funded millions of dollars of fluff studies and public relations programs to convince farmers and the public that sewage effluents and products such as sludge and biosolids are safe for use on grazing land, food crops, parks, school grounds, home lawns and gardens. Farms have been destroyed, cattle have been killed, people have suffered serious irreversible illnesses and many have died needlessly.

SPREADING THE SLUDGE

In the 1970s Congress enacted cradle-to-the-grave legislation for control of hazardous chemicals and waste. What we got is cradle to agricultural and home lawns as Congress neglects its responsibilities. According to a letter from the Congressional Committee on Oversight and Government Reform to EPA on the endocrine disruptor screening program. "Over the past ten years, EPA has not completed a single step of this multi-stage process. . . assuming that EPA identified the same number of chemicals [73] for testing each year, testing for the pesticide chemicals alone would not be completed for roughly thirty years, and testing for other chemicals listed under the TSCA Inventory [75,000] could take hundreds of years."

This pace is unacceptably slow and fails to protect the American public from thousands of dangerous chemicals that may interfere with vital biological processes.

WHAT'S WRONG WITH THE FOOD SAFETY BILLS

The draconian H.R. 2749 House version of the food safety bill has already passed the house; below are talking points on S. 510, the Senate version. While not quite as bad as H.R. 2749, S. 510 would be a disaster for small farmers and artisan food producers.

- S.510 calls for federal regulation of how farmers grow and harvest product. Farmers selling food directly to local markets are inherently transparent and accountable to their customers, and there is no reason to impose these regulations on them. Based on FDA's track record, it is likely that such rules will also discriminate against diversified sustainable farms that produce animals and crops in complementary systems.
- S.510 expands FDA's powers over food processors, regardless of their size, scale, or distribution. FDA oversight of small, local food processors is overreaching and unnecessary. Small processors selling into local markets do not need federal oversight, unlike the large, industrial, multi-sourced supply chains that are the cause of most foodborne illnesses and food recalls.
- S.510 applies a complex Hazard Analysis and Critical Control Point (HACCP) system to even the smallest local processors, imposing onerous paperwork and record-keeping on these small businesses. Applying a HACCP system to local foods facilities processing for local markets, as well as farmers making value-added products, could undermine and extinguish these emerging small businesses attempting to bring healthy local foods to American consumers. In fact, when HAACP was applied to the meat packing industry, it was instrumental in reducing the number of smaller regional and local meat packers, yet failed to increase the number of independent, objective inspectors in giant meat slaughtering and packing facilities.

Bottom line: Food safety problems lie with the industrial food processors and food imports, not with local producers. FDA should not be given any additional regulatory power over the local food system than what the agency has at present. One size does not fit all when considering food safety bills! Local foods businesses are not the same as animal factories or mega-farms that sell products into industrial scale national and international markets, and should not be regulated the same way! For more information, visit farmtoconsumer.org, click on "Alerts."

William Sanjour, Chief of the EPA Solid Waste Division, warned in 1978 that EPA was going to end up in court looking like fools over this national policy.

EVASION

The current food safety effords evade the real problem. Lying to the American people and putting our health in jeopardy is unacceptable. It is also unacceptable for Congress to give agency employees immunity and the right to ignore or change the laws at will. Moreover, giving these agencies more power, more money, and more people to regulate food safety, a problem they created with the national sewage policy, is shear madness.

William Sanjour, Chief of the EPA Solid Waste Division, warned in 1978 that EPA was going to end up in court looking like fools over this national policy. Congress did not heed the warning of EPA's best—Sanjour, Hugh Kaufman or David Lewis, who fought for public health and suffered badly. It is time to stop this madness.

The goals of food safety and health reform are laudable. However, the government needs to actually protect public health by focusing on cradle-to-grave control of waste that is hazardous to public health. This is where the money should be spent, not on ineffective regulations.

WHAT CAN YOU DO?

1. Get informed! The latest research of early

studies on toxic biosolids can be found on our website, thewatchers.us.

- 2. Sign our petition. A petition to stop this madness can be found at. www.thepetitionsite. com/2/help-ban-sludge
- 3. Call your Senator and tell them to vote NO on S 510, the Senate version of the food safety bill.
- Become a fan of Stop! HR 2749 and S 510 "Food Safety" Bills in Facebook.
- 5. Spread the word! Send this article to everyone you know, especially farmers and the people they work with.

Jim Bynum is the Vice President of Help for Sewage Victims, a retired safety consultant, hazardous material transportation trainer and farmer. Sludge runoff from the Kansas City, Missouri sewage disposal site contaminated his fields. High levels of salmonella and E. coli O157: H7 forced him to stop farming. He has since sold that farm. This article is based on a post to the Fight Back Fridays' blog carnival. Hear from other food activists on FoodRenegade.com.

OPEN AIR VENDORS IN UKRAINE: NO FOOD SAFETY WORRIES HERE!

Southampton, New Jersey chapter leader Judith Mudrak and her husband Mike have sent us these wonderful photos taken on their recent visit to Ukraine.

RIGHT: Unrefrigerated raw dairy products in the market.





LEFT: A street vendor sells kvass.

RIGHT: Unrefrigerated meat sits for hours in the market. Note the heavy layer of fat around many of the cuts.



THE INTERNATIONAL SYMPOSIUM ON FOOD SAFETY By Geoffrey C. Morell, ND

The International Association of Food Protection (IAFP) held its 96th annual meeting in Grapevine, Texas, July 12-15. I had become a member of the IAFP, representing the Weston A. Price Foundation, in January, in order to attend a local symposium on raw milk (see *Wise Traditions*, Spring 2009, page 94). When the invitation to the conference arrived, my interest was piqued, and I decided to attend to hear what the big boys were saying about food safety.

This was definitely the big Kahuna of food safety experts. Over two thousand scientists and officials attended the event, held at the GayLord Convention Center, just north of Dallas. There were hundreds of booths and innumerable poster displays, filling about thirty rows in the exhibit hall. For a good laugh—or perhaps a cry—have a look at the program, posted www.foodprotection.org/files/annual_meeting/full-program-2009.pdf.

A perusal of the speaking and poster topics shows the high-tech emphasis. Some examples:

Sterilant Gas Decontamination of Food and Environments and Emerging Technology Harnessing Irradiation for the Marketplace Today Effect of Gamma Irradiation on Inactivation of Food borne Virus in Oyster Effect of Pulsed Light Treatment on Growth and Resistance Behavior of *Listeria innocua* and *Escherichia coli* Reduction of Salmonella on Five Different Conveyor Belts during Continuous Spray Sanitizing Inactivation of Bacterial Spores in Tomato Sauce by High Hydrostatic Pressure Effect of Antimicrobial Sanitizers and High Power Ultrasound on Murine Norovirus on Romaine Lettuce Use of Edible Coatings Containing Organic Salts to Control *Listeria monocytogenes* on Cold-smoked Salmon

I believe the "sterilant gas decontamination" technology is what is currently applied to almonds. One gets the impression that the technology comes first, with millions of investment dollars behind it, and then a persuasive salesperson convinces an industry—such as the almond industry—to adopt it. In one session on irradiation, I asked about consumer acceptance and was met with blank looks, as if to say, "What has consumer acceptance got to do with it?"

In spite of all the high-tech applications, it's easy to see from the program that problems with food safety are not decreasing but getting worse. One whole session was devoted to "Pathogen and Spoilage Persistence." Other examples:

Survival of Salmonella spp. during Preparation of Pancakes and Waffles

Survival of Desiccated *Listeria monocytogenes* on Stainless Steel and Transfer to Salmon Products Extracellular Protectants Produced by *Clostridium perfringes* Cells at Elevated Temperatures Heat Resistance of Seven Pathogenic STEC Serotypes, Including *O157:H7*, in Single Strength Apple Juice Translocation of *Escherichia coli O157:H7* during Needle Injection for Moisture Enhancement of Meat Hepatitis A Virus Survival during Low Heat Dehydration of Green Onion Our Food Plants - How Hotter and Wetter Conditions Produce Mycotoxins and Fungal Growth Attachment of Norovirus in Manure and Biosolids to Lettuce Facing a Persistent Challenge: Salmonella Control in Low-moisture Foods

Detection and Survival of *Bacillus cereus* Spores in Raw and High-temperature Short-time Pasteurized Milk Survival Characteristics of Persistent Dairy Salmonella Strains

These challenges represent lots of employment for microbiologists, which might explain the resistance to my question, posed several times during the question and answer period: "What about a different approach? What about helping the human body build up natural immunity?" The answer was that with so many strains of pathogens, it was not possible to develop an immunity, either through vaccines or good nutrition. My mention of cod liver oil provoked several caustic remarks. I well remember one New Zealand government official years ago wondering whether our society was becoming too hygienic, making it susceptible to some fresh mutation no one had encountered before.

I asked one overseas exhibitor with a large poster on dairy about establishing a criteria under w hich raw milk could be acceptable. He hinted that it could be done but was not prepared to support or advocate raw milk, stressing that all milk should be treated. The goal, obvious from this conference, is that *all food* be treated!

As the bureaucrats devise more and more rules, so they will need more and more inspectors to carry out the supervisions. Several presentations dealt with guidelines for home cooking and household hygiene. Where will the home garden fit into all of this? Or will the ever spying eye of the inspector, using a GPS system, be on the trail to hunt out delicious, raw, attractive, organic, untreated commodities and those dangerous home cooked meals? We are left to wonder.

Ask the Doctor

WHAT DO TO ABOUT TETANUS By Thomas S. Cowan, MD

Question: What are your thoughts on getting the tetanus vaccine? Are there any natural ways of treating tetanus?

Answer: This is a question that has come up many times over my years of medical practice. Parents have often asked my advice about tetanus prophylaxis for their children. As with other areas of medicine, I can lay out the issues, but it is difficult for me to say that there is only one way to handle this question.

First, the basic facts. Tetanus is the name we give to the illness that is caused by the toxin secreted by the bacteria Clostridium tetanii. This bacterium is an obligate anaerobe which means it can only live in the absence of oxygen. It is ubiquitous in the soil, and is widely distributed all over the world. When the bacteria enters the human body in a wound, and if the wound is devoid of oxygen (such as a puncture wound from a nail) then the bacteria can flourish inside the wound. If the wound is exposed to oxygen, which is what happens with common lacerations, then the tetanii bacteria will be unable to grow. If they grow, they eventually will produce a tetanus toxin (a poison) that selectively puts the skeletal muscles of humans into a tight spasm. The skeletal muscles include the major muscles of movement. The smooth muscle, such as the viscera (intestines) or the specialized muscle of the heart are unaffected by the tetanus toxin. As more and more of the toxin is produced, the affected person will eventually go into full body spasms and then develop "lockjaw" which is the dreaded outcome of a tetanus exposure as the jaws remain tightly clenched.

The mortality rate for an episode of full blown tetanus is high and in some studies upwards of 50 percent of the patients who contract tetanus will not survive. If one does survive, the tetanus toxin is eventually cleared from the body and no residual repercussions remain. The key point in this is that even though the tetanus toxin is made by a bacterium there usually is no significant infection at the site of the wound. In some cases, the doctors have actually been unable to locate any overt signs of infection at all, but somehow the bacteria had grown in the body and had made their toxin. Also, the symptoms of tetanus usually start about one week after exposure to the bacteria (from the wound) but can occur up to months following the incident. This makes it even more difficult to track down the infection or to be confident that any particular incident no longer presents a danger.

In the U.S., there are about fifty cases of tetanus per year; it is a much bigger problem in third world countries, especially among infants who can contract tetanus from the cutting of the umbilical cord with an unsterile instrument.

Conventional medicine offers two ways to deal with tetanus. The first and most common is to give people, usually children, a series of tetanus shots or vaccines. The vaccine contains a very small dose of the tetanus toxin and the theory is that the vaccine recipient will make antibodies that can neutralize the toxin if it should every occur as a result of infection. Usually an initial series of three shots is given at two, four and six months and then "boosters" at varying intervals thereafter.

The second method of dealing with tetanus is to wait until an exposure has occurred, or at least a likely exposure and then give what is called hypertet, which is serum containing the neutralizing antibodies. In this case, the recipient is not making antibodies himself; he is given them to neutralize the toxins that are already in his system.

Back when I was first practicing, hypertet (tetanus immune globulin) was made from collecting the serum of horses that were "hyperimmunized" with tetanus. The rate of severe anaphylactic reaction to this medicine was about

The key point in this is that even though the tetanus toxin is made by a bacterim there usually is no significant infection at the site of the wound. 20 percent, with most of these reacting patients dying from the medicine. Luckily, I have never been in a situation that required me to give anyone this treatment and for that I have always been grateful.

Today, the hypertet is made from recombinant DNA, maybe not the greatest thing in the world, but it is nowhere near as lethal. Still, there have been numerous episodes of hypertet contaminated with various viruses so this preparation is also to be avoided if at all possible.

This then brings us to the bottom line: since we all want to avoid taking the hypertet, the real choice is whether to use the vaccine preventatively or do nothing except practice good wound care.

Regarding the vaccine, it is important to note that tetanus vaccinations are different from all the other vaccines. First, tetanus is unlike the other illnesses for which children are given vaccines. It is not a childhood illness, like pertussis or measles. It really isn't even an infection, its more of poisoning, from poison made by bacteria. This means there is nothing good about getting tetanus, unlike the immune enhancement that comes about through the usual childhood illnesses.

Second, unlike the other vaccines, there is no cell-mediated immunity—white blood cells clearing the virus—with tetanus, because it is a poisoning, not an infection.

The bottom line here is that unlike all the other childhood illnesses, there is nothing good about having gone through tetanus or contracting tetanus; it is a fairly deadly poisoning which is best handled only by prevention. Thus, for a number of years, tetanus was the only vaccine I ever gave the children in my practice. I gave three shots, usually starting at about two years old and I never gave boosters. This was because of National Institutes of Health research, which claims that no one who has received all three shots for tetanus has contracting clinical tetanus. By the way, the vaccine does not contain thimerosol; however, there is no telling whether it contains other questionable ingredients.

During the last decade, however, there have been some counter arguments that have stayed my hand with regard to giving the tetanus vaccine and made the whole situation unsettled. First, it has become clear that the incidence of clinical tetanus dropped to a very low level even before routine vaccination was practiced in this country. Why this is no one knows, but it mirrors the pattern seen in the rest of the childhood illnesses. Second, there have been some published studies showing that having tetanus antibodies facilitates the penetration of unrelated viruses into the cells. One of the viruses mentioned was HIV, another was hepatitis C. The implication is that somehow having tetanus antibodies from the tetanus vaccine makes one susceptible to seemingly unrelated viral infections. The mechanism of this is obscure and as far as I know there has been no follow-up. I can't find this original reference, but I distinctly remember a patient showing me the research in the early 1990s. This, plus the worry about the chemicals used to preserve the vaccine, make this a more difficult choice than it was in the early days.

A few other points are worth mentioning. One is that a number of patients over the years have told me they wanted to have only the tetanus vaccination but were told by their pediatrician that it was unavailable as a single vaccine. This is not true: any doctor can purchase plain tetanus toxoid from any of the major vaccine manufacturers. Second, there is no reason to get a booster tetanus shot after a wound if you have already been vaccinated. As I said, you are protected if you have had three vaccines at any time in your life, even fifty years ago. There is also no reason to give hypertet to anyone who has done the original series of three shots. And finally, even though there are worries about the vaccines, it is something that, given at the right time-certainly not at two months-in an otherwise healthy child is a fairly reasonable prevention strategy.

What if you get a puncture wound from a nail or a staple, have not had the vaccinations, and do not want to take the hypertet? Obviously scrupulous wound care is the first priority. In addition, it makes sense that super nutrition could help your body deal with the toxin should it take hold. That means extra cod liver oil, natural vitamin C, lacto-fermented foods and plenty of bone broths. Avoid stresses after the injury and get plenty of bed rest so your body can devote itself to dealing with the challenge.

The bottom line here is that unlike all the other childhood illnesses, there is nothing good about having gone through tetanus or contracting tetanus.

Homeopathy Journal

HOMEOPATHIC TREATMENT FOR INFLUENZA By Joette Calabrese, HMC, CCH, RSHom (NA)

Yesterday, in the house down the block, the Grecos' thirteen-year-old son Anthony got sick. The family was setting up the annual autumn neighborhood party in their yard and Anthony couldn't join in. He was dreadfully weak, had a whistley wheeze, and every breath he took was painful. His eyes were drawn, and he was pale and nauseated. This was one of those illnesses that could easily turn into a bad case of the flu, bronchitis or worse. As a child, his mom had suffered frequent bouts of influenza that had turned into pneumonia. His dad, too, had similar episodes as a youngster. More important, the word on the news was that the influenza season was at hand.

But there is something different in Anthony's life from that of many other children on his block. He has homeopathy as his method of healthcare. In fact, as a result, he has never ingested an aspirin, Tylenol or antibiotic in his thirteen years of life. He is a drug-free kid.

When Anthony was about four, he began catching every cold and flu that was going around. That's when his parents called a homeopath. The homeopath explained to his mom that when someone young or old has frequent bouts of the flu, pneumonia or even colds, that the method of addressing it is to use a particular type of homeopathic remedy called a nosode before the onslaught of an illness. It gently and safely stimulates the body to be able to withstand contagion.

The homeopath recommended one for Anthony that was specific to his medical history and it halted the sinus infections, frequent bronchitis and lingering low level flu-like symptoms that used to plague Anthony. Now his mom gives it to him once each year in the fall. Characteristically, the remedy was chosen specifically for Anthony. Homeopathy is wonderfully individualized.

Had Anthony's parents adhered to the dictates of conventional medicine when he most recently fell ill, he would've been dragged to the doctor's office for an antibiotic, analgesic, inhaler and perhaps a steroid just as the party was gathering for the celebration at their home. Like a cascading row of dominoes, if this illness had been treated with conventional medications, it might have eventually advanced to a future pathology. Instead, because Anthony had taken his homeopathic early in the season his mom only needed to give him a little boost with another remedy, Influenzinum 30C. And with the threat of the flu in their area, she was prepared by giving each member of the family a few doses of Influenzinum 30C as a prophylactic.

Anthony's mom also knows that homeopathy has been shown to not only protect against flu in advance of its symptoms, but to resolve the episode at hand and even minimizes the chance of it recurring soon. If it indeed reappears, it does so with less gusto, doesn't last as long, and her child will have profited by this method of care. That's because she has observed in her children that a developmental leap occurs after a mild illness. Last time it was when Anthony was struggling with math. After that brief, well spent illness liberated by a few doses of the correct homeopathic remedy, he conquered his long division with ease.

Homeopaths as well as astute parents have through the centuries understood that colds, the flu and other childhood illnesses are a requisite prelude to the normal stages of childhood development. That is, illness presses the child to meet the trial of the illness itself, including the emotional challenge that accompanies it. Growth always follows. This ushers the child into the next intellectual, emotional and physical developmental stage. By using conventional medications, this

as well as astute parents have through the centuries understood that colds, the flu and other childhood illnesses are a requisite prelude to the normal stages of childhood development.

Homeopaths

development can be stifled because the disease is not allowed to resolve from within, but is merely suppressed by artificial means. Conversely, it's not uncommon after the use of a homeopathic remedy that the child not only conquers the illness but the parents report that "it seems he has just grown up." Indeed! Isn't that the progress we want for our children?

Smart mom. This time, after three doses of *Influenzinum*, Anthony slept twelve hours straight into the next morning. When he woke, he reported an improvement of seventy five percent. Great! Nevertheless, his mom knew it was not over yet. More of the same remedy would be administered, but now less frequently. Two days after this now rather mild illness, Anthony was be back to his thirteen-year-old antics.

Contrast Anthony's experience with that of Jacob, who lives in the blue house down the road. His mother tells Anthony's mom that Jacob has had bronchitis twice this year, not unlike his dad who has always been susceptible to these kinds of infections. Jacob's been on a daily dose of antibiotics since two months ago. The doctor said the bronchitis was from the flu that was going around at that time. But now he has skin rashes, stomach aches and chronic constipation. He sees the doctor monthly for adjustments to his inhaler because it no longer works so well. And it appears that Jacob has developed asthma. Not only has this eighth grader lost time in school, but his mom mentioned he was struggling with reading of late.

Why are these two boys so different? Both families have a history of respiratory illness, both have been exposed to the same flu bugs, and both families live typical American lifestyles, yet how can one so quickly resolve the illnesses that come his way while the other struggles daily? Why, it's the method of care of course! Health is not bestowed randomly. Anthony has an immune system that is strong because his mother has

utilized homeopathy to its fullest and doesn't allow the introduction of drugs in her home.

Each illness overcome with the use of homeopathic medicine is an opportunity to strengthen the immune system. Homeopathy is rational, intelligent, with no side effects in the present or the far future, and is profoundly curative.

Two boys. Two families. Two different approaches to health. Which house would you choose? \bigcirc

Joette Calabrese, CCH, RSHom, a certified homeopath with a thriving practice of discerning clients throughout the United States and abroad, is a sought after lecturer, author and frequent radio guest. Ms. Calabrese's signature philosophy maintains that the blessing of health is not bestowed randomly, but can be achieved through the detailed and systematic method of classical homeopathy. Her nearly twenty-five years of extensive study and practice complement her unique methods of classical homeopathy with the precepts of slow food nutrition. She may be contacted for phone consultations, seminars, and a variety of nutritional and homeopathy CDs at www.homeopathyworks.net 716.941.1045

HOME INFLUENZA PROTOCOL

Homeopathy has a reputation worldwide for stimulating the immune system to set it on the right course. For folks who are prone to colds, the flu, sinus infections, ear infections and the like, it is a wise consideration to naturally arouse the immune system so that it no longer results in these pathologies.

However, even without this kind of personal care from a homeopath, there is still plenty that can be done. As a gentle yet frequently successful prophylactic for influenza, the following is the protocol that has been shown to often halt deeper pathology:

At the first word by the authorities of an impending influenza epidemic, each family member can take *Influenzinum* 30 C, four times in one day, repeated weekly until the threat is over or up to a month. Then one dose can be taken monthly for the duration of the flu season. This will often eliminate the flu altogether but if it still hits home, it will prove to be a milder version because of *Influenzinum*'s protection.

Meanwhile, at the very first sign of influenza or if there has been exposure to anyone with any respiratory symptoms during flu season, one dose of *Influenzinum* 30C, followed by one dose *Oscillococcinum* 30C, eight to twelve hours later is a well known protocol. This process should be repeated for three or four days, depending on the seriousness of the presenting illness. If started early enough this procedure will live up to its sterling reputation, particularly during the cold and wet season. Further protection can be achieved by working with your homeopath before an epidemic to individualize and address immunity more fully.

For more detailed information on how to protect yourself from influenza and also treat it, go to homeopathyworks. net and click on *Ahh Choo the Flu*. To purchase *Influenzinum* 30C and *Oscillococcinum* 30C, contact your local health food store, pharmacy or Johnson's Village Pharmacy (716) 753-3200.

Food Feature

CONTINUOUS BREWING: TASTIER, EASIER AND SUPERIOR KOMBUCHA By John Moody

> A number of years ago, our family started experimenting with fermented drinks. We tried sun teas, fermented coconut juice, assorted kefirs and ginger sodas. But kombucha captured our hearts and those of our children. At first, we used the modern, western method of straight shot brewing. Then a good friend kindly explained to us the more traditional art of continuous brewing. In a short time, we were hooked on a combination of better taste, more consistent supply and less work with our kombucha, and began refining and teaching the method to others.

BENEFITS OF CONTINUOUS BREWING

Continuous brewing is a traditional method of making kombucha. After I had spoken with numerous native Russians and consulted with a few different reference works, I realized that the liquid was kept in some sort of fermenting container and a portion was drawn off for drinking or other uses as needed. As liquid was drawn off, fresh replacement was added, sometimes soon after or sometimes a few days later. Thus, in traditional brewing, the culture is fermenting continuously, without interruption, at all times—a constant mixture of predominately older and some younger liquid.

The benefits of continuous brewing are both practical and nutritional. They include:

- Less risk of mold and other contamination in kombucha batches, as once established, the liquid maintains a far more acidic environment, more hostile to outside invaders because of smaller amounts of free sugar and a greater population of good bacteria and yeast.
- Less overall work to produce more overall volume.
- More consistent supply of kombucha (a few bottles every day or every few days rather than having a large batch all at once).
- A broader array of bacteria and other beneficial compounds in the final product.

CAFFEINE AND KOMBUCHA

A number of families in our group expressed concern over the amount of caffeine in kombucha, especially since very young children were drinking it daily. Kombucha is relatively low in caffeine, especially compared to mainstream beverages, although the amount of caffeine in a particular serving will depend on the types and amounts of teas used and the length and strength of the ferment.

On average, one serving of kombucha will contain approximately one-third the caffeine (or more precisely, of caffeine-like substance) than a similar tea beverage of the same size. Also,

HOW TO DECAFFEINATE TEA LEAVES

We use loose leaf teas, as they are far less expensive than their packaged counterparts and can be easily strained out of the tea mixture before adding the sugar.

To decaffeinate, place 8 tablespoons each green and black tea into a one-quart glass container or ceramic bowl. In a teapot or saucepan, bring a few cups of water to a boil. Let the water just come off the boil, then pour it over the tea leaves. Allow the tea to steep for approximately three minutes. The caffeine will quickly leach out of the leaves. Strain the tea leaves and discard the water. Now you have decaffeinated tea (anywhere from 40-70 percent less caffeine will now be present in the leaves). The process can be repeated for those wishing to bring the caffeine content down even more.

time, we were hooked on a combination of better taste, more consistent supply and less work with our kombucha, and began refining and teaching the method to others.

In a short

some claim that up to half the caffeine in the tea is converted into other substances during the fermenting process, but this conversion is both unpredictable and highly debated. Furthermore, the caffeine reduction appears to be largely related to "starving" the culture for many days (not adding any new sweet tea mixture to the ferment), and thus would probably have a negligible effect on the caffeine content in a continuous brew that was drawn down more than twice per week.

Thankfully, tea leaves are easy to partially decaffeinate, since caffeine is highly water-soluble, allowing removal of between 40-70 percent of the caffeine in three minutes of steeping (see side bar page 68), while the poly-phenols and many other beneficial substances in the tea leaves remain because they are less soluble. Many Internet sources claim much higher rates of caffeine reduction via this home method (as high as 80 percent in under one minute of steeping), but this is not the true. Caffeine reduction of 70-90 percent requires a second steeping with fresh, hot water after initial the steep, lasting another three minutes, which would have an uncertain, yet surely negative impact on the beneficial compounds in the final product, not to mention the taste.

Thus, if caffeine content is a concern, lower caffeine varieties of tea can be employed or the tea leaves can be decaffeinated prior to brewing. If you need to completely avoid caffeine, then commercially decaffeinated teas are the only sure option, although these will have a negative impact on the health benefits of the finished beverage. Also, we know a few people who prefer to preserve the inherent caffeine content of kombucha, as this makes the drink a great, natural replacement for those who are required to work at night and may need a natural, low-caffeine drink to help them stay awake and work safely.

CONTINUOUS BREWING AND SUGAR

The second question that often comes up with kombucha in general, and continuous brewing in particular, concerns the residual sugar content. Again, since kombucha is a living product, affected by seasons, temperature, humidity and other factors, the amount of sugar present in the final product is very hard to determine. If you have concerns about residual sugar in your brew, you can reduce it through a number of approaches:

- 1. Allow the mixture to ferment longer and draw it off less often or in smaller amounts (remove 10 percent rather than 15-20 percent of the volume, three times per week).
- 2. Allow a longer second ferment once bottled (the result will be more of a kombucha wine, vinegar or beer).
- 3. Choose a sweetener like white sugar, which

Espresso

Plain, brewed

Instant

Caribou Cappuccino

Decaffeinated, instant

Decaffeinated, brewed

Starbucks Caffe Latte

Starbucks Coffee Grande

CAFFEINE CONTENT OF POPULAR SODAS Caffeine content per can

Diet Mountain Dew and Mountain Dew	55 mg
Diet Coke	46 mg
Diet Dr Pepper	44 mg
Dr Pepper	43 mg
Pepsi	39 mg
Diet Pepsi	37 mg
Coke	34 mg

SOURCE: Journal of Food Science, August 2007.

SOURCES: Caribou Coffee Co., 2007; Starbucks Corp., 2007; USDA National Nutrient Database for Standard Reference, 2007.

CAFFEINE CONTENT OF POPULAR COFFEE BRANDS

In milligrams per 8 ounces

120-150

2

2

512

62

95

75

165

Estimates for the caffeint content of kombucha range from approximately 8-16 mg per 8-ounce serving and 2-8 mg for batches done with home-decaffeinated tea leaves.

Tea leaves are easy to partially decaffeinate, since caffeine is highly water-soluble, allowing removal of between 40-70 percent of the caffeine in three minutes of steeping. breaks down more thoroughly and is more easily digested by the culture.

- 4. Choose flavorings that do not contain large amounts of additional sugar and/or allow the second ferment in the bottles extra time to break down this sugar.
- 5. Check for sourness; the more sour the beverage, the less residual sugar it will contain.

BULK BREWING REPLACE-MENT LIQUID

Continuous brewing is a big time-saver and allows a more consistent supply of kombucha. We can bulk brew our concentrated "replacement" liquid once every two weeks, then as needed add the concentrate and additional water to our fermenting vessels.

Our basic kombucha recipe follows a ratio of 2 to 1 to 1 to 1; that is, 2 *cups water* for every 1 *cup sugar* and 1 *tablespoon each organic green and black tea.* Three-fourths cup of this concentrated liquid plus 3

1/4 cups water can then be used to replace 32 ounces of liquid in your kombucha jar.

We brew about two gallons replacement liquid at a time and store it in half-gallon mason jars in the refrigerator. (It could also be stored in a cold cellar, garage or other cool place—just be very careful that the place is cold enough to inhibit the growth of mold.) The replacement liquid keeps for up to two weeks, saving time and dishes. This also makes our every-otherday kombucha routine very compact—add flavoring to bottles, decant the appropriate number of bottles (10-20 percent of total volume), add concentrated replacement followed by additional water to the fermenting vessel, and enjoy!

THE IMPORTANCE OF A SPIGOT

A jar with a spigot is an absolute must for efficient kombucha brewing. As any family or farmer knows, the less work and time involved in the daily chores, the more enjoyable the chores (and all of life). The task of ladeling out liquid and then funneling it into bottles creates a large



Continuous kombucha three- and five-gallon brewing jars with spigots.

amount of additional work and mess that is best avoided.

There are various jar options available to the home brewer, ranging from simple and plain to large and decorative. Whatever jar you choose, be certain that no metal will be in contact with your fermenting liquid or above or around it, even just a very small amount around the spigot seals or some other area of the container.

For those looking for an inexpensive fermenting vessel, Ball makes glass sun tea jars that have a plastic spigot. These cost around seven to

eight dollars and in the late fall many stores sell them for as little one to two dollars each, making them perfect starter or experimental jars.

A good website for jars is www.infused-vodka.com, although I find that the sizes listed for the jars are not always accurate.

VARIATIONS

Kombucha blends extremely well with all sorts of flavorings. We recommend that you only add flavors *after* decanting, as once flavorings have been added to the main brewing jar, you will never again achieve a neutral base with the kombucha culture you are using.

KOMBUCHA VARIATION FAVORITES For one 16-ounce bottle

IMITATION SPRITE: A few small chunks of lemon, optional chunks of orange and optional grated ginger.

GINGER BERRY: 1/4 teaspoon grated ginger root and 2-3 blueberries, sliced in half, optional 1/4-1/2 strawberry.

GINGER BANANA: 1/4 teaspoon grated ginger root and 1-2 slices of ripe banana, about 1/8 inch thick, cut in half. In our experience, any flavoring that uses banana should not be stored more than 3-4 days.

BERRY BLEND: 2-3 blueberries, sliced in half, and 1 strawberry, quartered.

There are three main ways to flavor your kombucha, although other methods are available albeit less widely used (hydrosols of essential oils, for instance, the leftover water from making essential oils).

- 1. Juice of fruits, vegetables and herbs.
- 2. Fresh and frozen fruits, vegetables and herbs, whole, cut up, or pureed.
- 3. Dried fruits, vegetables and herbs.

We use the second option most frequently, since fruit juices are often pasteurized, somewhat expensive and may have additional additives that are best avoided; while dried fruits can also be very expensive and in our experience don't seem to add as much flavor (or color) as well as their fresh or frozen counterparts. We use some fresh fruits (seasonally), and a large amount of frozen fruit, since frozen fruits are easier and less messy

to cut into small pieces, especially the berries. Yet, we know many who have had great success using some or all of these approaches.

A warning: if you use dried fruits, remember that the pieces will expand in size as they absorb liquid. If the pieces you place into the bottles become too large, you may have a very difficult time getting them back out. Even fresh fruits and vegetables may expand after sitting in the bottles, so smaller pieces are better.

A tip: an excellent way to save time when flavoring kombucha is to pre-cut up a large amount of fruit and keep it frozen; or use a blender or food processor to pre-blend, slice or shred a large portion of your favorite flavoring and then

KOMBUCHA CONTINUOUS BREWING: BASIC RECIPE FOR APPROXIMATELY THREE GALLONS

WHAT YOU WILL NEED: One *kombucha culture* (called a SCOBY) and 16-32 ounces *kombucha* from a friend or from the store (if you purchase kombucha at the store, get unpasteurized, unflavored kombucha for your starter liquid), and a brewing container that is around three gallons in total volume. This will also work for 3 one-gallon brewing containers, in which case you will need 3 kombucha cultures.

STEP ONE: In a large stainless steel or enamel pot, bring 2 gallons filtered water and 8 tablespoons each green and black tea (16 tablespoons total) to a boil. Slowly add 16 cups sugar to the water, stirring vigorously to dissolve. Allow mixture to steep for 10-20 minutes or longer, then strain out the tea leaves. This is your concentrated replacement liquid. You will need some for the next step; the rest should be stored in the refrigerator.

STEP TWO: Place the kombucha culture and the starter liquid into your three-gallon fermenting jar; or place the three cultures in three one-gallon jars and divide the starter liquid between the jars. Add (or divide between the jars) 1 1/2 cups replacement liquid followed by 6 1/2 cups water. Cover the top of the jar with a breathable cloth or towel and make the covering secure with a rubber band.

STEP THREE: Allow the mixture to ferment for 2-6 days. Taste daily and once the mixture reaches a strong enough acidity for your liking, add another 1 1/2 cups replacement liquid and 6 1/2 cups water.

STEP FOUR: Repeat step three until the jar is about 90-95 percent full. Now you are ready for continuously available kombucha!

SCHEDULE FOR EVERY DAY

STEP ONE: Draw off two 16-ounce or three 12-ounce bottles of kombucha from the jar and flavor to your liking. Cover tightly and allow the bottles to age for 2-5 days to develop fizz and flavor, and to mellow.

STEP TWO: Add 3/4 cups replacement liquid and approximately 3 1/4 cups water, recover your jar and allow to ferment 24-36 hours. If you notice that the mixture is starting to become less acidic over time, skip a day or two once per week.

SCHEDULE FOR THREE TIMES PER WEEK

STEP ONE: Draw off four 16-ounce bottles of kombucha from the jar and flavor to your liking. Allow the bottles to age for 2-5 days to develop fizz, flavor, and to mellow.

STEP TWO: Add 1 1/2 cups replacement liquid and 6 1/2 cups water and recover your jar.

refrigerate or freeze the extra.

Note that your choice of flavorings is directly affected by your choice of teas—some teas will mesh better with certain flavors than others,

so experimentation and research is key, as is a good notebook to keep track of your results.

Kombucha can also be flavored with a wide array of herbs, spices and roots. It's best to experiment in single- or doublebottle quantities and, as always, to keep good notes on the results so that you don't end up with a large batch of undrinkable brew. Always keep a spare kombucha culture or make sure you have a fellow brew mate with an extra in case your experiments go awry.

ALTERNATE TEAS AND SWEETENERS

While most people use basic green and black teas for their

kombucha, many other teas are suitable. We do recommend that you try alternate teas in small

batches (such as a one-gallon jar) apart from your main jar, so as to not risk losing your primary culture.

While some teas are said to be an absolute no-no for kombucha brewing, such as Earl Grey tea, we have spoken with people who have suc-



Bottles for kombucha: left to right, juice spritzer bottle with wire-held stopper, a GT Kombucha bottle, a glass juice bottle and a Virgil's Root Beer bottle.

cessfully used this and many other brands. The various choices of tea, sweetener and flavoring allow for an almost infinite array of tastes and textures, while also unlocking the possibility for a wide array of subsidiary benefits through the medicinal actions of the components.

Another way to alter the finished flavor and properties of kombucha is through the changing or mixing sweeteners. Many modern kombucha recipes call for white sugar, yet traditional brews would have usually been made with unrefined, local sweeteners. While the choice of white

sugar is understandable since it is inexpensive, predictable and breaks down quickly in fermentation, it should not deter you from experiment-

FINDING BOTTLES

Because kombucha produces carbonation, it has the potential to explode bottles. Personally, we have forgotten about jars of kombucha for up to six weeks (one fell under our bedroom dresser and was not found until we moved!) and never had an explosion, but others report potentially dangerous explosions, especially if the bottles are of low quality or cracked glass, or they are kept in a very warm or hot place.

The best types of bottles for kombucha are thick-walled, glass bottles that come with wire-held stoppers, glass bottles for beer, or root beer, or high-end glass water bottles (such as Pelligrino or Perrier bottles) that can be recapped easily. In order to get these you need to...

- 1. Become friends with people who drink these beverages
- 2. Become friends with a bar or restaurant that serves these beverages and ask them to save the bottles for you. You should supply a bin or crate for them to use and be sure to collect the bottles regularly so as to not in any way be a nuisance in exchange for their kindness.
- 3. Scavenge them from recycle bins and dumpsters, especially those of stores like Whole Foods.
- 4. Find them on or request them from places like Craigslist or Freecycle.
- 5. Drink these beverages yourself.

You can also purchase these bottles from beer- and wine-making supply stores in most cities, but in our experience many of these bottles appear to be of a much lower quality than those an actual drink comes in. Another good bottling option is the organic lemonade and fruit drink bottles sold at most health food and regular grocery stores, in the pint and quart sizes. Their lids are metal and thus will need to be checked and replaced more often, but the glass is very durable and previous contents of the bottles are known and innocuous. If you do purchase bottles two good sources are www. mainbrew.com/pages/bottles.html and www.mountainhomebrew.com.

ing with other sweeteners, including raw honey, tree syrups and whole sugar cane. Brews that employ other sweeteners will usually not ferment as quickly as those relying primarily on white sugar, since white sugar is a very "high octane" fuel option for ferments.

BOTTLING AND BOTTLES

The best bottles for kombucha are those for Groslch, Fischer or Virgil's root beer, or any other similar reusable glass beer or root beer bottle with wire-held stoppers. Bottles from the store, such as GT's, sparkling water or glass juice bottles, can also be reused, but if their lids are metal, they will begin to rust, which is a concern both from the metals in the lids and the BpA or other possible chemicals that are contained in the small white seal you see around the edge of the lid.

Bottles with tight-fitting caps have the added bonus of creating wonderfully fizzy drinks, a sure delight for those trying to wean themselves off carbonated, sugar-, chemical-, and heavy metal-laden alternatives. After adding flavoring to each bottle and filling them with kombucha, we normally allow them to sit for three to seven days, depending on time of year and temperature, to mellow and develop carbonation.

COST AND TIME OF CONTINUOUS BREWING

Soft drinks are very expensive: they cost four to eight dollars per gallon and they create medical expenses by destroying our teeth and overall health. Americans spend over sixty billion dollars a year on soft drinks, consuming over one gallon per person per week. Kombucha can be brewed and flavored with all-organic ingredients for two dollars per gallon or less, saving money and strengthening overall health. Furthermore, we are able to produce about forty 16-ounce bottles per week in about one hour of actual work. Thus, continuous kombucha is an extremely useful method for producing an affordable, health-promoting drink for a family and community to enjoy.

John Moody is the founder of Whole Life, a buying club in Kentucky that carries local WAPF-friendly food and ecologically sensible products. He has helped start or train multiple other buying clubs around the country, along with writing, researching and speaking for various journals and events in his region. He and his wife Jessica will be serving their many flavors of continuous kombucha at the Wise Traditions 2009 soda bar.

RESOURCES AND REFERENCES

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"Tea and the rate of its infusion" by Professor Michael Spiro. Published in the New Zealand journal *Chemistry*, 1981, 172-174.

"Analysis of Caffeine Levels in Multiple Infusions of Tea," Micah Buckel, Bruce M. Branan and Bruce Richardson, Asbury College.

www.happyherbalist.com. This is by far one of the very best sites for information about continuous brewing and kombucha in general available through Internet.

www.kombu.de/english.htm

WHERE TO OBTAIN A KOMBUCHA CULTURE

The kombucha culture or mother is the mushroom-like colony of bacteria and yeast that turns the sweet tea mixture into the magical drink. It is often called a SCOBY, which means "symbiotic culture of bacteria and yeasts."

- 1. Check with your local or regional WAPF chapter leader, health food stores, or other similar groups. Our chapter and many others have an excess of starters to share!
- 2. Grow your own from an unflavored, store-bought kombucha (just pour into a widemouth jar, cover and a SCOBY will form in a week or two.
- 3. Purchase online from a reputable source, such as the Happy Herbalist, Laurel Farms, Dom's Kefir site, some Ebay sellers, or others listed in the WAPF shopping guide.
- 4. Many yahoo groups have members who will ship you a SCOBY if you cover the cost of packaging and shipping.



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The Homeopathic Treatment of Influenza: Surviving Influenza Epidemics and Pandemics Past, Present and Future with Homeopathy

By Sandra Perko, PhD, CCN Benchmark Homeopathic Pubns, 2005

"Shut the doors! Stay out of public places! Take aspirin!. . . Influenza is on the way!" This was the battle cry of conventional medical and public health authorities throughout the world when the earth's most widespread and tragic pandemic annihilated millions. Undeniably, the Spanish Flu of 1918 rivaled the devastation of the plague of the 14th century. The world hadn't seen the likes of it before nor has it since. Some authorities are certain of its return. That is why the author of *The Homeopathic Treatment of Influenza* has spent so much time on the connection between the epidemic of 1918 and the next big influenza.

But don't be put off by the Chicken Little opening to this riveting book by Sandra Perko. And prepare for the first few chapters to be white knucklers in the realization that, given the scientific evidence, the tragedies of the Spanish Flu of 1918 could certainly take another foothold. However—and I mean a big however—the author also includes commanding substantiation of the curative role homeopathy played during that 20th century pandemic. She also includes instructive chapters aimed at treating influenza homeopathically for the general public.

Dr. Perko unfolds the fascinating account of the homeopathic versus conventional medical methods. At the turn of the last century, approximately thirty to forty percent of the physicians in the U.S. were homeopaths. While the allopathic (conventional) doctors stood helplessly by as their patients died, (the influenza of 1918 would claim upwards of 39 million victims worldwide) their homeopathic counterparts were administering safe and gentle homeopathic remedies that proved to be powerful indeed. And their results were astonishing, reports Perko. These doctors treated the afflicted in large homeopathic hospitals (where homeopathy was used exclusively), in city dwellings, factories and the countryside. And they were successful in keeping their patients alive and in eliminating much suffering.

In the aftermath of the 1918 influenza, while the allopaths were still scratching their heads, the homeopaths assembled for their annual convention to evaluate sound data. In 1921 at the 77th convention of the American Institute of Homeopathy in Washington, DC, Dr. T.A. McCann from Dayton Ohio informed his distinguished homeopathic colleagues that he had collected statistics of 24,000 cases of the flu treated by conventional means. In these cases a 28.2 percent rate of mortality was reported.

Meanwhile, homeopathic physicians had treated 26,000 cases of the flu solely with homeopathic means, and reported a mortality rate of only 1.05 percent. Another report was offered by Dr. Frank Wieland of Chicago, who noted that in the plant where he was employed, of 8,000 workers, "We had only one death. We used no aspirin and no vaccines. *Gelsemium* was practically the only remedy used."

The reports of many doctors from New York to San Francisco and many towns in between substantiate homeopathy's ability to thwart even the deadliest of flus in the history of mankind, and in a most impressive manner.

An interesting aside in Perko's book concerns the use of aspirin, which was the drug of choice for the allopaths. It took another fifty years for conventional medicine to comprehend aspirin's devastating effects when used to treat viruses. In 1957 Reye's syndrome was discovered as the cause of illnesses and deaths related to viral infections which had been treated with aspirin.



Homeopathic physicians had treated 26,000 cases of the 1918 flu solely with homeopathic means, and reported a mortality rate of only 1.05 percent.

Continued on Page 77



If we make more withdrawals than deposits, this energy account becomes tapped out, and we find ourselves mentally, emotionally and physically exhausted.

Spent

End Exhaustion and Feel Great Again By Frank Lipman, MD, with Mollie Doyle Fireside (Simon and Schuster) 2009

I first learned of this book through Liz Lipski, PhD, CCN, of Innovative Healing (and author of *Digestive Health*, among other books) while participating in a teleseminar through her Access to Health Experts, in January of this year. This is one of those books that provides excellent insight and ideas but suffers from serious problems in the area of dietary advice.

The author, Dr. Frank Lipman, is the founder and director of the Eleven Eleven Wellness Center in New York City. He attended medical school in Johannesburg, South Africa, where he grew up. Recognizing some deficiencies in his Western training, he went on to study traditional Chinese medicine and functional medicine. Experimenting on himself, he has developed what he describes as a comprehensive system for getting people back into the rhythm of their lives.

The premise is that "each of us comes into the world endowed with essential energy" and that "we are meant to supplement this original endowment of energy with what we can manufacture from eating, breathing, sleeping, learning, working, playing and relationships" (page 6). If we make more withdrawals than deposits, this energy account becomes tapped out, and we find ourselves mentally, emotionally and physically exhausted. This is the syndrome of *Spent*.

The process of restoring the body's balance is a multifaceted six-week program of what Lipman calls Daily Beats, which includes sleep, diet, exercise, supplements, meditation, and relaxation along with a "pulse" section that is meant to help integrate each suggestion into your daily life.

Dr. Lipman discusses diet as one of the key

factors of restoration. And some of his advice is very good. Not an advocate of calorie-counting or portion control, he recommends eating delicious, high-quality food. Grass-fed meat, free-range poultry, and organic eggs as well as low-mercury, wild fish are on the shopping list, along with loads of vegetables and many fruits.

Unfortunately, his list of recommended fats is limited to coconut oil and extra virgin olive oil along with sesame oil or toasted sesame oil as an option for occasional stir-fries. There is no mention of the key role played by the fat-soluble activators, vitamins A and D, in adrenal health, and the need for grass-fed butter, cod liver oil, and other animal fats to provide these key nutrients.

Lipman is big on smoothies as he feels they rest the digestion as well as offer convenience as a breakfast food. But instead of cream, yogurt or kefir as a base, he makes almond milk his first choice for a base, but he does also suggest coconut water, either fresh or in aseptic packages. Flaxseed oil or coconut oil is also a recommended addition.

New for me was the concept of using avocado instead of banana as a smoothie ingredient, in order to cut down on the sugar content and add good fat while imparting a creamy texture. I recently tried this, and even though it doesn't do much for the color of the concoction, I declare it delicious!

I think we would all agree with his list of poisonous ingredients to be avoided in industrial foods: partially hydrogenated or hydrogenated fats and oils; artificial sweeteners; high fructose corn syrup and other refined sugars; sodium nitrite and sodium nitrate; MSG, sulfites, potassium bromate, preservatives, artificial colors, and artificial fats (such as Olestra).

Lipman recommends avoidance of most processed foods. Among the shopping guidelines

is this practical advice: "If you do buy food in a box, choose one with five ingredients or fewer, none you can't pronounce and no cartoon characters."

On page 145, Dr. Lipman cautions against the use of unfermented soy, citing the Weston A. Price Foundation as a good source of information on soy dangers.

Although he does not consider cow's milk to be a great food for adult human beings (using the old cow's-milk-is-for-cow's-babies argument), he does discuss the hazards of pasteurization and homogenization and suggests trying raw milk for those who cannot give it up. And he again refers to the WAPF website for more info.

Lipman promotes sheep's milk and goat's milk cheeses as being much easier to digest while supplying the same nutritional benefits. I personally would like to see more emphasis on raw butter by the slab and raw cream by the glassful, as I found them to be such important contributors to my own healing from adrenal fatigue years ago.

There is some discussion of leaky gut syndrome, but he apparently isn't aware of or doesn't buy into bone broth or stock as a healing substance, as all of the soup recipes in the book call for vegetable stock. This, of course, could be easily modified. He makes link with antibiotics causing a disruption of the internal ecosystem is made, but does not introduce the topic of corrective probiotics until sometime later in the book.

There are other serious departures from WAPF principles that I noted, in that he says nuts should be bought raw and unsalted and can be slowroasted at home. He makes no mention of enzyme inhibitors or the need for soaking and dehydrating. Nor did I see any instructions for properly preparing the gluten-free grains he includes in his diet protocol. He advocates adding whey protein to smoothies, although stressing that it should come from cows that grazed on pesticide- and chemical-free grass. And he is a huge fan of super greens powder to add the essential vitamins and nutrients to the diet.

Even with the flaws in dietary advice, this book is truly a treasure trove. It is absolutely loaded with step-by-step, practical advice, from breathing techniques to cleaning out your medicine cabinet. It also includes information on functional testing, how to set up a proper sleep environment, balancing your hormones, and lots more.

This book also offers inspiration, such as introducing readers to the South African philosophy of *Ubuntu*, a worldview that sees all of humankind as interconnected. By encouraging us to seek meaning in life we find the ultimate way to heal and replenish ourselves.

So while we have given this book a Thumbs Down, it is still recommended for its comprehensive, supportive, integrative, user-friendly advice for recovering from exhaustion. Hopefully in a future edition Lipman will make the necessary corrections and additions so we can give this book a very enthusiastic Thumbs Up. Of Review by Kathryn N. Johnson

Homeopathic, continued from Page 75

stood only too well the danger of using conventional medications in any form during such an illness. Sandra Perko devotes one chapter to the distain of homeopathic doctors for the use of aspirin while recounting the link between the large number of deaths associated with the use of this drug.

Could a simple remedy such as gentle little *Gelsemium* have thwarted the attack for so many? You bet! In fact Dr. Perko has gathered the recommendations of homeopathic physicians from around the world to compile a list of the top

remedies used for influenza from 1918 to the present. Many homeopathic physicians recommended *Gelsemium*, each doctor unaware that others were doing the same in other corners of the world! Truths are universal.

As a practicing homeopath, this book stirred me with another historical example of homeopathy's ability to stand up to illness, even to epidemics. It will likely comfort any reader to know that there are proven remedies at hand. I'd recommend it as a tool to protect loved ones from the potential "Big One." QOO

Review by Joette Calabrese, CCH, RSHom. Homeopathic strategies to protect your family from the flu with homeopathy are available at www.homeopathyworks.net . Click on Ahh Choo the Flu for a downloadable informational manuscript. Or call (716) 941-1045 for a snail-mail version. \$12.99 plus S&H. It will give you peace of mind.



Instinct Based Medicine How to survive your illness...and your doctor By Dr. Leonard Coldwell Strategic Book Publishing, 2008

Leonard Coldwell, NMD, ND, PhD, CNHP lives in Charleston, South Carolina, and is retired, so is not practicing in the U.S. He claims to have cared for more than 35,000 patients in his career of over thirty-five years, treating cancer and other terminal illnesses with a legendary cure rate. Kevin Trudeau pronounces this German-born doctor as his personal physician in Europe and a consultant on his bestselling book *Natural Cures They Don't Want You to Know About*.

As a teenager, faced with his mother's diagnosis of terminal liver cancer, the author claims he made a pact with God. The deal was that if God helped him cure his mother, he would spend the rest of his life helping other people with their health.

Over thirty years later, he describes his mother as a healthy, energetic and enthusiastic person. And so, Dr. Leonard Coldwell is on a mission to share his trademarked Instinct Based Medical System (IBMS), which claims to help identify and remove the root cause of every disease.

The problem for the reader, however, is that it is difficult to figure out what exactly his Instinct Based Medical System is.

It turns out that Dr. Coldwell identifies mental and emotional stress, which result in decreased energy, as the causal factors in the creation of any and all disease.

The problem for the reader, however, is that it is difficult to figure out what exactly his Instinct Based Medical System is. Dr. Coldwell describes this as a self-help system, and a good part of the last half of the book reads much like a self-help book. There are a few exercises provided. But are these the system?

I don't think so. Dr. Coldwell speaks of performing twenty-minute sessions. I am left

suspecting that the system is comprised of an audio program which must be purchased additionally.

Although Dr. Coldwell emphasizes the importance of nutrition, he gives relatively little attention to the subject. I am rather certain that his views in this area would not mesh well with WAPF principles. He does say that cholesterol is not bad, but also makes statements like "Meat and poultry are full of drugs" (page 165), and "Research in nutrition has proven years ago that milk products (all dairy) are not suitable for human consumption" (page 376). He refers to the website www.notmilk.com. It seems that he makes no distinction between factory-farmed foods and those that are properly produced, nor between real milk and industrial milk.

Echoing Tim Boyd's review of The Liberation Diet, in the Summer, 2009 edition of Wise Traditions, about the Carnegie and Rockefeller involvement in medical schools and the pharmaceutical industry, Dr. Coldwell states "The medical profession with all its glory was created by John D. Rockefeller to create salespeople for the chemicals he created" (page 126). He makes a good point about the apparent failure of the American Cancer Society, one of the nation's largest volunteer health organizations, which collects over four hundred million dollars a year, yet has not produced a single breakthrough. He also goes on to say, "The American Cancer Society was also founded at the New York Harvard Club in 1913 by none other than John Rockefeller, Jr. and his friend" (page 138).

After much of what can only be characterized as a scathing (and well-deserved) criticism of the conventional medical system and pharmaceutical industry, I identify him as being antiprescription drugs, anti-vaccines, anti-fluoride, anti-chemotherapy, anti-radiation, anti-surgery as well as anti-hypnotherapy, anti-Neuro-Linguistic Programming, anti-meditation, anti-yoga

and anti-The Secret!

We can all benefit from reducing, not just managing, our stress and exercising a cautious approach to the health care system in our society. Unfortunately, this is the most poorly organized and sloppily written book I have ever read. There are more typos than I have seen in any publication. Some sentences don't even have periods at the end of them! All of this coupled with a great deal of repetitiveness makes this book nearly impossible to follow. And in the end, Coldwell does not deliver the "help to self help" program as promised. ways to access him and his information. His email address is dr.leonardcoldwell@gmail.com and he has two websites: www.instinctbasedmedicine.com and www.drleonardcoldwell.com. He says that he will answer all e-mails, but I have e-mailed him numerous times over the last several weeks and have never heard back from him. Dr. Coldwell's book is not likely to be found in bookstores. It must be special ordered through Barnes and Noble or can be purchased through his websites for \$29.95 plus shipping. If you go this route, you may also receive a coupon for \$30 off a cleansing program through Universal Formulas.

Review by Kathryn N. Johnson

Kathryn Niflis Johnson BSN, RN is a natural health educator in Woodbury, MN. She is a seeker and a freedom fighter who has studied natural health for the last 20 years. She specializes in helping people learn to prepare and locate nutrient-dense foods through her company Optimal Health Connection. She can be reached at organicone@comcast.net.

If you are still interested, there are many

FAT: AN APPRECIATION OF A MISUNDERSTOOD INGREDIENT, WITH RECIPES By Jennifer McLagan Ten Speed Press, 2008

While reading *Fat: An Appreciation of a Misunderstood Ingredient, with Recipes,* I sometimes found myself padding into the kitchen and taking a spoonful or two of bright yellow raw butter from the fridge. This book can surely inspire such behavior, and reminded me of the best of Julia Child, the no-nonsense, down-to-earth, exuberantly fat-loving doyenne of French food, who shrugged in the face of urgent anti-fat hand-wringing. Julia Child, by the way, died two days before her 92nd birthday.

In a food culture known for its misplaced finger-wagging, McLagan's book stands out. It's a love letter, a sonnet, a worshipful ode to all the traditional fats that abound on the earth. It's a joyful romp through your great grandmother's recipe book, complete with trivia, history, lore, and practical hands-on information. It's a compendium of knowledge largely lost to our generation, and a celebration of dishes both current and historic. Have you ever wondered what the difference is between leaf lard and *lardo*? Do you know which animal fat is the very best for pastry and how to render it? Why does butter feel so good in your mouth? It's all in there, along with countless recipes and gorgeous foodie photographs.

Clearly, this is a book for which we've all been yearning. In McLagan's world, carbs and proteins are the suitors to fat, the leading lady. They celebrate her beauty and allure, but aren't meant to stand alone. I even laughed out loud when McLagan says, after detailing how to make the perfect roast beef sandwich, "you could add lettuce and tomato, but it does rather detract from the beefy experience."

Recipes include many varieties of spiced or flavored butters, puff pastry, butter sauces, buttered vegetables, a wonderful looking buttered chicken recipe from India, pork cracklings, fat-laden terrine, pork belly, rosemary-flavored pork fat, french fries done in lard, plenty of bacon-based recipes, sausage, foie gras, several marrow recipes and lots of ideas for using duck, chicken and goose fat. There's even a recipe for suet latte! McLagan uses butter, lard and goose or duck fat liberally in pastries and rich desserts which, if you give into temptation, will mitigate the effects of all that sugar and white flour.

Read. Revel. Enjoy the fresh air, and keep that butter coming. Thumbs up!

Jill Ebbot is a holistic health counselor in Brookline, MA, specializing in helping her clients achieve vibrant health through the wise use of nutrient-dense foods.

Review by Jill Ebbott.



Devil in the Milk Illness, Health, and the Politics of A1 and A2 Milk Keith Woodford Chelsea Green Publishing, 2009

I have thought about the medicinal aspects of cow's milk for virtually my entire medical career. As one four-year-old child pointed out to me many years ago, "Mommy, I know why he always talks about milk, his name is Cow—-an." So, I guess this milk "obsession" is no surprise.

The obsession started in earnest about twenty-five years ago when I read the book The Milk of Human Kindness Is Not Pasteurized by maverick physician William Campbell Douglass, MD. This was one of the most influential books I have ever read. I became convinced that a large part of the disease in this country is related to the way we handle, or rather mishandle, milk and milk products. Raw and cultured dairy products from healthy grass-fed cows are one of the healthiest foods people have ever eaten; in fact, they are the very foundation of western civilization. On the other hand, pasteurized, and particularly low-fat, milk products have caused more disease than perhaps any other substance people are generally in contact with. This view was reinforced when I met and joined up with Sally Fallon and learned the principles of the Weston A. Price Foundation. End of story, I assumed; but I could stop thinking about milk.

Over the years, however, every once in a while Sally would say to me, "You know, we have the wrong cows here." I had also heard this comment from assorted bio-dynamic farmers but didn't really know what to make of it or whether this was a medical issue I should be tackling. All along, though, I felt that something was not quite right. It remained unmistakably true that many of my patients, in spite of eating only the proper dairy products, still had illness and still seemed not to tolerate milk. Truth be told, for most of my adult life I myself couldn't drink any kind of raw milk without feeling a bit sick and congested. Somehow my story with milk wasn't quite finished.

Along came the GAPS (Gut and Psychology Syndrome) diet, and my discovery of the use of low dose naltrexone, both of which I have described in previous writings, but the relevance here is that many patients only improved and recovered when they eliminated milk (but not other dairy products) from their diets and took a medication that stimulated endogenous (one's own) endorphin production.

Then, a further nudge in the direction of this topic showed up about a month ago. I was asked to consider writing the foreword to a book called *Devil in the Milk*, written by agribusiness professor and farm-management consultant Keith Woodford. In this book Dr. Woodford lays out the theory that there is a devil in some of our milk, and this is something we need to come to grips with. Here is a brief synopsis of the main thesis of his book.

Milk consists of three parts: 1) butterfat, 2) whey and 3) milk solids. For this story we are only concerned about the milk solids part, as the fat and whey don't have this "devil." The milk solids part is composed of many different proteins, along with lactose and other sugars. It is the protein part of the solids we're interested in. One of these proteins is called casein, of which there are many different types, but the one casein we are interested in is the predominant protein called beta-casein.

All proteins are long chains of amino acids that have many "branches" coming off different parts of the main chain. Beta-casein is a chain of 229 amino acids with proline at postion 67—at least the proline is there in "old-fashioned" cows. These cows with proline at number 67 are called A2 cows, and are the older breeds of cows (such

I became convinced that a large part of the disease in this country is related to the way we handle, or rather mishandle, milk and milk products.

as Jerseys, Asian and African cows). Some five thousand years ago, a mutation occurred in this proline amino acid, converting it to histidine. Cows that have this mutated beta-casein are called A1 cows, which include more modern breeds like Holsteins.

The side chain that comes off amino acid 67 is called BCM 7. BCM 7 is a small protein (called a peptide) that is a very powerful opiate and which has some undesirable effects on animals and humans. What's important here is the fact that proline has a strong bond to BCM 7 which helps keep it from getting into the milk, so that essentially no BCM 7 is found in the urine, blood or GI tract of old-fashioned A2 cows.

On the other hand, histidine, the mutated protein, only weakly holds on to BCM 7, so it is liberated in the GI tract of animals and humans who drink A1 cow milk, and it is found in significant quantity in the blood and urine of these animals.

Woodford describes research showing that the opiate BCM 7 can cause neurological impairment in animals and people exposed to it, especially autistic and schizophrenic changes. BCM 7 interferes with the immune response, and injecting BCM 7 into animal models has been shown to provoke Type 1 diabetes. Dr. Woodford presents research showing a direct correlation between a population's exposure to A1 cow's milk and the incidence of auto-immune disease, heart disease (BCM 7 has a pro-inflammatory effect on the blood vessels), type-1 diabetes, autism, and schizophrenia. What really caught my eye is the finding that BCM 7 selectively binds to the epithelial cells in the mucous membranes (such as in the nose) and stimulates mucus secretion.

For reasons that are unclear historically, once this mutation occurred many thousands of years ago, the A1 beta-casein gene spread rapidly in many countries in the western world. Some have speculated that the reason for this wide spread of A1 cows is that the calves drinking A1 milk and exposed to the opiate BCM 7 are more docile than their traditional brethren (in effect, they were stoned). This theory is only speculation, of course. But what is true is that basically all American dairy cows have this mutated betacasein and are predominantly A1 cows.

Consider French cheese—mostly due to culinary snobbery, the French never accepted these A1 breeds of cow, claiming they have lousy milk. Voilà, the French enjoy superlative milk and cheese. Our issue in America is that we have the wrong cows. When you take A1 cow milk away, and stimulate our own endorphin production instead of via the toxic opiate BCM 7, some amazing health benefits ensue.

So what are we all to do with this knowledge? Does this mean no one should drink raw cow's milk in the U.S.? One saving grace, as expressed in *Devil in the Milk*, is that the absorption of BCM 7 is much lower in people with a healthy GI tract. This also parallels the ideas of the GAPS theory which expounds upon this topic. BCM 7 is also not found in goat's or sheep's milk, so these types of milk might be better tolerated by those with a compromised digestive system.

A final point: we now have one more thing to put on our activism to-do list. Dr. Woodford explains that it is fairly straightforward to switch a herd to become an all A2 herd. No genetic engineering is needed, no fancy tests, just one simple test of the beta-casein and it can be done via breeding with A2 sires and selective culling of A1 individuals. Hopefully, when this practice becomes widespread we will end up with a truly safe and healthy milk supply. Then maybe I should just change my name.

> Review by Tom Cowan (This review was first published at www.foufoldhealing.com)

This opiate BCM 7 has been shown to cause neurological impairment in animals and people exposed to it, especially autistic and schizophrenic changes.



There is a serious omission of celiac and Crohn's diseases and their causes, which are grain, gluten, and gliadin allergies, and which also lead to several types of cancers. *Understanding Nutrition 10th Edition* by Ellie Whitney, PhD, and Sharon Rady Rolfes, MS Thomson Wadsworth, 2005

With over a million copies sold, *Under*standing Nutrition casts a major influence on dieticians and nutritionists and, consequently, on the current dictates of dietary recommendations. The authors assure their readers that their work is based on the best science available, and that only a Registered Dietician (RD) can be relied upon for accurate nutrition information. It should be noted that an RD degree can be obtained by achieving a four-year degree in a related subject, and then passing an examination given by the American Dietetic Association.

Whitney and Rolfes intended to comprehensively cover all topics of nutrition, and they could have via *Understanding Nutrition*'s 990 big pages. Their writing is very clear, but contains internal inconsistencies. Many citations appear to support the authors' (and ADA's) positions. Kilocalories (kcal) are correctly used instead of calories. The authors provide advice for the "average" American for whom they have made tiny changes in intakes of many nutrients based on age, sex and pregnancy, but none for metabolic types, such as low-carbohydrate diets for people prone to diabetes, or special diets for those with most types of food allergies.

The authors make a serious omission of celiac and Crohn's diseases and their causes, which are grain, gluten, and gliadin allergies, and which also lead to several types of cancers. This neglect must be related to the authors' incessant promotion of whole grain foods, and carbohydrates in general, despite the fact that 10-50 percent of Americans suffer from grain allergies. The authors discuss high-fat intake as the purported cause of irritable bowel syndrome, while grains, damaged intestinal flora and stress are the more likely factors.

While "balanced diets" are lauded, the actual diets recommended are high in carbohydrates (300 grams per day, 60 percent of energy intake), tempered only to 50 percent for diabetics, despite extensive un-cited findings that serum glucose control, hyper- and hypoglycemia are uncontrollable with such diets. Type-2 diabetes is preventable and treatable with low-carbohydrate, high-fat diets, which are anathema to these authors. The authors' fear of fat, especially animal fat, comes from their belief that fat is supposedly atherogenic, one of the most pervasive messages in this book, and one which ignores evidence of superlative cardiac health in groups such as the Inuit, Maasai, and long-term (up to fifty years) use of high-animal fat diets by physicians.

The Spanish Paradox (among others) was the result of observations that between 1964 and 1991, per capita bread consumption in Spain fell by 55 percent, rice by 35 percent, and potato by 53 percent while beef and full-cream milk consumption doubled, poultry tripled, and pork intake quadrupled. During this same period heart disease deaths fell by 25 percent in men and 34 percent in women; blood pressures and stroke deaths also dropped. The Spanish now live two years longer than Americans.

Between 1959 and 2004, researchers published at least fifty articles seeking to prove a connection between fat intake or serum cholesterol levels and "heart disease" (CVD) in which none could find a positive correlation.

Among the chemistry errors found in *Understanding Nutrition* is the claim that loss of an electron by a stable molecule always creates a free radical, implicated in atherogenicity and carcinogenicity (page 389). In some contexts, electron loss leads to formation of a positive and negative ion pair, not a free radical, which is commonly formed when a hydrogen atom with its electron is removed. However, this is exactly what happens with polyunsaturated fatty acids;

they are more likely to form free radicals (and go rancid) than saturated or monounsaturated fats, making them less desirable.

The authors also ignore a well done study (Rose, 1965, *British Medical Journal*) that pitted animal fat against olive and corn oils. After two years, 75 percent of subjects consuming animal fats were free from major cardiac events, compared to 57 percent of those consuming olive oil, and 52 percent of those who consumed corn oil.

Cholesterol is such a bugaboo to Whitney and Rolfes that they describe not a single direct function of this vital nutrient in the body! Cell and organelle membrane illustrations show no cholesterol present, where, in fact, it is an essential structural component, as it also is in nerve synapses and other brain functions. The authors ignore the demonstrated association of low cholesterol levels with cancer, depression, violence, and all-cause mortality. Uffe Ravsnkov, MD, PhD, has analyzed many of the original studies and trials cited in Understanding Nutrition to try to find support for saturated fat or cholesterol's alleged deadly role in heart disease, with absolutely no success (The Cholesterol Myths). The original sources provided either no evidence to support these claims or directly contradicted them

Whitney and Rolfes even extol the Seven Countries Study of Ancel Keys, MD (p.174), long exposed as a fraud based on data suppression. In addition, the authors quote a publication of the National Heart, Lung and Blood Institute which claims that a 1 percent reduction of serum cholesterol level gives a 2 percent reduction in incidence of CVD (p.176), but a concurrent publication and many other studies have shown the opposite. In the elderly, those with higher cholesterol levels live the longest, as do those whose cholesterol levels do not drop on their own.

Understanding Nutrition strongly recom-

mends dietary fiber to prevent both CVD and colon cancer, despite the authors' admission that the research was contradictory (p. 124). A sixteen-year study on 89,000 women and a metaanalysis of seventeen studies showed no effect on CVD and 35-50 percent *increases* in colon cancer.

Salt limitation to less than six grams per day "to lower blood pressure" is advocated by the authors despite very persuasive evidence showing that when limiting salt to such an extent blood pressure will go down in only one-fifth of people, that it will go up in one-fifth, and that three-fifths will be almost unaffected by changing salt intake. Overall, in the gigantic Intersalt trial, there was little effect of salt on blood pressure, while increased potassium intake was hypotensive. In 2003, the Cochrane Collaboration agreed.

Physicians who ignore the recommendations of dietitians may be justified. Calls for courses in nutrition for physicians and other health providers, if based on books such as this, might not be worthwhile. Therefore, this book is not recommended, despite some valuable content.

The best single-volume (non-textbook) nutrition book that I know of is Barry Groves's *Trick* and *Treat: How "Healthy Eating" is Making Us Ill*, London, England: Hammersmith Press, 2008. See my Amazon.com review for more details.

I have found over one hundred thirty questionable statements in *Understanding Nutrition* other than those noted above. For a complete list, with references to back up my positions, e-mail me at kauffman37@yahoo.com.

Review by Joel M. Kauffman

Joel Kaufmann, PhD, is a Professor of Chemistry Emeritus with degrees from Philadelphia College of Pharmacy and Science and MIT. His experience includes about ten years of exploratory drug development and four years of research on synthesis of potential anticancer drugs under contract with the National Cancer Institute (NCI) and anti-radiation drugs for Walter Reed Army Medical Center. He has published about seventy peer-reviewed publications and has ten patents. Cholesterol is such a bugaboo to Whitney and Rolfes that they admit not a single direct function of this vital nutrient in the body!



Cure Tooth Decay By Ramiel Nagel CreateSpace, 2008

Seventeen years ago while having my teeth cleaned, I overheard the patient in the adjoining cubicle ask the dentist if there was anything she could do to keep her teeth from decaying. He emphatically stated, "No, there is nothing you can do. Your teeth are soft and are going to continue to decay for the rest of your life."

I imagine that the woman accepted the authority of the dentist, believing and trusting his training and experience and perhaps now has lost all her teeth and wears dentures. I do not imagine that she embarked on a journey to answer the question for herself, a process that is neither taught nor favorably looked upon because "Doctor knows best."

Back then, I could not have offered any advice but intuitively I felt there was something that could be done. A few years later, I encountered the incredible research of Dr. Weston Price. "Yes!" I said, "Physical demise and the ensuing suffering are not our fate. There is a way out."

At the Wise Traditions conference last November, I met Ramiel Nagel and purchased his hot-off-the-press book, Cure Tooth Decay. I had been working as a whole health educator at a biological dentistry practice in Massachusetts for two years, educating new patients about Whole Body DentistryTM and introducing them to the work of the Weston A. Price Foundation. I immediately felt this book would be perfect to add to the collection of recommended reading materials. Not only was I correct with this initial instinct, but I quickly realized a few pages into Ramiel's story that this book is about a journey of health in that health is ultimately a way of being in right relationships and being empowered, a journey I encourage all of my patients to embark on.

I incorporated both Ramiel's personal story and his explanation of tooth decay and dietary suggestions (which flowed perfectly from the story of Weston Price) into my sessions with patients, to encourage them to look for the answers to their own questions concerning their health and wellness and the dis-ease they may be experiencing. I watched patients smile as they "got it." No one had ever told them that tooth decay is a nutritional problem, and when the truth was presented they immediately grasped it. *Cure Tooth Decay* is an indispensible book for any holistic practice, medical or dental.

Ramiel's wake up call occurred when he and his partner Michelle faced rampant tooth decay in their one-year-old daughter. Ramiel wrote on August 18, 2008, "When my daughter's teeth began rapidly decaying around the age of one I did not know what to do, or to whom to turn. Eventually I resolved to focus my energy and intention on the goal of discovering why her teeth were decaying and how to stop it. This book is a manifestation of my family's triumph against dental caries. It brings me great joy every time a parent writes to inform me that their young child who has been suffering from tooth decay, has just been spared costly and painful dental surgery from reading my book. The majority of us can take effective steps to avoid the dentist's chair and obtain lasting dental health."

The American Dental Association states that bacteria feed on sugars left on our teeth from eating foods such as milk, raisins, cakes or candy, producing acids that destroy tooth enamel and over time result in tooth decay. By contrast, *Cure Tooth Decay* introduces us to Weston Price and Melvin Page, dentists whose work helps us understand the true nature of tooth decay.

Dr. Page's discovery is that tooth decay is the result of a biochemical disturbance of the calcium-phosphorous ratio. This imbalance reverses the flow of nutrients through the three miles

Ramiel's wake up call occurred when he and his partner Michelle faced rampant tooth decay in their one-year-old daughter.

per tooth of microscopic dental tubules. When minerals are taken from the tooth, "it is quite possible that the body is sacrificing the minerals in the teeth for use by the vital organs." "Lack of adequate nutrition causes physical degeneration and tooth decay is the result of physical degeneration." With this understanding, different dietary choices can be made.

Ramiel evaluates all aspects of possible dental interventions, including root canals, amalgam fillings, fluoride, sealants, whitening, x-rays, conventional vs. biological dentistry and dental visits in general. He mentions that he still has mercury amalgam fillings following the advice of "a wise person who suggested that he not get the fillings replaced". One of the biological dentists I work with believes that this is not the best health advice and that all mercury-based fillings and other dental metals such as metal with porcelain or gold crowns should be replaced with less toxic composite or pure porcelain crowns. I personally like what Ramiel says, "Fillings, regardless of the material used, can block the energy currents in the tooth". Not everyone gets ill from amalgam fillings nor does their replacement always make people who are ill become well. "Again, this demonstrates how the most ideal solution to cavities is to heal and prevent them with nutrition."

The gift of *Cure Tooth Decay* is that it serves

as an invitation. It is not a prescription. One could follow all the dietary protocols to the letter but not have the results that Ramiel and his family experienced because they did not make it their own or see the bigger picture of health and dis-ease. "The revealing findings of Dr. Price, along with his telling photographs, bring home the important fact that our modern foods and lifestyle are a primary cause of disease."

Dr. Price wrote, "One immediately wonders if there is not something in the life-giving vitamins and minerals of the food that builds not only great physical structures within which their souls reside, but builds minds and hearts capable of a higher type of manhood in which the material values of life are made secondary to individual character."

According to Ramiel, "the law of personal responsibility is vital to obtaining increasing health. I have found that healing cavities is not just about the physical process of substituting nutrient-devoid foods with their nutrient-rich alternatives. It is an opening up to life itself. It is a reaching out and a growing. It is a small death of the old ways of being. Those who have successfully conquered their decay have embraced the principles of this book and taken it upon themselves to heal. They looked within, trusted themselves, and in some ways acted out of the involuntary consciousness that instructs and guides us. I urge you to tap into this infinite but dormant power. . . I encourage you to take everything I have written in this book as a pointer to your inner knowing and not as a replacement for it."

How I wish that I could have jumped out of the dental chair seventeen years ago and handed the woman yearning to stop her teeth from decaying a copy of *Cure Tooth Decay*. I like to believe she would have accepted Ramiel's invitation and changed her fate. Human beings are not designed to degenerate but to live long healthy lives in wonderment of the universe. Thank you, Ramiel, for *Cure Tooth Decay*, for helping us on the journey.

TENDER GRASSFED MEAT: TRADITIONAL WAYS TO COOK HEALTHY MEAT Stanley A. Fishman, Alanstar Games, 2009

Neither fat nor flavorings are spared in this collection of delicious recipes aimed at putting grass-fed meat back on our tables. Fishman includes recipes for bison, lamb and organ meats, always with a view to making the meat tender and tasty. Detailed advice on marinades, aging for tenderness, cooking temperatures, use of bones, gristle and scraps in broth, and the use of innards in sausages and liverwurst make this book a must for serious—and not-so-serious—cooks. I especially liked the recipe for meatloaf using liver sausage from U.S. Wellness Meats—a wonderfully sneaky way to get liver into your family—and his use of fish sauce as a substitute for soy sauce. His Nomad's Broth, which uses bones from several animals, is a great variation on traditional stock.

The chapter on steak alone is worth the price of this book—so many variations, including Irish Whiskey Steak, Scottish steak and steak in Chinese and French styles. A Thumb's Up for this one—happy eating. Review by Sally Fallon Morell



Real Food for Mother and Baby The Fertility Diet, Eating for Two, and Baby's First Foods By Nina Planck Bloomsbury, 2009

Nina Planck's landmark book, Real Food: What to Eat and Why, was a bold and enthusiastic promotion of traditional, old-fashioned foods, and especially of long-revered animal fats such as butter and lard. Since the birth of her first child, Planck has now followed up with Real Food for Mother and Baby and, as readers might expect, this book is in part a reprise of many of the key nutrition discussions of her earlier work, with a particular focus on fertility and pregnancy diets. At first glance Planck's advice seems comprehensive and sound; her upbeat reassurances beam from the pages. She uses all the right words; she invokes the name of Weston Price. Soon though, the reader finds that Planck did not follow these guidelines; she ends up reducing traditional dietary recommendations to such a degree that these shortcuts sabotage the very wisdom that informed her guidelines in the first place. Her predilection for breezy simplification results in serious misrepresentation and confusion.

For instance, "The Fertility Diet" chapter has plenty of good, detailed advice for both men and women who wish to conceive. "If you're ready to have a baby, change your diet first," Planck counsels. Be an omnivore for access to diverse nutrients; get those fat-soluble vitamins by eating the right fatty foods; indulge in plenty of clean seafood; and avoid simple carbohydrates in their many industrial guises. For those unsure of their diet, however, Planck falls back to recommending a basic prenatal multivitamin and taking extra folic acid rather than emphasizeing the especially important foods that provide these nutrients: "If you eat plenty of real food, that's all you need to do [take a multivitamin plus folic acid]. If you don't, I suggest a little cod liver oil for vitamins A and D. If you're surprised to find yourself pregnant, don't fret. Just start eating well. Most mothers and babies do just fine."

Planck reduces her fertility advice to one short paragraph called "Five Easy Pieces,"—a simplified list of only five foods: "For vitamins A, D, and K2, drink whole milk. For vitamin E, be generous with extra-virgin olive oil. For folate, have a green salad. For iodine, eat wild salmon, or any seafood. For zinc and vitamin B12, any red meat will do. It's just plain real food, and substituting other real foods is fine."

Planck's recommendation for whole milk to provide vitamins A, D and K, has the effect of obscuring and diminishing the conclusions of Dr. Price. Whole milk will provide small amounts of vitamins A, D and K, if-very big if-the cows are eating rapidly growing green grass in the spring and fall; a container of whole milk from the grocery store is unlikely to contain vitamins A and K₂, and the vitamin D will have been added. The store milk is likely pasteurized or ultrapasteurized, a process that compromises the lactoglobulins that help the body absorb vitamins A and D. In any event, Dr. Price never recommended whole milk as a good source of A, D and K₂ (his Activator X). Raw whole milk from pasture-fed cows is an excellent source of calcium, minerals and a range of other nutrients, but it cannot supply adequate fat-soluble activators to ensure successful reproduction and optimal development in the child-you need cod liver oil, organ meats, certain seafoods and plenty of grass-fed butter for that. So the devil is in the details, which Planck cheerfully glosses over.

Thus Planck's Panglossian assurances regarding dietary requirements and women's pregnancy and birth outcomes are blindly optimistic, amounting to a kind of deception. The inescapable reality in America today is that we have a crisis in reproductive outcomes directly

The message remains that preparing for childbirth is an undertaking of the highest commitment and dedication.

affected by our generally deplorable diet. Planck is carefree, however: "My own fertility diet was basic. I took extra folic acid and a little cod liver oil... Here and there my diary says 'bison heart' or some other obscure traditional food, but I can assure you those meals were rare. Most American women get pregnant without eating bison heart." While that last statement may be strictly true, with current U.S. infertility rates reported at about 25 percent, serious problems like these need accurate advice and serious solutions.

Planck introduces the research of Weston Price, and particularly his observations of the nutrition practices of the native peoples he visited who exhibited superb health and reproductive vigor. Unlike Planck, Price was humbled by the great care and attention these people devoted to nurturing the next generation-not just choosing any old milk or meat, but going to great lengths to procure special foods, especially for mothersto-be. And of course these people were already consuming nothing but nutritious real foods, as well as drinking clean water and breathing clean air in undefiled environments. Nonetheless, their native wisdom demanded that young men and women preparing for marriage, and that pregnant women, new mothers and young children should regularly receive still more of these especially important foods to ensure perfect health for future generations. This philosophy of nurturance (not to mention the long view on our dependence on one another) sounds extraordinary to many today, but the message remains that preparing for childbirth is an undertaking of the highest commitment and dedication.

By stark contrast, Planck was fourteen when she decided to become a vegan in order to lose weight. At precisely the age when young women in the traditional groups Price studied were receiving extra nutrition for their reproductive health, Planck embarked on a voluntary exile into a nutritional wasteland that lasted about a decade. Even after she transitioned from vegan to vegetarian in order to eat fat-free yogurt, her consumption of fat was never more than a trickle of olive oil, and her diet never included animal fats. It was during her stay in London in her twenties and her work in establishing farmers' markets there that she found herself in the midst of a cornucopia of real foods and finally came to her senses. Nevertheless, the dark legacy of those critically vulnerable years in the nutritional desert is worrying. Although Planck never reflected on the possible damage caused by those years of sub-optimal nutrition, astute readers ought to take heed when regarding their own reproductive health history. Those who have been vegans or lowfat vegetarians need to follow a diet of truly nutrient-dense foods, with keen attention to detail, for considerable time before getting pregnant.

Planck addresses the question of environmental pollutants and their effects on the developing fetus, recalling with chagrin the herbicides her parents used on their farm during her childhood. Of course, farm children bear the greatest risk of accumulated chemical exposures and later effects. Rather than focus about what might be residing in her body and how to find dietary protection now that she was newly pregnant, Planck decided instead to think positively and continue on as before. Planck's situation ought to at least provide a warning to other women who have been exposed to chemicals in their youth: they will need even more care with their preconception diet in order to replenish and protect themselves.

EATING FOR TWO

Right off the bat we learn that Planck is alarmed by how much food she is asked to eat to satisfy most pregnancy dietary advice. With no increase in appetite, although with a great increase in fatigue, she becomes peevish and impatient with recommendations that seem overwhelming to her. Unfortunately, she has forgotten to heed her own advice to change her diet before becoming pregnant.

She reproduces the list of fats and proteins recommended by the WAPF that she typed up for herself and taped to her refrigerator. "Then I tried the diet," she continues. "Impossible. I couldn't even manage it for one full day." The diet that has helped hundreds of mothers give birth to vibrantly healthy babies gets no more than one day's effort. She doesn't really like beef and lamb, and no matter how hard she tries, can't find a way to use lard daily. And there was just too much food.

Turning next to Adelle Davis's *Let's Have Healthy Children*, Planck found the advice more to her liking: "Davis emphasized the elements you needed to build a baby: vitamins, protein, calcium. She suggested you fill in the rest, according to taste and hunger: fruit, brown rice, whole wheat toast, chocolate. (True, she never mentioned chocolate, but women who eat

chocolate daily when they're pregnant have babies who smile more.)"

Planck crankily tries to be the Good Eater: "For a few weeks, I dutifully ate liver twice a week. To make room for all the beef, chicken, fish, eggs, cheese, milk and butter, I reluctantly cut way back on dark chocolate (to a couple of squares), fresh fruit (from five or six pieces down to two or three), and homemade ice cream, now with a mere smidgen of honey or maple syrup. . . Still, I wasn't happy. Meals were not a pleasure."

It seems to me odd that Planck should be suffering alone with her mealtime quandaries—where was the baby's father, or Planck's mother or aunt or friends? How about some help from our local WAPF chapter? Especially in the days when all she wanted to do was sleep, couldn't someone else provide tempting, nutrition-packed meals each day? Planck quotes Dr. Price, who wrote of tribal leaders in the Fiji Islands who assigned teenage boys the task of seeking special seafood daily for the expectant mothers to nourish their children. Pregnant women need support and nourishment from their "tribe."

Instead, Planck plugs on alone and once again comes up with a simplified eating approach to the forty weeks of pregnancy, dividing the period into three "acts." Each "act" involves the development of a different system of the baby's organism, and Planck highlights the foods that are particularly necessary at those times: "As long as I was taking cod liver oil, I realized, I didn't need to eat liver twice a week for vitamins A and D. As long as I had a little grass-fed butter oil...I didn't need to worry if there was enough butter on my eggs. I could probably skip the extra lard altogether. (Hurrah!) When I took fish oil, I didn't worry if I wasn't hungry for salmon." So Planck herself was not relying on milk for vitamins A and D. But she does not say which brand or how much—a critical omission.

BIRTH DAY

A home-born child herself, Planck naturally planned to deliver her own baby at home. However, after laboring without progress and in constant pain for twenty-four hours, Planck's midwife calls off the homebirth and drives her to the backup hospital. The baby is in a difficult posterior position, and Planck's labor remains stalled. Per routine hospital protocols, she is moved along the slow conveyor belt that ends in cesarean section. Those grueling hours in the hospital which finally result in the delivery of baby Julian are painful to read; Planck's misery was complete.

Unsurprisingly, Planck finds herself weeping daily for a month after the birth. She insists some of this is normal as postnatal hormones readjust—in her own case she must also work the drugs out of her system, and add in a recovery period for major surgery along with her many emotions. While mentioning almost in passing that being well-fed can prevent "mild baby blues" she advises mothers whose depression is severe enough to interfere with caring for their babies that anti-depressant medication may be in order, even if they are breastfeeding. Wouldn't additional cod liver oil, egg yolks and bone broths be a better solution?

Crushed that her hopes for a peaceful home delivery were dashed, Planck asks, "Why me? Why was my baby the one in this rare position, the one in need of rescue?" No one can presume to know the answer for certain, but we ought to remember that ease of childbirth was one of the key markers of reproductive health noted by Dr. Price in the healthy groups he studied. In the U.S. today, the cesarean rate is over 30 percent, and even higher in teaching hospitals. Without this rescue surgery, how many American mothers and infants simply would not survive the otherwise normal human function of birth?

NURSING

Planck introduces her chapter on breastfeeding with renewed energy and optimism—after a brief trial and error period while she and Julian get the hang of it, nursing is something she finds she does very well. Planck includes lots of information about the components of breast milk—she several times has her own milk tested for DHA content—so important for baby's developing brain—and finds it consistently high. She includes an illuminating section on the difference between "cache or carry" mammals, which elegantly explains why human mothers and babies do best in close body contact day and night to facilitate the almost constant nursing helpless human babies require.

Detailed nursing techniques, a list of FAQs on breastfeeding, and troubleshooting advice are all sensible and useful. The difficult topic of what to do if you cannot nurse your baby introduces the pros and cons of wet-nurse as Planck's first choice, human milk bank as second, and home-

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made formula (WAPF's milk and meat formulas are referenced) third, with powdered, low-iron milk formula as a distant fourth, when there is truly no other choice.

FIRST FOODS

For the most part, Planck uses a "real foods" approach to feeding baby Julian, and she relies on it again for moral support in her own clashes with the pediatrician over Julian's weight, considered too low at one point, and iron levels, also considered low. The inclusion of these run-ins may be useful for new parents unaccustomed to challenging doctor-sanctioned standards of healthcare for their children, but low weight and low iron levels should be taken seriously as warning bells to make improvements in the diet.

For try as she may to prevent it, Planck allows sugar and white flour products to creep into Julian's diet—with the inevitable tears from both when Julian demands bread, chocolate and crackers. Part of the difficulty no doubt comes from Planck's frequent cross-country travel—starting when Julian is only three weeks old—and continuing regularly with him in tow on book tours. All that disruptive travel for an infant makes me wince, but I suppose I'm hopelessly anachronistic. "Hats off" to mothers who manage to travel with beef stew and raw milk for their children, she says, but admits she can't pull it off.

I was rather surprised that even simpler conveniences for her child seemed too much bother: "Most books will tell you to purée meat in water, stock, or milk and spoon-feed your baby, which is dandy, but it seemed like a lot of work to me. Julian had meat on the bone or in chunks from the start." The digestive capacities of a child take years to mature, and it is a great help and kindness to at least mince meat in tasty, digestion-enhancing bone broth for him.

Where Planck does become diehard about food selections is in her insistence on lots of fruit

and vegetables every day. While giving credence to the superiority of fully ripe, locally grown, pesticide-free produce, she insists that it's still better to eat plenty of fruit and vegetables every single day, regardless of their provenance. "If your fridge isn't packed with fresh produce, you won't have a couple of vegetables at every meal. I'd rather throw away old vegetables—and often do—than do without at supper time. The same goes with fruit. . . In deepest winter, when local produce is scarce and expensive here in New York City, I go directly to the greengrocer, head held high, to buy greens. I have no idea what the carbon footprint of these choices is. But I know the price and convenience calculation without thinking."

I hate to say it, but if you *do* think about it, imported greens in winter are for the most part only exercise for your jaws and window dressing for your dinner plate. Most vegetables rapidly lose what uncertain nutrients they have starting minutes after they have been harvested, whether they are organic or not. They won't gain anything aging in your refrigerator, either. Conventionally grown produce is little more than water, fiber and traces of pesticides and rocket fuel.

A family is more securely provisioned with a freezer full of raw June butter, liver and lard from autumn-harvested animals, and soup bones for the stock pot to last over the winter, and a pantry filled with raw cheese and lacto-fermented organic vegetables. These foods carry the nutrients of the sun-filled seasons to us in deepest winter, in more reliable form and denser concentration. I wish that Planck could have worked up some real passion insisting on plenty of these foods for pregnant women.

IN CONCLUSION

Real Food for Mother and Baby contains a good deal of useful, easily accessible information not often found in the usual pregnancy preparation books currently available. Unfortunately, by blithely simplifying that advice to meet modern-day circumstances, Planck's program falsifies the message of Dr. Price, cannot claim to best nourish pregnant women or their children, and in fact shortchanges them of a diet rich in essential nutrients. The truth remains that there are truly no short cuts to this success; most modern couples today will need extra time and extra nutrition—and clear, accurate explanations—to best prepare for parenthood and ensure that their baby enjoys perfect physical form and optimal health. The stakes are very high and the message needs to be very clear and more serious.

Review by Katherine Czapp



Ten Acres is Enough: How a Very Small Farm Can Keep a Very Large Family Edmund Morris Review Press, 2009

First published in 1867, this reprint offers a fascinating review of farming techniques in the 19th century. The author, Edmund Morris, was the Joel Salatin of his day, an ebullient innovator who combined a reverence for nature with a keen eye on the bottom line, all written up in a witty aphoristic style. My favorite: "The fragrance of a fat and ample manure heap is as appealing to the nostrils of a good farmer, as the fumes of the tavern are notoriously attractive to those of a poor one."

Morris purchases a run-down ten-acre farm in semi-rural New Jersey, as close as possible to a town for access to stores and a social life, and also within striking distance of a newly built railroad line connecting New York with Philadelphia and Washington, DC. Thus he has a ready market for the raspberries, blackberries, strawberries, peaches, tomatoes and cabbages that he produces. The financial details he provides are fascinating: many famers had an income of over five hundred dollars per year selling produce to the big cities from land that cost one hundred to three hundred dollars to purchase. Morris earns a very high price by getting his fruit to market two weeks earlier than other farmers; when market saturation drops the price too low, he keeps the produce for family use.

What did farmers use before the advent of commerical fertilizer? They used manure and lots of it. Morris is fixated on manure, which he purchases in wagon loads from a nearby city. A big fan of tilling, he tills deep and manures heavily. In addition, after planting, he applies liquid manure. After purchasing his land for five hundred dollars, he then spends two hundred dollars on manure—a huge sum when compared to the cost of the land. He spends these sums for several years until he realizes he can get manure for free by keeping cows over the winter. He purchases ten cows in the spring, keeps them in the barnyard throughout the year, feeds them on green cuttings, garden waste and hay, and sells them for a small profit early in the year. Meanwhile he gathers up all the manure for his crops—with no more expensive outlay. He also composts all the leaves he can get his hands on in the fall.

His other fertilizer is ashes, which he saves up throughout the year. He plants each fruit tree in a hole filled with ashes, and reapplies ashes to the roots every year. When the peaches set on the branch, he removes two-thirds of them so that the remaining have plenty of nutrients to grow big and sweet.

For insect protection, the root balls of the tree get an application of tar every spring; Morris also encourages the population of birds with numerous bird boxes. He considers the loss of a small amount of grain or fruit to the birds a just compensation for all the insects they eat. "A certain insect was found to lay 2,000 eggs, but a single tomtit was found to eat 200,000 eggs a year. A swallow devours about 543 insects a day, eggs and all."

Morris' other obsession is weeds, to which he has "an almost religious aversion." During the first few years, he and his family and hired hand spend every free hour cultivating and weeding. Over time this hard work pays off and the weeds diminish. Using manure from his own cows, fed produce and greens before they have gone to seed, helps immeasurably, as does the planting of cover crops such as purslane.

The reward for all this hard work is steady profit and an enjoyable life in the country. It's much harder to make as much money in agriculture today, but there is a great deal in this little book to provide inspiration to modern farmers. Read and enjoy!

Fdmund Morris, was the Joel Salatin of his day, an ebullient innovator who combined a reverence for nature with a keen eye on the bottom line, all written up in a witty aphoristic style.

Growing Wise Kids DOWN AND DIRTY WITH KIDS IN THE KITCHEN By Jen Allbritton, CN

Instilling excitement about food early in your child's life is a true gift, a lesson that will reverberate for generations. Fortunately, kids notice where we put our time, resources and attention, which will happily work to the advantage of those who live a traditional, real food lifestyle. time laughing, enjoying each other and creating memories. The second benefit is fostering a love of good food and an understanding of how to truly properly nourish our bodies.

There is no better time than right in the midst of tearing open the peel of a tangerine or drop-

A quote by author Wilfred A. Peterson says it all, "Our children are watching us live, and what we are shouts louder than anything we can say."

Nevertheless, we need to focus on how we make food come alive to our children. How can we make it more inviting and fun to play in the kitchen with us, or if



My friend's daughter Scout wears protective gear to help cut down on tears when chopping onions in the kitchen.

ping a chicken foot into a bath of stock to discuss the bounty of nutrition it holds. Keep a quick reference resource close by that details the nutrient profile of different foods so you can quickly explain why a particular nutrient is vital to health. For example, The Whole

old enough, *for* us? This piece will touch on different ideas to inspire your children, no matter what age, to desire to get down and dirty in the kitchen and, maybe even, encourage an interest in better nourishing themselves.

PLUSES OF INCLUDING KIDS IN FOOD ACTIVITIES

Think of your kitchen as a play area and classroom, where children learn a treasure trove of lessons, both academic and character building. The best part of cooking together is spending *Foods Companion* by Dianne Onstad or *The New Whole Foods Encyclopedia* by Rebecca Wood.

You might want to explain your point in more personal terms. Let's say little Robby wants to be tall like Michael Jordan and Suzie wants silkier hair. Tell them how nutrition can help, from the inside out! For example, "The sardines mixed in our salmon cakes are packed with protein to help build muscle, and B_{12} to keep your nervous system firing strong so that you can grow, grow and grow!" or "This yummy trail mix loaded Our children are watching us live, and what we are shouts louder than anything we can say. with almonds and sunflower seeds dishes up a good amount of vitamin E and protein, which hair needs to be shiny and strong."

Other lessons found in the kitchen include:

- Exploring and creativity.
- Persistence—not every recipe turns out perfectly the first time, so try, try and try again.
- Confidence-building by seeing and tasting a job well done.
- Reading and following recipes works on math (measurements and fractions) and science skills for elementary school-aged children. Have a chalk or white board ready for your work.
- Making cultural dishes from around the world opens their eyes to geography and languages (the bunny trails that can be followed with this line of questioning are innumerable).
- Learning to clean up. No kitchen job is complete without working on one's cleaning skills! And learning to leave a kitchen cleaner than you find it is a lesson that will build responsibility and take your children far.
- Strengthening vocabulary skills by using the proper names for kitchen gadgets and cooking techniques.
- Enhancing fine motor skills in preschool-aged children with stirring, pouring, measuring, pounding, rolling, etc.
- Developing skills to take on to life outside the home. This may even contribute to the family by cooking full or partial meals.

HELPING CHILDREN FEEL INVESTED

Children become invested in a meal when they are involved in any and all aspects of its creation, starting with where the food originated. Ideally, kids should experience their food up close, right from its source. Visit farms to feel the wet nose of a cow that gives your family milk, and dig around in the dirt that grows your carrots and potatoes.

Involving the family in a CSA (Community Supported Agriculture) program is one of the best ways to do this (see my article titled "Getting the Goods" at www.westonaprice.org for more details on CSAs). CSA family farms often welcome members to participate in their day-today operations. Research confirms what so many home gardeners already know: being out in the sun, growing your own food elicits a deep satisfaction and desire to eat fresh, colorful produce. Spending as little as thirty minutes per week tending a garden will encourage children to taste more vegetables. Do what works for your family—sometimes a full garden is impractical, so consider trying your green thumb at an herb garden in the window sill or sprouts on the kitchen counter. Also visit a local orchard or berry farm (see www.localharvest.org for resources in your area) to pick food to bring home or go on a tour of your neighborhood botanical gardens.

Another way to connect to the source of your food is to visit farmers' markets and become friendly with the local chemical-free farmers by asking questions—lots of questions! Finally, make grocery shopping a family experience. Let the kids peer into the produce section and ask questions, develop a friendship with the produce manager so they feel comfortable asking what makes one apple different from another or why some carrots are yellow and others orange. Just as with helping in the kitchen, adding children to the mix may lengthen your shopping experience and make for a tiny bit more work, but remember to look at the bigger picture: we are building their food philosophy that will serve them for the rest of their lives.

Each child is unique and some personalities thrive on ownership more than others, but everyone likes to feel accomplished. For my little guy, when I put him "in charge" of a task, he takes it very seriously and follows through with his head held high! While kids are young, consider giving them tasks involving meal preparation or mealtime in some way. Here are some quick ideas to get you started:

- Set the table.
- Grease pans.
- Take "orders" for building a salad (give them a piece of paper or chalk board and have them mark off who wants avocado or who doesn't want tomatoes in their side dish).
- Research—if children are old enough to work the computer, put them on a quest to find out all they can about the history of the meal. Where did a certain ingredient come from originally? Is it grown seasonally in your area of the world? Where did the recipe you are making originate?
- Clean the table and put away dishes. (Even the smallest member of the family can put clean silverware away or help clear the table.)
- Wash vegetables.
- Knead dough.
- Stir batter.
- Portion out dough or fruit with a melon scooper.
- Shake a plastic bag full of ingredients to mix.

ENCOURAGING EXCITEMENT ABOUT MEALTIME

First and foremost, meal times need to be pleasant, relaxing, unhurried and joyful. Talk about positive things; ask questions that will end in happy conversations and tell a joke or two. You can go the extra mile with special centerpieces (kid-created, preferably), soft music, theme-based tablecloth or dishes—let your imagination soar. Below are a few ways to add that extra little zing to mealtime.

Celebrate "Fundays": Celebrating the unusual keeps the family on their toes and, who knows, may even start a new yearly tradition! Try celebrating these unique "holidays":

- Elvis's birthday, January 8. Make fried peanut butter and banana sandwiches (his favorite), stick in an Elvis CD and have everyone dance around the house in their "blue suede shoes."
- **Dr. Seuss's birthday, March 2, 1904.** Read *Green Eggs and Ham* and make "green" scrambled eggs by blending in a little steamed spinach or a dash of spirulina (a green-blue algae).
- Ice Cream Day, third Sunday in July. Whip up some homemade ice cream from nutrient-rich raw cream, real maple syrup and vanilla and go gun-ho with all the toppings!
- **Plan a Theme Night:** You can take these ideas as far as you want, but if you get the kids involved, watch out!
- **Toothpick night:** Everything served is toothpick-able, such as diced meats, cheeses, olives, cherry tomatoes and chopped fruit.
- **Restaurant night:** Create the ambiance of a nice restaurant with candles, soft music and tablecloths. Give each family member a role to play, such as waiter, chef, hostess or guest.
- Alphabet food night: Pick a letter of the alphabet and serve foods that start with that letter. For example, serve foods that begin with the letter B, such as beef patties with bacon, broccoli and banana ice cream. How about the letter F for fish fajitas, home fries and fruit salad.

Make weekly meal planning a family event: Giving kids a chance to vote for meals throughout the week sends a message of cooperation. Let them pore over your stash of cookbooks, check out some cookbooks especially designed for kids from the library or watch a cooking show on TV together for ideas. Just be prepared to make real food, traditional prep adjustments and substitutions.

USE MOVIES AND BOOKS TO YOUR ADVANTAGE

Watch movies or read books that inspire, or scare! "Super Size Me" is a unique look behind America's obsession with fast food and the consequences of a fast-food diet on the human body.

"The Future of Food" offers an in-depth investigation into the disturbing truth behind the unlabeled, patented, genetically engineered foods. Try PBS Frontline's "Modern Meat," an in-depth investigation of the world of the modern American meat industry. Or view the new movie "Food, Inc.," a compelling unveiling of our nation's food industry. Watch one or all of these movies as a family, assign an essay or further research to make the information real to them.

A page-turner book to recommend to older children is *Fast Food Nation* and *Chew on This*, both by Eric Schlosser. *Chew on This* is a re-written *Fast Food Nation* targeted to a younger audience between ages nine and fifteen. Both books detail the history of fast food as well as the hair-raising,

stomach-turning secrets hidden behind closed doors. Some teens may be drawn to Barbara Kingsolver's work *Animal, Vegetable, Miracle: A Year of Food Life*, chronicling the true story of her family's move to a farm in rural Virginia to become locavores (those who eat only locally grown foods) for one year.

Picture Books Galore! We love read-aloud picture books in our home—fun stories, beautiful illustrations, sweet endings. According to Joseph Addison, an early eighteenth century English essayist and poet, "Reading is to the mind what exercise is to the body."

There are many books that incorporate food in a fun way. Even if a child is outside the age range, there is still fun to be had by all. Below is just a sampling of our family's favorites.

- Too Many Pumpkins by Linda White, ages four to eight. A perfect fall and winter read, this book tells the story of Rebecca Estelle, who had to eat an enormous amount of pumpkins when she was growing up. So she vows to never eat pumpkin again. But something happens that makes her open her heart to her neighbors with the help of this most disliked squash. Get ready to make anything pumpkin—pudding, custard, pie, soup or ice cream.
- Johnny Appleseed by Reeve Lindbergh, ages four to nine. There are many books about Jon Chapman, better known as Johnny Appleseed, but this one has such wonderful flow and exquisite folk art that it makes you want not only to make anything apple (baked, dried, pie, fritters), but also to go plant some apples trees of your own.
- *Blueberry Mouse* by Alice Low, ages four to eight. Blueberry Mouse is completely blue, right down to her eyelashes. She loves blueberries so much that she lives in a blueberry pie. The only thing is, she eats right through it! Make something with blueberries (sauce for pancakes, smoothies, popsicles, muffins) and help the kids come up with their own catchy song, just like in Blueberry Mouse.
- *Little House on the Prairie* by Laura Ingalls Wilder, ages nine to twelve. This book, along with the others of this now classic series, has captivated boys and girls alike for genera-

Make grocery shopping a family experience.

tions. Reliving the Ingalls' experiences in the 1800s frontier is thrilling for children. What better way to experience their way of life than to prepare food the way they did on their little plot of land in the Big Woods of Wisconsin or on their later homesteads further west. Johnny cakes or beet pickles are just a few items of their normal fare. Check out Barbara M. Walker's book *The Little House Cookbook* for ideas while reading about the Ingalls' adventures.

Ask your librarian for more ideas. There is a plethora of brilliantly written books featuring fun foods and families around the world eating their traditional fare. There are always interesting facts to be learned and bunny-trails to be followed. Now you are prepared to create your own recipe for getting down and dirty in the kitchen with your kids. First, start with a good base of personal excitement and investment in good food and nourishment, sprinkle in some well-planned activities to enhance learning and bake it daily for a lifelong love of good, real, wholesome food. Happy cooking with the kiddos!

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: jen@nourishingconnections.org.

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28-page Dietary Guidelines Booklets in Spanish are \$1 each (includes shipping & handling) Flyers: Real Milk Soy Alert! How to Protect Yourself Against Cancer with Food All About Trans Fats Cow-Share Programs Myths & Truths About Cholesterol NEW FLYER! Cod Liver Oll Suggested donation for flyers is 25 cents each (includes shipping & handling), 15 cents each for 100 or more	Heart Disease Issue: What Causes Heart Disease? Benefits of High Cholesterol; Oiling of America and more				
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Payment by check, Visa or Mastercard. Make checks payable to The Weston A. Price Foundation.



The Weston A. Price Foundation has filed a lawsuit in the state of Illinois, seeking a permanent injunction against the serving of soy-based prison meals. In a recent press release on the case (westonaprice.org/press/press-13jul09. html), we noted that if the state succeeds in continuing the high level of soy protein in prison meals, other institutions will be next, including schools for young children. In fact, the state of Illinois has a pilot program to increase the use of soy protein in several school district lunch programs. This article is based on a letter we received in response to our press release.

The threat of children being the targets for meals of toxic soybeans is not at all farfetched. In fact, this has already been happening for years in Argentina through soy food aid. Rural populations, whose traditional food crops and grass-fed cattle have been displaced to make way for the cultivation of GMO soybeans, have now no choice but to eat soybeans. Ironically, the large monocultures of soybeans, generously sprayed with the herbicide glyphosate (Round-Up), grown for export to feed the pigs, cows and poultry in Europe and China, are now proposed as a solution to fight malnutrition for poor Argentineans. Even churches, which should be speaking out about the problem of soybeans in Latin America, are not saying anything because

some are accepting donations of soy to distribute to their congregations.

It is important to be concerned about whether eating GMO soybeans or eating soybeans at all is good for our health or not. Soybeans themselves, however, are not the culprit. We should get to the root of why there is this push to replace our customary foods with soybean-based products and look at the other issues around growing soybeans, particularly GMO soybeans.

If there is such a push it is because someone is making a lot of money selling soybeans. Multinational companies like Monsanto, Sygenta (which produces the seed and chemicals for GMO soybeans), Cargill and companies that ship the beans have a strategic plan, which they have been implementing since 2006, to turn Latin America into a large soybean monoculture. Little by little, through aggressive incentive policies, not devoid of violence, they have been spreading the crop in Argentina, Uruguay, Paraguay, Brazil and Bolivia, placing soybean processing plants in strategic ports for export.

The interest of these companies is not to solve world hunger or protect the environment but to reap great profits. Among the consequences of GMO soybeans in Latin America are displacement of small farmers, as they cannot survive in the middle of large monocultures of soybeans sprayed with glyphosate from the air,



Traditional soybeans contain a variety of toxins that can slowly poison those that eat even small amounts of it on a regular basis. Genetically engineered (GM) soy now appears to be much, much worse. According to Ohio allergist Dr. John Boyles, "I used to test for soy allergies all the time, but now that soy is genetically engineered, it is so dangerous that I tell people never to eat it." GM soy contains two new proteins with allergenic properties and has seven times more trypsin inhibitor, a known soy allergen. When GM soy was fed to female rats, most of their babies died within three weeks, compared to a 10 percent death rate among the control group fed natural soy. The GM-fed babies were also smaller and had fertility problems. When male rats were fed GM soy, their testicles actually changed color, from the normal pink to dark blue. Mice fed GM soy had altered young sperm (www.responsibletechnology.org, May 2009).



and direct glyphosate poisoning of children and adults from the sprays

Apart from destroying rural communities and poisoning the soil and water, the soy expansion is destroying fragile ecosystems in Latin America. It is destroying the mollisols of Argentina, which were among the richest soils in the world, and the Chaco forest, which used to be known as "El Impenetrable," making it no longer impenetrable. The Amazonian forest in Brazil and Bolivia is turning into the Amasoja instead.

This has a consequence on global climate change and nutrient flows. The deforestation that occurs to make way for the soybeans causes local drying of the climate, which has the snowball effect of causing more forest fires and more drying of the climate, therefore further deforestation and climate change. The specter of the entire region becoming desertic is real, and this would jeopardize the water supply for the entire continent. Furthermore, as soybeans are very efficient extractors of nutrients, enormous amounts of plant nutrients are being extracted from South American soils to end up in the oceans via European and Asian waterways, from the manure of soy-fed animals. This results in eutrophication-nitrate leaching-which then leads to destruction of mangroves, coral reefs and other marine ecosystems that serve as the nurseries for the world's fish.

The outcry against the excesses of soybean monocultures has forced the companies involved to react by adopting so-called "responsible soybean production," which has the approval of some conservation organizations including the World Wildlife Fund. However these methods do not solve the problem but only attempt to legitimize it and might in fact accelerate the rate of deforestation because they do not consider secondary forest to be valuable as forest.

The soybean issue illustrates what can happen when our foods, which are the basis for our health, culture, communities and survival, are considered to be mere commodities to generate financial profit.

Maria van Heemstra, has worked in genetics research and with several NGOs as well as international organizations, and is presently working at the World Council of Churches, Geneva/Switzerland, in two projects (Faith, Science and Technology; and Health and Healing). Born in the Netherlands, Maria is a trained biologist (degree from the University of Geneva in 1975) and agronomist (PhD Soils and Crops, Rutgers University 1985). She has recently completed a specialization in Biosafety and Plant Genetic Resources Management.

FOR FURTHER INFORMATION

- "Genetically Modified Soya in Food Aid Programmes" by Elizabeth Bravo, www.lasojamata.org/files/soy_republic/Chapt04GMsoya-FoodAid.pdf
- United Soy Republics: The Truth about Soy Production in South America, available on line at: www.lasojamata.org/en/node/91
- "The Crop-sprayed villages of Argentina" by Lilian Joensen in: http:// www.lasojamata.org/files/soy_republic/Chapt07CropsprayedVillagesArgentina.pdf
- Articles on direct glyphosate poisoning of children and adults: upsidedownworld.org/main/content/view/412/44/ and www.toxicsoy. org/toxicsoy/irresponsible.html
- Amosoja, a documentary film: www.insomnia-sales.com/pro/fiche_ pro.php?ID_Film=69
- Article on eutrophication: archive.corporateeurope.org/docs/soygreenwash.pdf
- The Round Table on Irresponsible Soy: archive.corporateeurope.org/ docs/soygreenwash.pdf.

TOXIC ROUNDUP

Monsanto has always insisted on the safety of the herbicide RoundUp, used heavily on genetically engineered crops, claiming that "drinking a glass of glyphosate is healthier than drinking a glass of milk." But new research reveals that the herbicide could cause brain, intestinal and heart defects in fetuses. According to one of the study's authors, embryology professor Andres Carrasco, the doses used "were much lower than the levels used in fumigations." The study also indicated that glyphosate does not degrade.

In Argentina, farmers each year use between 180 and 200 million liters of glyphosate on RoundUp Ready soybeans. After news of the study appeared in the Argentine press, Dr. Carrasco received a visit from four men at his laboratory who "acted extremely aggressively." Two of the men were said to be members of an agrochemical industry organization but refused to give their names; the other two claimed to be a lawyer and a notary. Dr. Carrasco has also received offensive phone calls (www.organicconsumers.org/articles/article 17680.cfm).

NAIS Vpdate

GROWING OPPOISTION TO THE NATIONAL ANIMAL IDENTIFICATION SYSTEM By Judith McGeary, Esq.

The National Animal Identification System (NAIS) is a plan to require anyone who owns even one livestock or poultry animal-even just a single chicken or a pet horse—to register their property, tag each animal (in most cases with electronic identification, such as microchips or RFID tags), and report their movements to the government within twenty-four hours. Grassroots activists and organizations have been working diligently for years to stop this program before it drives our sustainable livestock farms out of business. The outcry that began in 2005, when the government plans were released, has gained significant momentum in the last year, as a broad coalition forms at the federal level and individuals across the country step forward.

THE ACTION IN CONGRESS

To date, Congress has provided over \$124 million of federal funding—our tax dollars—for USDA's implementation of NAIS. Early in the fight to stop this program, anti-NAIS activists identified stopping the funding as an important tool. The first battle over this issue occurred back in May 2006, when Congressman Ron Paul (R-TX) introduced an amendment to the Appropriations bill to halt all funding. That amendment failed by an overwhelming vote (34 to 389), but it created the first focal point for educating Congress about what NAIS really is and why we are opposed to it.

We've come a long way in the three years since that first vote. In July, the House of Representatives passed the 2010 Agriculture Appropriations bill with no funding for NAIS. Although this was an important step, the commentary behind the funding cut raised a red flag. The Chairs of both the Agriculture Appropriations Subcommittee and the full Appropriations Committee, Representatives DeLauro (D-CT) and Obey (D-WI), are long-time supporters of a mandatory NAIS. The bill summary stated: "Until USDA finishes its listening sessions and provides details as to how it will implement an effective ID system, continued investments into the current NAIS are unwarranted." The term "effective NAIS" was used in Congressional hearings in the spring as essentially another word for a mandatory or coercive NAIS that forces most people to participate. In other words, part of the motivation behind cutting funding was to create the choice between no NAIS and a mandatory NAIS, and it was done by those who support a mandatory NAIS.

The anti-NAIS movement quickly pressed for the "No NAIS" option. The Farm and Ranch Freedom Alliance (FARFA) coordinated a letter to the House and Senate urging that funding for NAIS be stopped. In addition to the Weston A Price Foundation and Farm-to-Consumer Legal Defense Fund, over eighty other organizations signed the letter. These groups spanned the full political and geographic spectrum, representing organic farmers, conventional ranchers, property rights activists and concerned consumers. A coalition that broad is rare in DC and key to getting Congress' attention.

The House of Representatives adopted the Committee's proposal for no funding for NAIS. However, the Senate Committee on Appropriations included \$14 million in funding for the program. Senator Tester (D-MT) gave an excellent speech during the hearing, excerpted below:

"... A few weeks ago the House chose not to fund Animal ID for FY10 and I think that was the right decision. I believe this committee and the Senate should follow suit. I have always had concerns about the merits of this program as the best tool for disease tracking and prevention. I believe there are cheaper and more effective tools that USDA has failed to utilize...

"I've also been troubled that some of the public confuses Animal ID with food safety rather than the livestock disease tracking Judith McGeary is an attorney and small farmer in Austin, Texas, 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 heritage breed poultry. For more information about NAIS and what you can do to stop it, go to www.farmandranchfreedom.org or call 1-512-243-9404.

program that it was meant to be. Food safety improvements at packing plants are critically important, but implementing Animal ID will do nothing to improve food safety at packing plants. Nothing.

"Animal ID simply isn't working."

As the Senate Committee version headed for the floor, Senator Tester submitted an amendment to cut the funding in half. The coalition of organizations alerted their members and called for support for the Tester Amendment, which ultimately passed by unanimous consent. Note that this does not mean that every Senator agreed with the amendment. Adopting a provision by unanimous consent is sometimes done when there is a majority in favor of the provision, and the Senators don't wish to have their individual votes recorded. The final result, though, is what matters: the Senate cut funding for NAIS to just over \$7 million.

The next step is a conference committee to reconcile the House and Senate versions of the Agriculture Appropriations Bill. The committee is expected to be named in early September, when Congress returns from its summer recess. Once the members are named, we will need to mount a grassroots campaign again, so please watch for action alerts in your email. If you do not have internet access, consider creating a phone tree that can be "activated" by someone who does have email access. We need everyone's voice in this fight!

FARM-TO-CONSUMER LEGAL DEFENSE FUND'S LAWSUIT TO STOP NAIS

Unfortunately, while the battle in Congress is gaining steam, the battle in the courts has hit a significant barrier. Last fall, the Farm-to-Consumer Legal Defense Fund brought the first, and so far only, lawsuit that sought to halt the program. The Fund sued both USDA and the Michigan Department of Agriculture (MDA) in federal court, alleging violations of multiple federal and state laws and the Constitution. The Fund alleged that MDA had implemented the first two stages of NAIS (premises registration and electronic identification) on all cattle in Michigan due to coercion from the USDA, so that both agencies were legally responsible. The Fund's suit asked the court to issue an injunction to stop the implementation of NAIS at both the state and federal levels by any state or federal agency.

MDA and USDA filed motions to dismiss the lawsuit, essentially claiming that MDA had independently chosen to require premises registration and electronic tagging, and was not really implementing NAIS at the USDA's direction. In July, the D.C. District Court granted the government's motions and dismissed the case. The Court stated that "NAIS is voluntary at the federal level," so the agencies did not have to comply with the federal laws that provide protection for small businesses, the environment and individuals.

The Fund filed a motion for rehearing on August 6, noting in part: "Specifically, the Court failed to recognize the facts that relate to Plaintiffs' allegations that MDA's alleged 'state actions' were taken at the direction of, and as a surrogate for, federal action by USDA. The evidence contained in the administrative record and in the exhibits attached to papers filed with the Court demonstrates that USDA took key steps to implement its allegedly 'voluntary' National Animal Identification System (NAIS) as a mandatory program through its interactions with MDA. Plaintiffs alleged that it was USDA's actions that directly influenced the decision and actions of MDA, the state regulatory agency."

As this article goes to press, the parties are in the middle of the briefing process, and we cannot predict when the Court will rule.

USDA LISTENING SESSIONS

The last issue of *Wise Traditions* included an update on the first five listening sessions held by USDA on NAIS. In the end, USDA held a total of fourteen sessions around the country. USDA billed these meetings as an opportunity to get public input into how to develop a workable NAIS system that people would accept. But the meetings quickly showed that few people have any interest in that! Instead, the clear message was "Stop NAIS." In total, approximately seventeen hundred people attended the sessions. Of those who spoke on the record, over 90 percent opposed a mandatory NAIS. The USDA also accepted written comments, and thousands more people sent in comments opposing NAIS.

CONCLUSION

The future of NAIS is unclear at this moment. Will USDA pay attention to the overwhelming opposition to NAIS? Will Congress end the funding for the program? Or will the legislators and agency ignore the will of the people and push through an "effective" NAIS? And if the government drops the pretense of a "voluntary NAIS," what will the courts do? The fight is far from over. Yet we have made significant progress. The USDA's original plan called for the entire three-step NAIS program to be mandatory nationwide by January 2009, a plan that has been seriously derailed and continues to flounder. We must keep on educating our neighbors and communities, and speaking out against this program, to protect the sustainable livestock farms that produce the nutrient-dense foods so critical to people's health.

A Campaign for *Real* Milk DOES RAW MILK KILL PATHOGENS? by Ted Beals, MS, MD

Amanda Rose describes herself as a consumer and supporter of raw milk. She represented the "pro-raw milk view" at a symposium entitled "The Raw Milk Conundrum" sponsored by the American Veterinarian Medicine Association (AVMA) at their convention in Seattle, Washington, July 12, 2009. In her talk, she presented the results of an online survey she conducted, which asked a number of questions about consumer attitudes towards raw milk.

Shortly after the AVMA conference, Rose announced the publication of a position paper on raw milk entitled "Does raw milk kill pathogens? A visual analysis of the research on competitive exclusion" (http://rawmilkwhitepapers.com/assets/ Does-raw-milk-kill-pathogens-12.pdf). In it she describes the notion that raw milk is a better pathogen fighter than pasteurized milk as an "urban legend." She concludes: "The evidence suggests that we really cannot count on raw milk killing enough pathogens to ensure its safety."

EVIDENCE OF BIAS?

An important note about her online consumer survey, her presentation in Seattle and her position paper: she has framed the question to get the answer she apparently wants, namely that fresh raw milk does not kill pathogens. In her survey she asks respondants to make a judgement about the following statement: "The beneficial bacteria in raw milk kill the pathogenic bacteria." Respondants are asked to judge whether this statement is absolute fiction, absolute truth or somewhere in between. The participants overwhelmingly answered that this statement was truth. It is my impression that Rose's position paper was designed to correct that "misconception."

Rose does not belong in the category of extremist fear mongers (she appears to reject the statement that drinking raw milk is "like playing Russian roulette with your health"). However, her position paper and pronouncements on the Internet place her in the category of those that wish to focus attention on the alleged dangers of drinking raw milk. Her position paper gives the impression that milk can contain extremely dangerous bacteria.

I do not disagree that milk, like *all* foods, can be contaminated with disease-causing microorganisms, but the inquiring public needs accurate and objective information. The opponents of raw milk have learned how best to scare people. Rose claims to provide balanced information, but this position paper is far from balanced; it is specifically styled to scare, not inform, the public. The best she has to say in favor of raw milk is a back-handed compliment-"the pleasure of consuming the food." Saying that she drinks raw milk and *might* choose contaminated raw milk over contaminated commercial processed milk is not a balanced statement, nor one that provides consumers with the information they need to make informed choices about raw milk.

COMPETITIVE EXCLUSION

In the title of her position paper, Rose uses the phrase "competitive exclusion." As a biologist, I prefer the phrase "competitive inhibition" as a more accurate description of this well recognized but complex biological phenomenon. The term has been publicized by the probiotic industry. An accepted description is as follows: competitive exclusion (CE) is used to describe the process by which beneficial bacteria exclude bad bacteria or pathogens. CE implies the prevention of entry and establishment of a bacterial population into the gut. To succeed, the good bacteria must be better suited to establish or maintain itself in that gut environment. CE relates to the interactions of living bacteria colonies in mixed communities, where certain bacteria are able to inhibit (not exclude) others from becoming established. This phenomenon is not something

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.

that can be measured in test tubes. Rose inappropriately applies the term competitive exclusion to the ability of raw milk to kill off pathogens inoculated into laboratory samples of raw milk.

Those who look at the benefits and value of fresh, unprocessed whole milk (raw milk) point to competitive inhibition as only one of a variety of mechanisms that enable milk, fresh and unprocessed from the cow, to diminish the

possibility that a virulent bacterial contaminant might colonize the gut and cause sickness. The lactoperoxidase system and lactoferrin are two of the many antibacterial enzyme systems that contribute to the competitive inhibition properties of fresh raw milk.

SCIENTIFIC PAPERS

In her position paper, Rose focuses on seven scientific papers along with a document from the Food and Drug Administration, information from a private lab's test results and unpublished preliminary information. A lot more on this subject can be found in the scientific literature, but I will focus on the reports that Rose cites in her paper.

Four of the papers look at what happens to pathogens when inoculated into milk.

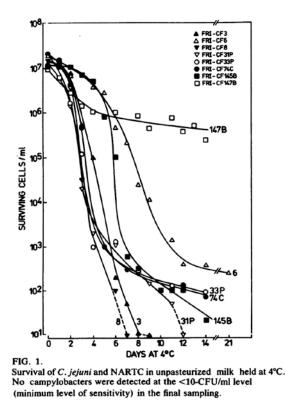
Rose concludes that the weight of the evidence indicates that the pathogens are not killed, or are not adequately killed, to make the milk safe. She fails to inform her readers that in each of these papers, the results and conclusions of the authors is that the inoculated pathogens *are* killed.

Rose first discusses "Prevalence and Survival of Campylobacter jejuni in Unpastuerized Milk" by Michael P. Doyle and Debra J. Roman (*Applied and Environmental Microbiology*, Nov 1982 44(5):1154-1158). In the paper, the authors provide a chart (above) showing the reduction in campylobacter—a reduction that can only be described as dramatic.

The authors inoculated raw milk with eight different strains of *Campylobacter jejuni*, shown

by the different curves in this figure. Only three of these strains are from human sources (a fact Rose omits from her report). All strains *do* show reduction in pathogens with time. The only line without a steep decline (the steeper the line the faster the pathogens were dying) tracks a nonhuman strain.

In her paper, Rose created her own chart, which deemphasizes the extensive and dramatic results factually depicted by Doyle and Roman. That's because the data she uses are from *another* experiment, reported in the same paper, which documents the fact that although the inoculated



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strains were dying, the generic bacteria already present in the raw milk were just as dramatically multiplying, increasing to as many as eight hundred million bacteria over the course of the experiment.

In another cited paper, researchers Massa, Goffredo, Altieri and Natola inoculated seven different strains of E. coli O157:H7 into fresh unprocessed whole milk to determine their fate after days of storage (Letters in Applied Microbiology 28(1):89-92). Like Doyle and Roman, they spiked the milk with extraordinarily high numbers of each pathogen (1,000,000 per ml-Doyle and Roman used 10,000,000 per ml). Even with these huge numbers of pathogens, the E. coli O157:H7 strains failed to grow and died off gradually. Actually, the purpose of this research was not to determine whether the pathogens were being killed, but whether it was acceptable to store milk at $8^{\circ}C(46^{\circ}F)$

rather than the standard 5° C (41° F). The authors conclude that the colder temperature should be used as the standard.

In the third paper, researchers Pitt, Harden and Hull used lower amounts of inocula of a different pathogen, *Listeria monocytogenes*, introduced into raw milk, but unlike the others they kept the milk at temperatures that optimize the growth of these bacteria (98.6° F) (*Australian Journal* of Dairy Technology 54(2):90-93). After fifty-six hours, no viable cells of *L. mono* were detectable. In a paper not cited by Rose, these same authors looked at other pathogens and concluded, "The growth of Staph. aureus, *S. enteritidis*, and *L. monocytogenes* in raw milk at 37° C was reduced markedly compared to the growth of these organisms in pasteurized milk" (*Milchwissenschaft* 2000 55(5):249-252).

In the fourth paper cited by Rose, Doyle working with Zhao and Wang looked at survival of *E. coli* O157:H7 at refrigerated and higher temperatures. They used a mixture of five research strains of this pathogen and concluded that *E. coli* O157:H7 did not grow at 5° C (41° F) and

decreased over days (*Journal of Food Protection* 60(6):610-613).

HUGE NUMBERS

It is important to understand that huge numbers of pathogens were added in these research protocols, because this practice makes it much easier to count the remaining bacteria. What the general public needs to understand is that these are not conditions of our dairy practices. A simple calculation will make this point. When a person or a cow is having diarrheal sickness, their stool/feces contain extremely large numbers of the pathogen causing the disease. For the medical laboratories this makes it really easy to determine which bacteria is causing the diarrhea.

However, in dairy operations across this country, safety experts have been focusing on the fact that in some dairies a few of the cows that appear healthy and do not have intestinal disease with diarrhea, can be colonized by a pathogen and can shed the pathogen for short periods of time. But under these conditions, when pathogens appeared in the feces, their numbers were extremely low—in fact these pathogens could be called "background" pathogens compared to the large numbers of other (mostly beneficial) bacteria present.

So let us consider conditions closer to reality. Suppose in the dairy herd there are some cows that are not sick, but are shedding small numbers of pathogens. If we wanted to contaminate some fresh unprocessed milk, how much manure would it take to equal the amounts used by the researchers that Rose cites in her position paper? There have been abundant publications on what happens to pathogens that exist in manure or dairy soil. But these studies inoculate very large numbers of a pathogen in the material and then look at what happens to the numbers over time. There are far fewer articles that ask about the numbers of pathogens in the feces of farm animals, particularly when they are not clinically sick. Some of the best information is found in research projects that spike milk with pathogens. Before inoculating the milk, the researchers check to make sure that the cow's feces are free from pathogens. On rare occasion they find that the cow is shedding one of the pathogens, and give the amount in their paper.

Although somewhat of a departure from reality, let us suppose we collected 1 gram of feces from one of those rare animals that is shedding a pathogen. That gram (about one thimbleful) will contain different amounts of pathogen (see below). Researchers have reported that feces with *E. coli* O157:H7, *Campylobacter jejuni*, or *L. monocytogenes* will contain about 500 cfu (colony forming units) in a gram.

To match the Doyle group's inoculum you would need 20,000 thimblefuls of fresh manure from a cow shedding *Campylobacter jejuni* (10,000,000 cfu divided by 500 cfu/g). The inoculum from the Massa study was equivalent to 2,000 thimblefuls of manure from a cow shedding *E. coli* O157:H7 (1,000,000 cfu divided by 500 cfu/g). The inoculum from a study by Gaya, Medina and Nunez (*Applied and Environmental Microbiology*, Nov 1991 57(11):3355-3360), which inoculated raw milk with large amounts of *L. monocytogenes*, would equal only 20 thimblefuls from a cow shedding *L. monocytogenes* (10,000 cfu divided by 500 cfu/g).

Inoculums such as these may be standard procedure in a research laboratory, but they would never occur in a real dairy environment. That is a lot of manure! Even fractions of a thimbleful of manure would be conspicuous on the in-line filter. Besides, that filter would remove the material from the milk before it reached the storage tank. The most ardent proponent of raw milk would never suggest consuming milk containing such huge amounts of manure. Even the anti-microbial properties of raw milk can be overwhelmed!

BSK CHALLENGE TEST

Rose devoted a substantial portion of her paper to the "BSK Challenge Test." This is not published research, but from the information I have from the laboratory that performed this testing, the researchers used a cocktail of three pathogens each in extremely large numbers (67,000,000



MORE THAN A THIMBLEFUL!

Scientists refer to fecal weights in grams, which is not easy for most people to understand. Shown here is a thimble that would contain about one gram of feces along side a glass of milk. There are about 500 colony forming units in one gram of manure.

The term cfu, or colony forming units, is a measure of bacterial colonies that grow individually on a culture plate in the laboratory. If spread widely enough, each colony would originate from a single speck of bacteria, multiplying until their numbers increase and they became visible. Technically, since it is possible for bacteria to clump together, several bacteria could clump to make one of those specks. For this reason the unit of measure is cfu, not numbers of bacteria. of Salmonella, 250,000,000 of *E. coli* O157:H7 and 220,000,000 of *L. monocytogenes*). They actually inoculated with only a portion of the final cocktail, so the amount of each pathogen added to the milk was less: 2,400,000 of Salmonella; 9,200,000 of *E. coli* O157:H7; and 8,100,000 of *L. monocytogenes*. We already have a visual idea of how much fresh manure it would take to match these amounts.

Furthermore, in this project all three pathogens were inoculated simultaneously into the milk sample. With some extremely large confined herds I have seen reports of two pathogens discovered together on the same farm, but never three. Even under these extremely unlikely laboratory conditions, the amounts of pathogens found in the milk after several days were reduced. Not only did the milk keep these three pathogens from growing, they were being killed. The lab report says the milk was maintained at 40° (I assume 40°F).

FIVE-LOG REDUCTION

Rose makes an unsupported statement in her paper that "Microbiologists want to see a change of five logs in bacteria counts." Such an assertion trivializes the complexity and controversy over what constitutes adequate destruction of pathogens. Some food safety publications talk about the desirability of a 5 log reduction of pathogens. But that is not the criteria used for milk. A threatened population of a pathogen does not die all at once. There is a gradual decrease, whether the killing is by heat or by biological antibacterial activity. Research shows the reductions essentially follow a logarithmic (base ten) pattern.

To date I know of no one who has proposed a criteria for adequate antibacterial effect in fresh raw milk. Any argument for adequacy of pathogen killing must consider the total number of pathogens present under real circumstances. A 5 log reduction is the same as saying 99.999% of the bacteria were killed. You could not measure a 5 log reduction starting with realistic numbers of bacteria because the procedures do not measure fractions of a bacterium—if you started with 2,000 bacteria, a 5 log reduction would be 0.02 bacterium which is the same as saying that if you performed the experiment 100 times, in two of those repeats there would be bacterium present. On the other hand if you started with 200,000,000 bacteria then a 5 log reduction would leave 2,000 bacteria. Wisely, none of the researchers in the papers Rose discusses mention her 5 log criteria. Nevertheless, Rose simplistically concludes that since none of their results demonstrated her arbitrary standard, then the milk did not kill enough pathogens.

A LEGITIMATE QUESTION

Rose then asks a legitimate question: are there enough pathogens in a glass of milk from any of these experiments to cause people to become sick? To help her readers visualize the amount that makes people sick, Amanda Rose draws bar graphs to show that on Day Six, most of the experimental milk in her selected publications will not have killed enough inoculated pathogens to drop below her red line (the FDA's minimum infectious dose). But she fails to point out the incredible amounts of manure that would have to be shoveled into the farmer's bulk tank to get the levels up to the inocula used in those laboratory studies.

One of the basic myths of the anti-raw milk folks is that it doesn't make any difference how few pathogens get into the milk, because milk is such a nutrient-dense food, even one bacterium will rapidly multiply until everything is overwhelmed with bad bugs. All of the publications Amanda Rose selected demonstrate the fallacy of this scare tactic. Pathogens do not rapidly multiple in milk that is fresh and unpasteurized, they do not grow, in fact they die off.

LACTOPEROXIDASE

Rose does admit that certain enzymes in raw milk can have antimicrobial effects. She discusses one study, by Althaus, Molina and Rodriguez (*Journal of Dairy Science* 84:1829-1835), which looks at the lactoperoxidase system in ewe's milk. Pathogens were not involved in this study. I believe the purpose for inclusion in her position paper was to show that in milk the amount of the enzyme active in this system varies. And since it varies, she argues that it can not be relied upon to make the milk safe. What Rose fails to understand is that the amount of the

INFECTIOUS DOSE

In their *Bad Bug Book*, the FDA published infectious doses for the major pathogens. "Infectious dose" is shorthand for "minimum infectious dose," which is meant to give an estimate of the fewest number of organisms that possibly were ingested by someone who became ill. In some older literature, a group of people were given a sample which contained various amounts of a pathogen, and researchers determined the infectious dose as the least amount that one person in the group ingested and had symptoms. Every student of infectious disease knows that this dose is not the amount that will make people sick. There are a whole list of factors that will change the amount necessary, but these factors all increase the number from the minimum. For example, it will take higher numbers to make a healthy person sick. Some research uses the amount that will cause half of the people to become sick as a useful yardstick. That number is a lot higher than the infectious dose used by the FDA. Unfortunately, that more reasonable standard has not been accepted by the public health agencies.

enzyme is not the limiting factor in this system, or in any enzyme system. The lactoperoxidase system is well recognized as a potent antibacterial system in fresh milk. In this system, depletion of the cofactors is what limits the antibacterial action.

The authors did not examine whether the variation in amount of enzyme would have any effect on the ability of the system to kill pathogens. They do conclude that the addition of the cofactors would make the system continue to be active at whatever levels of the enzyme were present in the milk. And since the specific cofactors in the lactoperoxidase (LP) system are abundantly available from beneficial bacteria in fresh unprocessed milk, the system appears to be fully active independent of the amount of the enzyme.

In the Gaya study, mentioned earlier the researchers concluded, "According to our results, the LP system exhibited a bactericidal activity against *L. monocytogenes* in raw milk at refrigeration temperatures" (*Applied Environmental Microbiology* 1991 57:3355-3360).

MISCARRIAGE

The remaining reference in the Rose paper concerns the ability of L. monocytogenes to enter different organs of the body (Bakardjiev AI and others. PLoS Pathogens 2(6):e66). Milk was not involved in this study. As background, it is helpful to realize that under usual conditions this particular pathogen exists and only grows inside of inflammatory cells that move around in our bodies. The research used pregnant laboratory guinea pigs. The pathogen was inoculated directly into the body and did not enter through the intestine, which is the normal foodborne route. Inflammatory cells containing multiplying pathogens moved through the body, and if there were enough of the pathogens (they were inoculating 7,500,000 bacteria into the animals), many organs became infected. The only reason that I can see that Rose discusses this research is to make the emotionally charged point that if the placenta became infected, an abortion ensues. As she comments: "The body then protects itself from the infection by expelling the baby and causing a miscarriage, stillbirth, or premature birth depending on the stage of the pregnancy."

It should be pointed out that this is not anything the authors said. They didn't even study different stages of pregnancy.

Rose does correctly report the authors' statement that a single bacterium is able to cause infection in the placenta, but her emotional message fails to tell her readers that the minimum infectious dose of foodborne *L. monocytogenes* is not one bacterium. The FDA in their *Bad Bug Book* says that the infectious dose is unknown but states, "it is safe to assume that in susceptible persons, fewer than 1,000 total organisms may cause disease."

The initial barrier to infection from this pathogen in milk is the wall of the intestine. Rose also conveniently fails to tell the readers that the authors found that the "placenta is relatively protected from infection." Even with their direct injection into the body of the guinea pigs, the authors show that it takes large numbers circulating in the body to infect most organs, and *greater numbers* to overcome the unique protection afforded the placenta. However, they did show that once inside the placenta the pathogen flourishes and can cause abortion.

In summary, Rose describes her document as a visual analysis of the research on competitive exclusion. Her choice of studies, her misunderstanding of the science, the specific choice of data and her personal way of visualizing the information, coupled with emotionally charged statements, distort and exaggerate the researchers' findings, obscuring the evidence showing that in fact, raw milk does kill off pathogens in realistic real-life situations. That fresh raw milk has the properties to kill pathogens is no urban legend; it is proven science.

Ted Beals, MS, MD, is retired from the University of Michigan Medical School and Veterans Administration Health Administration. A pathologist with personal interest in dairy testing and safety of milk, he has been presenting testimony on dairy safety in North America for the last several years. He and his wife Peggy Beals are members of the Michigan Fresh Unprocessed Whole Milk Workgroup

That fresh raw milk has the properties to kill pathogens is no urban legend; it is proven science.

REAL MILK UPDATES

WISCONSIN: For more than six years, Grade A dairies in Wisconsin have been selling raw milk to shareholders who invested in their dairies under an exemption to the general prohibition against the sale of raw milk in that state. The exemption had been clarified by administrative law decisions in 2002 and 2004, which established that Grade A dairies "are free to devise valid agreements sharing ownership in their milk producer license under applicable law that may include allowing actual owners to take a share of the ungraded raw milk produced under the license." Shortly after the 2002 decision, the Division of Securities for the Wisconsin Department of Financial Institutions (DFI) issued Orders of Exemption to a number of Grade A dairies allowing those dairies to sell equity shares to investors without having to comply with state security registration requirements. This enabled the dairies to sell raw milk to those persons purchasing the shares. The Orders of Exemption were good for two years at a time; the last was issued in 2006. The state Department of Agriculture and Consumer Protection (DATCP) approved each of the Exemptions issued by DFI.

In 2008, DATCP issued an administrative regulation entitled, "Raw milk sales prohibited; exemption." The regulation stated that the general prohibition on the sale of raw milk did not apply to "[a]n individual who has a *bona fide* ownership interest in the milk producer . . . if the producer is a legal entity other than an individual or married couple." When the agency proposed this regulation, it stated that the regulation would clarify "current statutory prohibitions against the sale of raw milk consistent with administrative law decisions." Grade A dairies selling raw milk to their shareholders believed that they could continue to sell raw milk to their shareholders even though the Orders of Exemption for a number of the dairies expired around the time that the regulation went into effect. There was little or no opposition to the regulation when it was proposed.

The status quo on raw milk sales continued for a little over a year after the regulation became law. In the spring of 2009, the agency began moving against those selling raw milk, making it clear that it had changed its interpretation of the 2002 and 2004 decisions. In April, DATCP sent warning letters to two shareholder dairies that had been recently featured in local media and advised them that they were engaged in the illegal sale of raw milk. A third dairy that had recently applied for a retail food establishment permit for its on-farm store was denied the permit because they were selling raw milk to shareholders; the department warned that the farm store would not be given a permit until all sales of raw milk ceased.

In June, each of the producers who had previously been issued Orders of Exemption by DFI received a letter from that agency. The letter stated the following: "[The] determination to issue such Orders of Exemption in past years was based on the language of DATCP statutes and rules in place at that time, as well as language of DATCP administrative hearing decisions that interpreted those statues." The letter went on to state:

This is to inform you that in view of DATCP's interpretation of its "bona fide ownership interest in the milk producer rule above, and because a Wisconsin farming operation's status under the Wisconsin Securities Law is an issue separate from a farming operation's required compliance with Wisconsin law prohibiting the sale or distribution of raw milk except in conformance with exemptions established by rule of DATCP, the DATCP rules for incidental sales of raw milk override and supersede any authorization under the previously-issued Securities Exemption Order for your farming operation to continue to sell raw milk to existing holders of Equity Shares. Thus, the previously issued Securities Exemption Order cannot continue to be used as a basis for selling raw milk or raw milk products to existing holders of the Equity Shares in the absence of compliance with the 2008 DATCP Raw Milk rules."

DATCP's interpretation of the "bona fide ownership interest in the milk producer" rule is basically that only farmers can drink the raw milk produced by a cow. The agency's change in interpretation could not have come at a worse time for shareholder dairies—not only have the prices farmers get for conventional milk collapsed but the prices paid for organic milk have declined as well, in some cases, significantly. There are certified organic dairies in the state being paid as little as \$12 per hundred-weight which is less than half of what they were typically making. Most of the shareholder dairies are certified organic.

DATCP subsequently followed up on DFI's letter by sending an investigator out to several of the shareholder dairies to find out whether those dairies were selling raw milk. By the end of August, there were at least nine dairies in the state that had received warning letters and/or visits from the agency. There is concern that DATCP will attempt to have criminal misdemeanor charges brought against the dairies for the illegal sale of raw milk. A group of raw milk producers has hired a lobbyist to help pass a raw milk bill in the Wisconsin legislature. The lobbyist will also work to convince DATCP not to bring enforcement action against the producers while the bill is making its way through the legislature.

A second issue at stake in Wisconsin was whether the shareholder dairies needed a retail food establishment permit to operate the on-farm stores they have. Several of the shareholder dairies are operating without the permit, arguing that a permit is not needed since the stores sell only to their shareholders and not to the general public. Wisconsin law requires that "a permanent facility from which food is sold to consumers at retail" needs a permit. "Consumer" is defined under Wisconsin law as a person who is a member of the public. Resolution of this issue holds implications for buyers clubs around the country, with most states having a Food Code similar to Wisconsin's. A precedent could be set as to whether the reach of the Food Code extends to such private contractual arrangements for the distribution of food.

In the midst of the dispute between shareholder dairies and DATCP, an outbreak of foodborne illness linked to raw milk consumption occurred in the state. On August 28, DATCP issued a press release stating that thirteen confirmed cases of illness in southeast Wisconsin were caused by the consumption of unpasteurized milk. The individuals have tested positive for campylobacter jejeuni. According to the release, there were other people in the same households who were ill but their test results were not yet available. The release disclosed that the onset of illness was between August 14 and 20; all victims had consumed raw milk obtained from a Grade A dairy in Wisconsin or had been in households where someone who was sick had consumed raw milk from that dairy. Campylobacter can be passed between people as well as become contracted from adulterated food.

Most victims of the illness recovered quickly; however, one was not so fortunate—initially suffering from intermittent paralysis including the inability to talk along with severe gastroenteritis. More than two weeks after contracting campylobacter, the victim was still having trouble walking. The dairy suspected of being responsible for the illnesses had samples of raw milk test negative for campylobacter at both state and private labs; but the state did not exonerate the dairy, continuing its investigation by conducting tests on the dairy's cows. As of the first week of September, DATCP and the Department of Health Services had not released the results of their investigation.

PENNSYLVANIA: The Pennsylvania Department of Agriculture (PDA) has proposed new regulations to revise its Milk Sanitation code. Of interest to the state's licensed raw milk farmers is a provision that requires testing at least twice a year for the presence of pathogenic bacteria including salmonella, *Listeria monocytogenes*, campylobacter, and *E. coli* O157:H7. Under the proposed regulation, "there may be no pathogenic bacteria present." If there is any pathogenic bacteria present in the tested milk, the permit holder must immediately stop selling raw milk for human consumption and must not resume selling until there have been two consecutive subsequent tests showing that the raw milk is free from "disease-producing organisms." The trouble with the proposed regulation is that not all pathogenic bacteria cause illness in humans. A number of Pennsylvania farmers have had their sales suspended in the past few years for a positive pathogen test when there has been no incidence of illness from the consumption of the suspended farm's milk. There are hundreds, even thousands, of subtypes of a pathogen like *Listeria monocytogenes*; and many, if not most, of these subtypes are benign. An effort will be made to change the language in the provision to read: "There shall be no positive test for the presence of pathogenic bacteria *known to cause illness in humans.*" In addition to this revision, an effort could be undertaken to amend the proposed regulations to provide for an exception to raw milk permit requirements for those selling direct to the consumer. The comment period for the proposed regulation was set to expire on September 30.

IDAHO: The Idaho State Department of Agriculture (ISDA) has begun the process of updating its rules on the retail sale of raw milk, holding an initial meeting August 10 in Boise to discuss proposed changes to the regulations. Currently, there are two dairies in the state licensed to sell raw milk. The proposed regulations would cover cow share programs. The proposed regulation governing inspection of raw milk producers states: "COW SHARE type programs are legal provided the RAW MILK and the RAW MILK PRODUCTS are produced and processed in facilities with RAW MILK and RAW MILK PLANT permits." Cow share programs would be exempt from the 'sanitary construction and operation' standards (e.g., mechanical bottling) provided the following conditions are met:

- a. The RAW MILK quality complies with the testing frequency and quality standards established by these rules.
- b. The number of animals in lactation does not exceed 3 cows or 7 goats or sheep.
- c. The COW SHARE owners are registered with the DEPARTMENT. The registration shall indicate where the COW SHARE herd is physically located and the mailing address of the PERSON in charge of the care of the herd and a copy of a written contractual arrangement including a legal bill of sale of the consumer(s) that have ownership in the animals producing RAW MILK for human consumption.
- d. Milk quality tests shall be provided to all COW SHARE participants.
- e. COW SHARE consumers shall not resell RAW MILK for human consumption obtained under a COW SHARE program."

One positive aspect of the proposed revisions to the regulation is that the sale of all raw dairy products by licensees would become legal. Under current law, licensees can sell only raw milk and cream.

According to an article by Carol Ryan Dumas for Capital Press, ISDA hopes to have final regulations published before November 13 which would enable them to be reviewed by the legislature in 2010.999

Healthy Baby Gallery

k d s e s s n "

After several miscarriages, Abigail Falk switched to raw milk, cod liver oil and other nutrient-dense foods. The result is beautiful, healthy Laila Falk, pictured here at fifty-three weeks. Laila was breastfed and then given homemade formula, cod liver oil and egg yolks as first foods. Mom reports that she is bigger and healthier than her "colleagues."

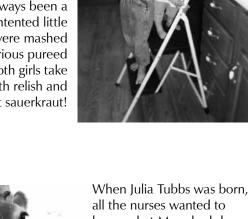


Luke Anderson, pictured here at seven months old, was over eight pounds at birth. Mom followed WAPF principles to the letter during her pregnancy. He has been a happy and fuss-free baby ever since. Now, in addition to regular feedings of breast milk, he is a very big lover of egg yolks mixed with grass-fed butter!



Pictured here at seven months old, Matthew Carden's mom had followed a nourishing traditional diet for six years, with special emphasis on the pre-conception and pregnancy diets. Matthew was born at a robust eleven pounds! He has enjoyed the raw milk and liver-based baby formulas since he was one week old, as Mom struggled at first with producing milk. He then drank a mix of breast milk and homemade formula, with a transition to homemade solid foods at four months. Matthew is bright-eyed and joyful and Mom is grateful to the Weston A. Price Foundation for helping her raise a happy baby that radiates good health.

Lizzie Pierce (right) was over nine pounds at birth, born eighteen months after her big sister Abby. She nursed like a pro right from the beginning and has always been a sturdy, healthy and contented little flirt. Her first foods were mashed banana, egg yolk and various pureed meats, including liver. Both girls take their cod liver oil with relish and they love to eat sauerkraut!





all the nurses wanted to know what Mom had done while pregnant because the baby had such a rosy complexion and was so alert. Mom, of course, nourished herself on raw milk, cod liver oil, butter oil and pastured eggs. Julia is pictured here with that best friend of mothers and babies, a Jersey cow.

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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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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ALEXANDRIA, VIRGINIA CHAPTER HOSTS GARY TAUBES



All the potatoes remained on the plates uneaten at a brunch hosted by the Alexandria, Virginia chapter of the Weston A. Price Foundation. The featured speaker was Gary Taubes, author of *Good Calories, Bad Calories*, and a big defender of dietary fats like butter. Gary points to carbohydrate foods as big culprits in the epidemic of heart disease, diabetes and obesity. He is pictured here (center) with Robert L. Henderson, *MD*, and Alana Sugar, co-chapter leader (along with Janice Curtin.) Over one hundred local health enthusiasts attended the event.

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	Stuart Town: Hal & Sally Harris (02) 6846 8261, merrimount@hotmail.com
	Sydney: Gemma Davies 0410 373 318, sydneychapter@gmail.com
QLD	Bribie Island: Dr. Herbert H. Nehrlich (07) 3410-7999, drhhnehrlich@westnet.com.au
	Brisbane: Julie Phillips (07) 3841-5999, foods@ihug.com.au
	Gold Coast: Filippa Araki (07) 5598 7282, filippa91@yahoo.com.au, http://health.groups.yahoo.com/group/westonapriceaus/ Ipswich: Jennifer Christine Payrits 0430 027411, freedomorganics@gmail.com
	Oxenford/Miami: Kyle Grimshaw-Jones 61 7 4948 1180, kyle@winshop.com.au
	Sunshine Coast/Connondale/Mary River Valley: Sven and Karen Tonisson (07) 5435 0041, gaia@ozemail.com.au
	Sunshine Coast: James Cutcliffe (07) 5478 6489, jc wapf@yahoo.com.au
	Toowoomba: Bronwyn Money 4615 5009, Bronwyn.money@gmail.com
SA	Adelaide, Eastern & Northeast: John Patchett 61 8 8365 1960, naturalelthy@picknowl.com.au
	Semaphore Park/Adelaide Western Suburbs: Kate Netschitowsky, (08) 8341 5470, katenetch@yahoo.com.au
VIC	Bendigo: Joy Stone 03 5433 3731, jdhoneypatch@yahoo.com.au
	Castlemain: Cathy Mifsud (03) 5411 2946 cathymifsud@bigpond.com
	Fish Creek: Victorian Organic Dairy Farmers Association (Bev Smith) (03) 5683-2340, orana@dcsi.net.au
	Melbourne: Arabella Forge wapfmelbourne@gmail.com
	Wyndham: Sarah Nicholson 03 9742 3536, sarah@nicho.id.au
WA	Albany: Mike & Barbara Shipley and Justin & Susan Shipley (08) 9847 4362, Shipleysorganics@bigpond.com
BRAZIL	
	Southwest: Alberto Machado 24 9956 9798, amachado@ism.com.br
CANAD	A
AB	Calgary: Riva Mackie rivamackie@gmail.com (403) 245-2462,http://health.groups.yahoo.com/group/westonapricecalgary/ Castor: Kathleen Charpentier and Richard Griebel (403) 882-3835, grebe6@telus.net
	Edmonton: Lori Clapp (780) 417-3952, lifeworthwhile@gmail.com
	Peace Country: Mary Lundgard (780) 338-2934, plundgard@telus.net or Levke Eggers (780) 568-3805, levke@telusplanet.net
	Stettler: Gayle Thoun (403) 740-6637, mc_5thou@xplornet.com
BC	Enderby: Naomi Fournier (250) 838-0235, enderbywap@hotmail.com
	Kamloops: Caroline Cooper (250) 374-4646, info@eatkamloops.org, www.eatkamlopps.org
	Nelson: Lorraine Carlstrom (250) 352-3860, lorrainer61@gmail.com
	Sunshine Coast: Candice Spenst (778) 991-3672, wholefoodsnutrition@gmail.com
	Vancouver: Barbara Schellenberg (604) 988-6280, realfood@ethicalkitchenbc.com
MB	Narcisse: Gary & Debbie Chikousky (204) 278-3640, gdchik@mts.net,
	http://ca.groups.yahoo.com/group/westonpricemanitoba
NS	Annapolis Valley: Shirley Scharfe (902) 847-1736, glscharfe@eastlink.ca
	Cumberland & Colchester Counties: Silvana Castillo (902) 257-2428, silvanacastillo@ns.sympatico.ca

ONT Barrie: Paul Ericson (705) 728-8748, paulsonntagericson@yahoo.ca Cambridge & Kitchener-Waterloo: Christine Kennedy (519) 653-2396, cakennedy@rogers.com Durham/Markdale: David Watson (519) 369-9974, highmeadows@xplornet.com Greater Toronto Area – West: Corey Evans, (905) 608-9314, info@healthisfreedom.net, www.healthisfreedom.net Huron Shores: Marcus Koenig and Jessie Koenig-Liang (519) 294-0599, makoenig@porchlight.ca Ottawa: Gail Davis (613) 238-2782, gdavis@ncf.ca, Pascal Desjardins (613) 728-0662, slo2burn@hotmail.com, http://groups.yahoo.com/group/wapf_ottawa Toronto (Downtown): Patricia Meyer Watt (416) 653-7112, b-healthy@rogers.com Toronto (East): Joseph Ouimet (416) 439-4753, joseph67x@yahoo.com

SK Regina: Sandra Brandt (306) 359-1732, brandt.s@sasktel.net

COSTA RICA

Turrialba and Central Valley: Gina Baker & Reinhold Muschler (506) 2556-8021, waldorfcostarica@yahoo.com

FINLAND

Tammisaari: Henrik Nyberg 358 (0)19-204 456, henrik.nyberg@makrobios.fi

International Local Chapters

GERMANY

Grosslangenfeld: Anita Reusch and Douglas Mitchell, 0049-(0)6555-242, anita@roylt.com Northeast Bavaria: Elvira Uschold (0049)-(0)9234-974714, euschold@yahoo.de

ISRAEL

Milka Feldman Ramat Bet Shemesh: Milka Feldman 972-77-320-0742

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Ames: Bjorn Solberg bjorn.solberg@gmail.com

PAKISTAN

Dr. Shagufta Feroz & Feroz Sharfuddin 92-42-8484303, drsferoz@gmail.com

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SWITZERLAND

Bern: Diana Boskma food.diana@gmail.com

UNITED KINGDOM

Bournemouth & Poole: Kelvin Snaith & Sarah Turner 07 71989 5015, kelvinsnaith@hotmail.com, sarah_alice_turner@hotmail.com South West England: Ben Pratt 07952 555811, ben@nutritions-playground.com, www.naturalfoodfinder.co.uk

CHAPTER RESOURCES

Resources for chapter leaders are posted at www.westonaprice.org/chapterleaders/ including our new trifold brochure in Word format and PowerPoint presentations.

LOCAL CHAPTER LIST SERVE

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

Dedicated to Helping the Consumer Obtain Nutrient-Dense Foods and Accurate Nutrition Information

FARM PRODUCTS BY STATE

DC

CSA: Hi-Brix, nutritionally dense, biodynamically grown kitchen vegetables, grass-finished beef, pastured pork, broilers and eggs. Openings for 2009 season in DC Metro area. Contact Allan Balliett, info@freshandlocalcsa.com (304) 876-3382, www.freshandlocalcsa.com. *10/4 IL

Northern Illinois' local producer of healthy beef and pork. No soy, GMOs or antibiotics etc. Organic pastures, minerals and feeds. Sides available @ locker, cuts available @ farm. Organic grains and superfoods (815) 239-1466 11/3

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, & Eileen Kelsey, CHom. incorporating WAPF Nutrition with Classical Homeopathy (815) 239-1466. 11/3

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. Available from the Yegerlehner's "The Swiss Connection". (812) 939-2813 www.swissconnectioncheese.com, Clay City, IN. 10/4

MA

Misty Brook Farm offers certified organic raw cow's milk, beef, veal, pork, and eggs. Raw milk is available year-round from 100% grass-fed Jersey cows. Come visit our traditional mixed farm! Contact Katia Holmes at (413) 477-8234 or mistybrookorganicfarm@yahoo.com, Hardwick, MA. 11/2

Robinson Farm: A diversified organic farm selling grass-based raw cow's milk, eggs, eggs, hay, seedlings, vegetables, perennials, flowers, grass-fed beef, humanely raised veal, local We encourage our readers to obtain as much of their food as possible from small farms and independent businesses.

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. 11/1

MD

Organically raised grass-fed beef, free-range eggs, and pastured chicken. Pick up from Potomac, Buckeystown or Emmitsburg (beef only). No hormones, antibiotics, or animal parts are fed. Beef never fed grain. Nick's Organic Farm, Quality Organic Products since 1979, Nick Maravell, (301) 983-2167, nickmaravell@ comcast.net. 11/4

Windmill Meadows Farm, Washington County, Grass-based sustainable family farm. Our focus: healthy, well-balanced soil produces healthy livestock on healthy grass for healthy, goodtasting food products. Grass-fed dairy, beef, goats, pasture-based poultry: (broilers & layers). Availability to Washington DC markets, (301) 739-5258. 10/4

MI

Creswick Farms. Dedicated to raising healthy, happy animals—lovingly cared for just as Mother Nature intended—which provide highenergy, nutritious and delicious food sources

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

FARM PRODUCTS BY STATE

for health-conscious individuals. No antibiotics, steroids or GMOs ever fed to our animals! (616) 837-9226, www. CreswickFarms.com. 10/4

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. 11/1

NH

Certified organic dairy: raw milk, yogurt, cream and quark. Pasture-raised lamb, beef and chicken. Eggs and vegetables available, raw fermented sauerkraut. Call for more info: Luke & Catarina Mahoney, (603) 742-4084 Brookford Farm, Rollinsford, NH, www.brookfordfarm. com. 10/4

NJ

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. 11/3

NY

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. 11/3

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. 11/1

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The Weston A. Price Foundation reserves the right to refuse advertising space to anyone.

FARM PRODUCTS BY STATE

OH

Sleepy Hollow Farm - grass-fed poultry (now taking orders), eggs and beef. Raw milk (certified organic) and raw milk yogurt available through our herd share program. Give us a call - we might be delivering in your area this summer, (937) 464-7505. 10/4

PA

100% grass-fed products: raw milk, cheese, butter, cream and eggs. Lancaster County, Willow Run Farm, Call (717) 656-1359 Eli and Sylvia King, 995-B Musser School Road, Gordonville PA 17529. 10/4

Bareville Creamery 100% Grass-fed offers farmstead cultured butter from our grass-fed cows.* We will ship to you. *\$6.00/ lb plus shipping, or visit our farm to pickup. Daniel & Katie Zook, Leola PA, (717) 656-4422. 10/4

Certified Organic Dairy. Raw milk cheese pastured chickens, turkeys, pigs, 100% grass-finished beef, beef & chicken broth. Call for more information (717) 786-8093, Green Hills Farm, John & Annie Esh, Quarryville, PA. 10/3

Certified organic grass-fed dairy. Raw milk cheeses, cottage cheese, yogurt, sour cream etc. from Jersey cows. Eggs from pastured chickens. Grass-fed beef, pork, chicken, rabbit and turkey. Call for information. Will ship. (717) 768-3437 Pleasant Pasture Organic Acre. 11/1

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. 13/3

Green Ridge Acres offers pasture raised chickens, turkeys, eggs, raw milk and dairy foods from grass based Jersey cows on our family farm. Farm fresh produce in season currently delivering weekly in Philadelphia. For more information, call (717) 354-7082. 11/1*

New location for an attractive variety of guality 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. 10/4

FARM PRODUCTS BY STATE

Nittany Valley Organics is offering certified organic soy-free grass-fed raw milk cheeses. Cheddar, Smoked Cheddar, Monterey Jack, Yogurt Jack, Pepper Jack, Colby, and Himalayan salted Baby Swiss. Looking for Retail Distributors, Reasonable Prices, Ship Mondays only, Place your order by Saturday noon please.. Customers for IN, IL, & MI please call 574-825-1596 ext 1. CT, MA, ME, RI, NY, & VT call (585) 765-9845 for Canada www.HealthyBeloved.ca 888-510-2669 Cheesemaker: Mark Stoltzfus Jr. (570) 726-7799. 11/2*

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. 11/3

Pasture raised raw milk and dairy foods. Also chicken, turkey, veal and beef, Nature's Sunlight Farm, Mark and Maryan Nolt, Newville, PA, (717) 776-3417. 10/4

Raw Dairy Products from our grass-fed Jersey cows. Eggs from our free-range pastured chickens. Beef from our own beef cows. Pork from our own pigs. Running Water Farm, Isaac & Mattie King, 1238 Clay Rd. Lititz, PA-17543, (717) 627-3177. 10/3

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. 10/4

Raw Dairy Products from our 100% grass-fed Jerseys. Free-range, grass-fed, chicken, turkeys. Suckling veal, whey-fed pork, and lard. We do not use hormones or antibiotics. Shady Acres, Glenn Wise, 8514 Elizabethtown Rd. Elizabethtown, PA, 17022, Shipping Available. (717) 361-1640. 11/3

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. 13/4

FARM PRODUCTS BY STATE

Try our aged raw milk Cheeses from our small herd of Jersey cows. Baby Swiss, Jack, Herbal and Hot Pepper, Cheddar-Sharp and Garlic, Havarti and more. Wholesale and retail. Raw milk and pastured eggs, (717) 656-2261. 11/1

Welcome to Family Cow Farm. Our grass-fed cows, pigs and chickens, give us milk, cream, cheese, butter, ice cream, meat, eggs, and more for our family and friends. We also have some produce seasonally. (717) 786-0131. 10/4

ΤN

We are a family farm offering all-natural, delicious, grass-fed lamb, pork, beef and, chicken. We now offer Jersey heifers for family milk cows (gentle!!) Call (866) 866-3287. Ask for Justin or Liberty or email: topoftheworldfarm@wildblue. net. 10/4

VA

Martha Bender M.I.L.K. 2028 Laws Ford Road Catlett VA 20119 Western View Farm has a jersey herd boarding project called MEMBER IN LOCAL KINE (M.I.L.K.) Project in Catlett, Virginia (Fauguier County). For information call (540) 788-9663. 11/2

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. 11/3

Western View Farm has Jersey herd boarding project. For, Member In Local Kine (M.I.L.K.) Project In Catlett, VA (Fauguier County) For information call, 540-788-9663. 11/2

WI

Certified, Organic, soy-free dairy, raw milk cheese, cultured butter, cream, yogurt, cottage cheese, colostrum. Also full line of grass-fed beef, pastured chicken, turkey and free-range eggs. Raw honey, maple syrup, and extra virgin organic coconut oil also available. Will Ship. Grazin Acres LLC (608) 727-2632 located 1 hr NW of Madison. 10/3

Certified organic 100% grass-fed dairy products. Also salad bar beef, pastured pork, pastured chickens, and eggs. Natural sweeteners, On-farm sales. Located 20 minutes south of Medford or 42 minutes W of Wausau, Lowland Ranch, Adin Hoover, Dorchester, (715) 654-6488. 10/4

Dedicated to Helping the Consumer Obtain Nutrient-Dense Foods and Accurate Nutrition Information

FARM PRODUCTS BY STATE

Pasture raised, whey and corn fed hogs in southwest Wisconsin to be ready for January. \$2.95/lb hanging weight for hogs reserved before November, \$3.25/lb after that. \$50 reservation downpayment.. Customer responsible for butcher costs. Email drzimmerman1@yahoo. com or phone 608-874-4144. Coulee View Family Farm www.couleeviewfarm.com 11/2*

HEALTHY 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. Jerkey, hot dogs, summer sausage, beef sticks. Certified Texas Longhorn Beef, 35000 Muskrat, Barnesville, Ohio 43713, phone (740) 758-5050, www.head2tail.com. 10/4

BUTTER and cheese - Nutrient rich summer gold butter and cheese from PastureLand Cooperative. Our products are made from the milk of 100% grass-fed cows grazing certified organic pastures in southeastern Minnesota. Shipping available. Call (888) 331.9115 for more information. www.pastureland.coop. 10/4

COCONUT OIL. Nature's Blessing - USDA certified organic. Discovered on my recent trip to the Philippines, this oil is wonderful! Coconuts are grown and processed on site within 8 hours, cold-pressed. The oil is clear with a wonderful mild flavor. Carrie Hahn, WAPF chapter leader (412) 531-4485. 10/3

GARLIC. Organic & Chemical Free as Nature intended. Whole cloves or dehydrated powder/chips. Erker Organic Farms, Burlington, CO. (719) 346-5026. *10/3

LACTO-FERMENTED VEGETABLES, raw, certified organic, locally grown. Dill pickles, sauerkraut, kimchi, ginger carrots. Sold/Shipped within Northeast only. See website for store list and mail order info. Contact: Real Pickles, PO Box 40, Montague, MA 01351, (413) 863-9063, www. realpickles.com, info@realpickles.com. 11/1

LACTO-FERMENTED VEGETABLES, cultured, 100% organic, by Immunitrition. Three delicious, raw blends – Garden, Sea & Sunshine. Ships 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. 11/3

HEALTHY PRODUCTS

MAGNETICO SLEEP PADS renew your energy while sleeping. Developed by Dr. Dean Bonlie, MagnetiCo is the only magnetic sleep pad backed by ten years of scientific research and designed to deliver the correct negative magnetic field to the body. Six-month satisfaction guarantee. Call Dr. Dave Morris at cell (559) 760-7618 for info. & clinical results. 10/4

NATURAL PRODUCTS. Life Energy Store: Nourish your body, heart & spirit. Delicious nutritious foods: pure chocolates, coconut, mesquite, agave, salts. Additive-free supplements. Natural soaps. More nourishing, earth honoring, healing products to vitalize your vibrant health and well-being! www.LifeEnergyStore. com (888) 846-6412 magic@lifeenergystore.com. 11/2

NEEDAK[™] Soft-Bounce Rebounders. Jump your way to b[™] there health! Tone and detoxify while building strength, flexibility & balance. Expertrated as the most comprehensive workout for all ages and abilities. Solid warranty and value: \$240 + S/H Liz: (928)767-4796. 11/2*

NUTRIENT-DENSE foods shipped anywhere in USA. Bone broth (frozen), cultured veggies, soaked nuts, coconut kefir, seasonal soups, kidfriendly snacks, granola all made with organic foods in accordance with WAPF ideals. Featured at the conference. www.Meanttobefoods.com; (Seattle) (206) 604-1460. 10/4

ORGANIC, RAW SAUERKRAUT. Fresh, Raw, & Alive! Gold Mine's Fresh Organic Sauerkraut is abundant in friendly, living micro-organisms, powerful aids to digestion and assimilation. Independent lab tests show 7.8 million CFU's of live lactobacillus and bifidobacterium species per gram! Aged in special ceramic crocs that allow the growth of friendly flora in a safe environment, Gold Mine's sauerkraut is - according to the most discriminating "kraut connoisseurs" - absolutely delicious! Featured at the annual conference of the Weston A. Price Foundation 2004-2007. (800) 475-3663 or go to www.goldminenaturalfoods.com. 11/1

SPELT. Organically grown. Traditional Oberkulmer Variety. Our spelt is grown by a certified organic farmer. We ship anywhere in the US. We sell by the pound. Contact the Plain Grain Co. LLC for details: www.carasmaternalconnections.com, cara@carasmaternalconnections. com (248) 628-8646 (paypal accepted). 11/2

HEALTHY PRODUCTS

THE FARMER'S GARDEN is the place where everyone can get access to food grown close to his or her home. Visit us at www.thefarmersgarden.com to search or place a free classified to buy, sell or trade your surplus backyard produce. Maureen The Farmer's Garden www. thefarmersgarden.com. *11/2

SERVICES

REMODELING. Michael's Remodeling, kitchen and bath design, basements, kitchens, decks. Serving Northern Virginia for 17 years. Michael Meredith (703) 764-956, Michaelsremodeling. com meredith848@yahoo.com. 11/3

EDUCATIONAL

ARTICLES NEEDED. NATIONAL DIRECTORY of organic food sources and other natural health products needs articles, new releases, recipes, and information about your products and services for future issues. Advertising available. Sample \$3. Buffalo Creek Publications, PO Box 397, Buffalo Lake, MN 55314. *10/3

CURE FOR TOOTH DECAY. At last, the real truth about your teeth. How to prevent and halt cavities for life. Utilize the wisdom of Weston Price and Melvin Page. Buy the book, Cure Tooth Decay! \$29.95 www.curetoothdecay.com. *10/3

DVD of JOEL SALATIN. "Heal the Planet by Healing Your Plate," presented at the Florida launch of the Farm-to-Consumer Legal Defense Fund August 2007. About 2.5 hours. \$20 donation to local WAPF chapter, includes shipping to US. Email WAPFSarasota@gmail.com. *10/3

Personal

Springtime and man's fancy turns towards? Outdoor activities, organic fruit, free range chicken and of course love! Single male 46 seeking single female 25-45, who holds the values of Weston Price in high regards. Chicagoland area but willing to travel. timmyd4@ yahoo.com (630) 350-1937. 10/4

FARMING/WAPF LIFESTYLE

COLORADO FARM seeks 2009 interns for minimum three months. Live at Sunrise Ranch and learn about raising nutrient-dense foods, leadership and community building. Raise produce and grass-fed beef in the foothills of the Rockies. Visit www.sunriseranch.org/farm or call (970) 679-4330. 10/3

DAIRY BUSINESS for sale in Southeast. Loyal customer base. 8 milking Jerseys, heifers, bull, milking equipment to supply 135 families weekly. \$40,000. Also 8 milking goats, 5 doe lings, buck, milking equipment to supply 40 families weekly, \$7,800. We will help you through transition. 23 acres sustainable farm, barn, outbuildings, creek, 5-bedroom off-grid home, \$260,000. eatreal@gmail.com. 10/3

ORGANIC, LOCAL FOOD BASED CAFÉ for lease in Carlisle PA. Great opportunity for a skilled Weston Price oriented team. Complete green facility, turn key operation. Large network of local producers provide beef, chicken, dairy and eggs. take a look www.thegoodlifecafe. com Call David at (717) 243 4968. *10/4

SAWSOMME (SAW-SOM-ME): Sunshine - Air - Water - Soil - Ocean - Minerals - Microbes - Energies. Properly balances life's precious benefits. All are needed in agriculture to start, nurture and sustain life's requirements. SASE. Ed Heine, 14N446 Hwy 20, Hampshire, IL 60140. (847) 464-5987. 10/4

TN BED & BREAKFAST. Spend your next vacation on a working farm, LaBelle Acres in Jamestown, TN. Guests are welcome to fish in the ponds, fight chickens for eggs, or just sit on the porch rocker. Breakfast foods are supplied, guests are welcome to prepare them when they desire. For more information, call (931) 863-5594 or labelleacres@yahoo.com or http://www. bedandbreakfast.com/tennessee-jamestownlabelle-acres. html. 11/1

VERMONT FARM seeks 2009 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,

FARMING/WAPF LIFESTYLE

Internet access and lots of education. Call Doug Flack, (802) 933-7752, Flack Family Farm, www. flackfamilyfarm.com. Snailmail please. 10/4

WANTED: APPRENTICESHIP in cooking, preparing, and foraging traditional foods. Especially-basic culinary techniques, fermentation, head to tail processing/cooking, traditional techniques for optimal nutrition, gastronomy, emphasis on principles of Weston Price. Please contact Carly.Leusner@gmail.com if you have an opportunity. *11/2

ZIMBABWEAN FARMER seeks to become involved in Biological/Organic Farming, either as a farmer or in the support sector or in research. I would be happy to send my C.V.(Resume) to the appropriate person. Please contact David Hartley by e-mail: chacmachacma@yahoo. com. 10/3

INVESTORS NEEDED

FARMSTEAD FRESH Inc. is soliciting investors to help with business expansion. The business is known for training sustainable dairy farmers in making gourmet quality'One Step Above Organic' grass fed raw milk cheese, and marketing it. Web site; www.farmsteadfresh.com. 10/3

INVESTORS NEEDED. Next Level Productions is seeking investors to complete its documentary film "Body Armor." The film follows the journey of individuals with chronic illnesses as they explore natural medicine and alternative therapies. Contact Gabe Golden. (310) 779-2816, Gabegolden310@yahoo.com. *10/4

HEALING ARTS

ANCIENT TRADITIONAL HEALING WAYS. Awaken vibrant health and well being in body, mind and spirit with extraordinary ancient teachings and effective self-empowering tools. Holistic counseling, energy healings, retreats. Discount for WAPF members. JoAnne Dodgson EdD, www.pathwaysforhealing.net, (888) 846-6412, joanne@pathwaysforhealing.net. 10/2

HOLISTIC HEALTH COUNSELING for women & families. Discover vibrant health with an integrative approach to wellness. Get inspired to: make an easy transition to traditional foods, heal naturally, and make gradual changes to improve your health and your children's health.

HEALING ARTS

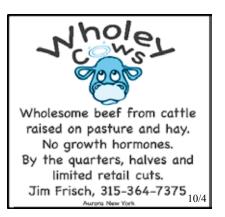
At last, find the way of eating and living that really works for your body and your life! Try a FREE phone session or sign up for our free monthly e-newsletter. Hannah Springer, MS, CHHC (718) 490-2839, Hannah@EarthBodyBalance.com. 11/1

HOLISTIC Lifestyle Coaching and High-Tech Meditation Programs. Free trial coaching session! Discover personal power and new ways to grow with a dedicated listener and creative partner (CTA Certified, ICF Member). Convenient telephone or email appointments. www. HolisticDynamic.com. "10/4

HOMEOPATHIC Care for Babies and Children. Join the Kairos Network Homeopathic Study Group. Member of WAPF, NCH, HEAR, and the Catskill Medicine Wheel. Low cost, effective, very useful for self-care and home prescribing. Tutoring by mail for Study Group members only. Beginners welcome. Make this part of your prepared parenting program. Send SASE to: Liz Potter, 321 Wahl Road, Livingston Manor, NY 12758. 11/1

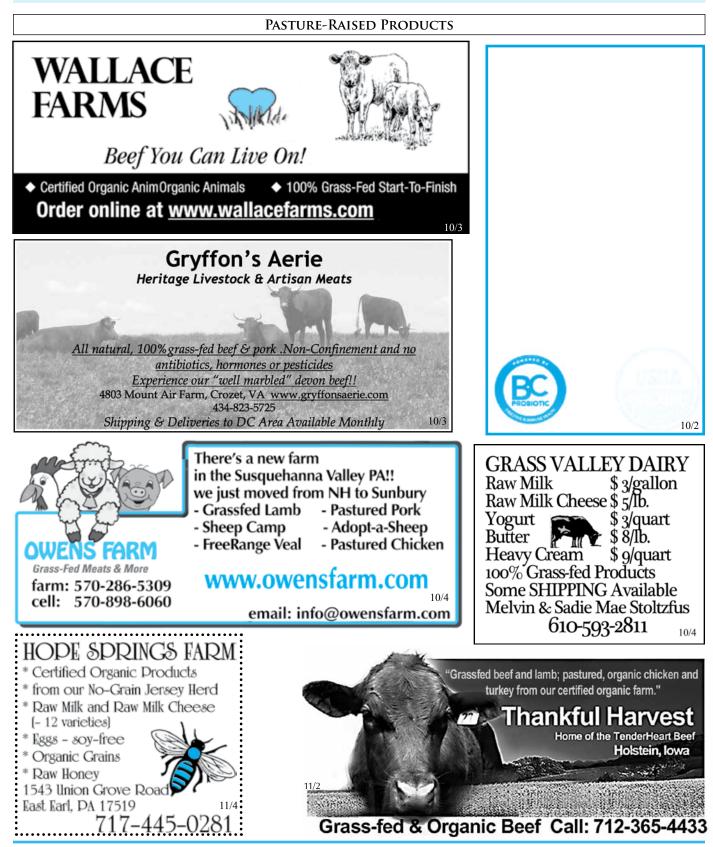
LIVE BLOOD CELL ANALYSIS is a handy and valuable window on the state of health or disease. This procedure has a powerful motivating effect to help others improve their diets emphasizing the principles of Weston Price. Have microscope, will travel. Contact Karen Myer, ND, at (262) 522-9993. 11/1

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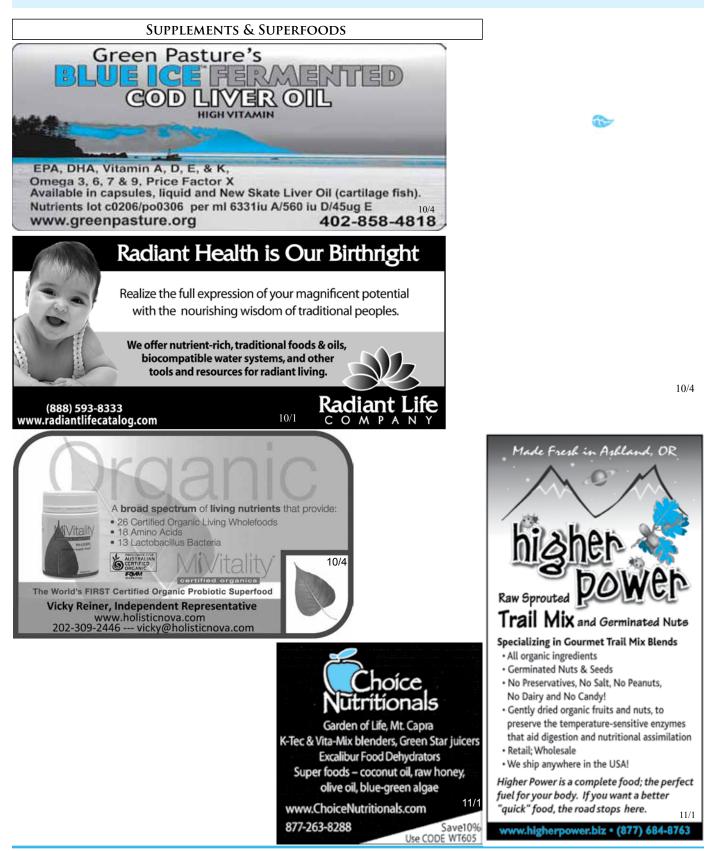
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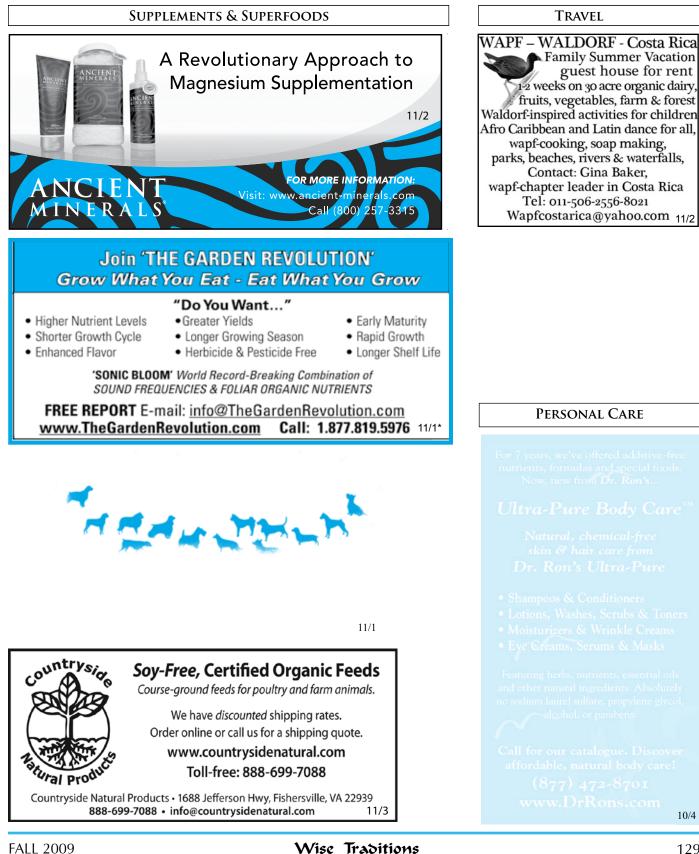




Dedicated to Helping the Consumer Obtain Nutrient-Dense Foods and Accurate Nutrition Information



Wise Traditions



129

Dedicated to Helping the Consumer Obtain Nutrient-Dense Foods and Accurate Nutrition Information



Wise Traditions



FALL 2009

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fruit, sprouted grains, crispy nuts, herbs,& jerky The large tray fits a standard oven and the medium size can be bought with or without a stove top rack(\$75.) which includes 5 trays Also available are stainless steel replacement screens for old dehydrators (.4.32/sq.ft.)

*10/2

Dedicated to Helping the Consumer Obtain Nutrient-Dense Foods and Accurate Nutrition Information



Narrated by Chef Mitterhauser, Calinary Olympics Gold Medalist this documentary is a kaleidoscope of information also introducing the Weston A. Price Foundatio who informs the public about myths and truths regarding mutrition today. You watch colorful and dazzling appetizer, entrue and dessert presentations wrapped around the 18 BASIC COOKING TECHNIQUES prepared with organic of rests whole food ingredients from the chefs 600 battle-hardened rest This chef aka Professor Culinarius links scientific sources from the WAPF to point out the vital importance how to cook with whole food ingredients instead of consuming processed where nod improvement motions or communing previous predicets. With homorous page and music the viewer's entretained with fascinating videography from a wealth of patronomy designed for anyone or a family interested in a life style that includes cooking as a regular cultural activity, hohly or prefersion. It beats any soap opera because you can learn to eat healthy and have fun in the process. As a story teller Professor Culis leads the viewer into a culinary odyney around the world with his escapades and buffet art.

69 min DVD including:

- 1: Introducing Chef Milterhauser 2: Weston A. Price Foundation 3: Ten Basic Cooking Techniques and School 4: Sautting Techniques with Walkyer File 5: Bad Ingredients Into The Trash Can
- 6 Good Fata
- 7 Corned Beef and Cabbags
- 8 Whole Fresh Fruits and Vegetables Gravias-Bome Cared Salme
- 10 Viennese Apple Strudel
- 11 Marzinan Princess Torte
- 12 Two Cook Books

www.professorculinarius.com

email to: mitterhauser@izoom.net 0/4

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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 Niginaq*tuat, 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 *10/2



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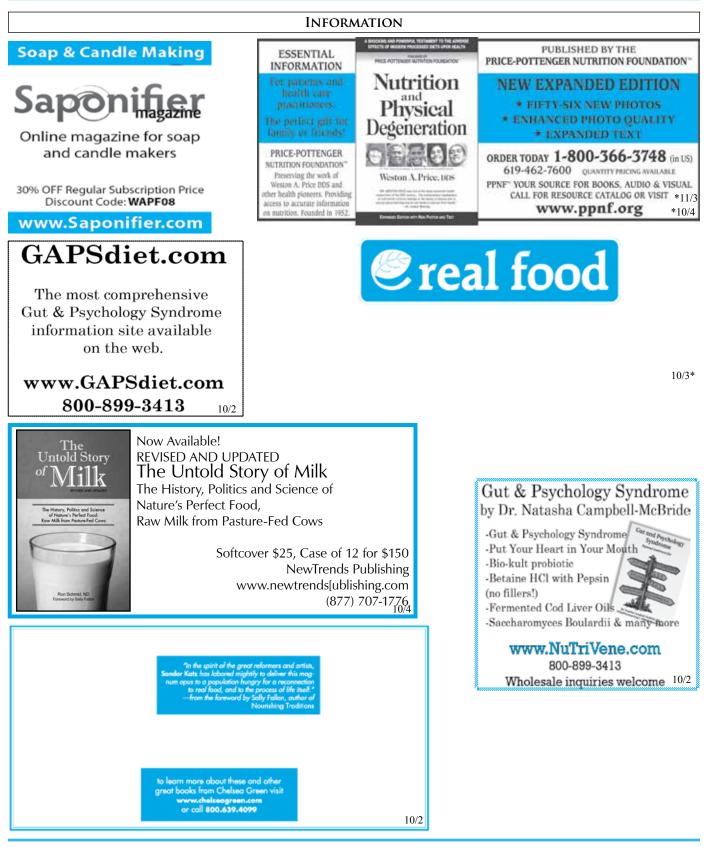
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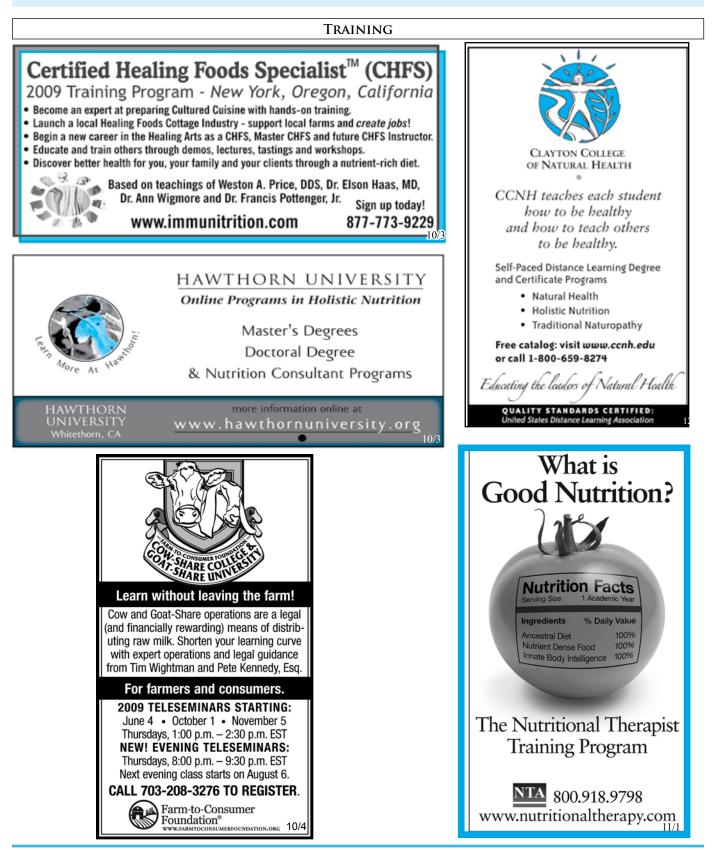
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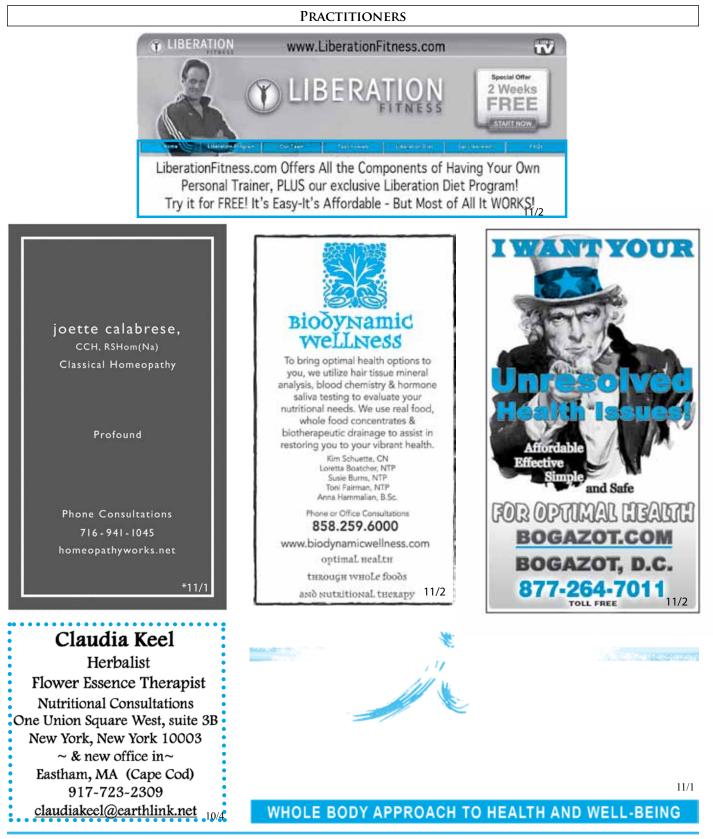
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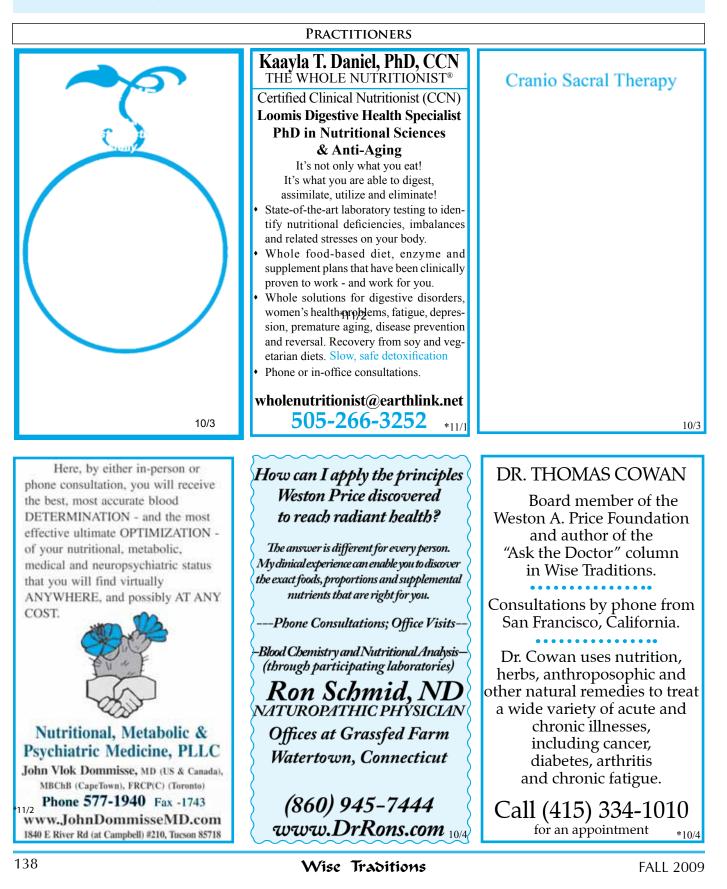
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