The "Fat Gene" Dream Machine

Dear Reader:

I sense another scientific hope about to vaporize. I’m talking about the story surrounding the so-called obesity gene and claims that science may soon be able to transform your body into that lean, sleek form of your dreams.

The molecular biologists who are producing most of this information are having a field day. So are the media people. And the pharmaceutical companies are agog as they imagine new obesity control drugs. And consumers? Because we’re really, really, interested, we’re ripe for the picking.

What’s all the commotion? It all started a few short years ago when we learned that a very important obesity gene was discovered. The fascination with this particular gene arose partly because a nice “mechanism” seemed to be at hand. In other words, this particular gene is called into action in those body cells which begin to fill up their fat stores. It produces (in experimental animals) a protein, called leptin, which then acts as a hormone by traveling back to the brain’s appetite-control center to shut down further eating, perhaps to control body weight. Consider what an award-winning drug leptin might be. If properly administered, leptin could conceivably be used to control appetite. These early observations also suggested that obese people would have low circulating levels of leptin because they had difficulty turning off their appetites.

However, guess what? Obese people are often shown to have high, not low, leptin levels. An explanation for this odd observation was that maybe the leptin of obese people could not send its message because something was wrong with the portal-of-entry receptor sites of the appetite-control center. In other words, the fat-filling cells appear to be producing extra amounts of leptin to compensate for this defect.

But we now learn of yet other genes in this obese scheme of things. One is a gene called GLP-1, which appears to act in concert with leptin to shut down appetite—if all works well. Another is a gene that controls the production of what is thought to be a key enzyme in the metabolism of fat.

continued on page 2
The Facts Beneath the Promises

To get to the real facts lurking beneath the false promises, let's refresh our knowledge with a few very simple ideas on genes and how they work. Genes, supposedly numbering more than 100,000, are the codes that dictate the kind and amount of proteins to be produced in our cells for the proper functioning of our bodies. These genetic codes are made up of unique sequences of four kinds of purine and pyrimidine chemical bases strung, like beads, along a long chain of DNA. Except for red blood cells, virtually every cell in our body contains the same DNA. The specific DNA codes (genes) called on to direct synthesis of these proteins depends on which kind of cell is doing what.

The production of protein from DNA first involves transcription of the DNA code for each gene into a rather similar copycat code of RNA. Then, the RNA code is translated into the unique sequence of amino acids that comprise each of the hundreds of thousands of different kinds of proteins. The overall process is far more complex than this (the literature on this process could fill hundreds of thousands of pages!), but this will do for our discussion.

The proteins produced from the DNA code carry out their unique functions mostly as enzymes and hormones. Enzymes regulate an enormous number of highly integrated and interdependent biochemical reactions, while hormones carry messages from the cells of one tissue to the cells of another. Again, this process is highly interdependent and complex. We should mention that hormones, after traveling through the blood cells to another tissue, transfer their message to the new cells by binding to portals of entry, or receptors, on the cell surface. At this juncture, the message is passed across the cell membrane to produce additional messages on the inside of the cell.

Bottom line? These reactions are so integrated, interdependent, complex, and intricately controlled that there is virtually no way that we can manipulate only one reaction, and then accurately predict all the consequences.

Okay, now let's go back to our obesity gene story and find out why I say we are sitting on the precipice of another scientific disaster. Because each enzyme or hormone within the complex web of integrated reactions is derived from a unique gene, it follows that there must be a large number of genes playing roles in the determination of obesity. Drugs are imagined every time a new gene is discovered! But there simply is no way we'll ever be able to treat obesity in such a superficial manner. Even if a drug is shown to produce an effect on obesity, it either will not be sustained or it will be associated with long-term adverse consequences. I will bet on it.

A Final Prediction

Why is it that we in science find it so difficult simply to observe how Nature handles the problem of obesity, then choose our actions accordingly? We already have overwhelming evidence that a low-fat, plant-based diet and regular exercise can largely control most weight problems. Of course, we don't know exactly how this works mechanistically, but this is secondary. Knowing exact mechanisms serves drug companies more than consumers. And one final prediction: such a diet and exercise program will be found to regulate in a consistent manner the activities of all these genes, those now known and those to be discovered, in ways that work best for weight control and overall good health.

Why do science and medical authorities persist in telling consumers that such a diet and exercise program is extreme and is something that most people will not like anyway? Isn't it a bit arrogant for us to suggest what consumers might like, then do research on something that mostly serves our own interests?

A total lifestyle change is safer, and far cheaper to adopt. Try it, and you'll wonder why you didn't make the dietary switch much earlier.

Wishing you the best of health!

Colin
The Great Olestra Blunder
What Went Wrong?
by Charles R. Attwood, M.D., F.A.A.P.

When I first heard of olestra five years ago, I thought its side effects were so terrible and potentially dangerous it would never reach the marketplace. I’d already found that my patients couldn’t depend upon specially processed low-fat foods or artificial nutrients such as Aspartame to control excessive weight gain. Olestra, under development by Procter & Gamble, offered something new: it was a fake fat that couldn’t be digested. Unlike Simplesse, another fake fat, it was heat-stable and could be used for both frying and baking. But there were serious caveats.

Dr. Fred H. Mattson, the co-discoverer and former employee of P&G, had confided to reporters, “We had a great deal of trouble with what we call anal leakage.” What this meant was that in some individuals this new substance—a sucrose molecule with six to eight long-chain fatty acids attached—was so large and dense that enzymes couldn’t break it down. It passed through the GI tract like mineral oil without absorption, staining the test subjects’ underwear. As little as 10 grams (in a one-ounce bag of potato chips) caused bloating, cramping, and diarrhea.

Pig Tests for Children’s Health?

Other problems were potentially even more serious. The fat soluble vitamins (A, D, E and K) apparently attach themselves to this large fatty acid polyester molecule and are discharged with it instead of being absorbed. As a result, several groups could be at special risk: people on anticoagulant medication, children and the elderly, pregnant women, and those with chronic inflammatory bowel disease. The study of longest duration that P&G submitted to the FDA was one lasting 39 weeks, but its subjects were pigs.

When it came to human subjects, the most ominous of olestra’s effects tested in the P&G laboratories was its interference with the absorption of many fat-soluble carotenoids, nutrients thought to play a part in prevention of cancer and of blindness due to macular degeneration in later life. One study conducted in Holland and reported in the American Journal of Clinical Nutrition (62:591, 1995) showed that after one month of eating just 3 grams of olestra daily (the amount contained in only 6 potato chips) the blood levels of lycopene, a carotenoid found in tomatoes, and suspected of preventing prostate cancer, were 40% less than in controls. Another report showed that eating 8 grams of olestra daily (contained in 18 potato chips) for two weeks led to a 20% drop in blood levels of lutein, thought to be protective against macular degeneration. Unlike cramps and diarrhea, consumers cannot monitor carotenoid depletion. All things considered, I found little reassurance for my patients and readers.

“Let Them Eat Olestra”

Astonishingly, the FDA’s Food Advisory Committee (FAC) recommended approval after just four days of meetings in November 1995. One of its members was my long-standing adversary, Dr. Ronald Kleinman, a Harvard pediatrician and author of Let Them Eat Cake. He was an ideal olestra advocate, having written that there are no bad foods for children. He acknowledged that children might have cramping or diarrhea but, he suggested, if that happens they can simply stop eating olestra-containing foods. “They may not wish to tolerate four or five bowel movements a day, but I don’t see that that has an adverse effect on their health if they stop that food. I don’t believe I am hard-hearted.”

Another committee member, Dr. Henry Blackburn, of the University of Minnesota, said, “This is a purely technological, superficial, get-rich-quick magic bullet pill.” He also complained that several committee members had worked as food industry consultants. Three members didn’t vote (citing conflicts of interest), five voted against olestra, and fifteen voted for allowing its use in salty snacks, potato chips, corn chips, and crackers, with the following label warning: “This product contains olestra. Olestra may cause abdominal cramping and loose stools. Olestra inhibits the absorption of some vitamins and other nutrients. Vitamins A, D, E and K have been added.” Notably missing were such key words as “diarrhea” or “anal leakage” and no mention was made about the inhibition of carotenoid absorption.

During the time between the committee’s adjournment on November 19 and the December 1 deadline for public comments, nearly 800 letters poured into the FDA. Most, I was told by Marian Burros of the New York Times, were from health professionals recommending that the product not be approved. Taking no chances, however, P&G wrote to dozens of scientists, asking that they each write letters to the FDA on its behalf during an extended period for public comments. Of the 26 scientists who complied, some had been consultants to P&G; others had been a part of the FDA Food Advisory Committee.

A Toned-Down Warning

On January 25, 1996, olestra was approved for marketing. The warning, in its toned-down form, appeared unobtrusively on the back of the package at the bottom. So is it all over? Not exactly. P&G must monitor side effects through an 800 number appearing on the package. Everything will be reviewed—by the same FAC—in 30 months. But already the giant leap from laboratory to grocery cart has been made, and no longer are the test subjects pigs. Mostly they are children—the largest consumer segment of salty snacks.

Charles R. Attwood, M.D., a pediatrician and writer based in Crowley, Louisiana, is the author of Dr. Attwood’s Low-Fat Prescription For Kids.
Menopause

As every woman knows who rides the wave of shifting hormones, these small, chemical components of our blood can take us for quite a ride—from bloating to hot flashes to depression. And while we may not be able to completely smooth the hormonal journey, we can ease the way.

Menopause is, well, a hot topic. But it seems it is less “hot” for Chinese women. Researchers claim that these women report far fewer difficult symptoms of menopause, including hot flashes. While we don’t know the precise reason for this, we do know the following very provocative facts.

- American women tend to have higher estrogen levels than Chinese women.
- Many researchers suspect that difficulties with menopause are caused by the degree that estrogen levels fall. In other words, if estrogen levels are not so high to begin with, their fall is far shorter, leading to fewer symptoms. Meat, chicken, and dairy products contain foreign estrogens that are fed to animals to increase weight and production, but they also lead to higher estrogen levels.
- Diets rich in vegetables, particularly whole grains and legumes, provide magnesium and vitamin B6, both of which appear to reduce symptoms of PMS, and possibly, of menopause.
- Many plant foods, such as soy products, contain phytoestrogens (plant estrogens) such as genistein, which bind to estrogen receptors in the breast or endometrium, “locking out” the “bad” estrogens associated with cancer. In addition, these phytoestrogens provide a natural and gentle source of estrogen as women’s levels drop during menopause. Researchers hypothesize that the high intake of soy products in Asia—toufu, soybean juice, miso—may be partly responsible for easing the Asian women’s way through this mid-life passage.

The Magic Of Phytoestrogens

What exactly are estrogens, and how do they work? These small, chemical hormones, produced mostly in the ovaries, travel widely through the body, slipping like keys into appropriate “keyholes”—receptor sites in the various parts of the body, such as the breast or endometrium. Once docked, they set off various chain reactions that affect us for good or ill.

It turns out that the estrogens that we make ourselves are not the only ones that fit the estrogen receptors: certain estrogenic compounds (phytoestrogens) made by plants also fit these hormone keyholes. And this capability may have far-reaching, beneficial effects on our health, possibly protecting against various cancers as well as easing menopausal symptoms.

Where do we find plant estrogens? While they are probably in many foods, soybeans are one of the main sources of these hormones. Whether you prefer your soy in the form of tofu, soy flour, or a steaming bowl of miso soup, all soy products (except soy sauce and soy oil) provide ample quantities of daidzein and genistein—two phytoestrogens that have been scrutinized by the scientific community. Eating a daily cup of soybeans may provide roughly the equivalent of one tablet of Premarin, a widely prescribed estrogen for menopausal women.

Another intriguing source of plant hormones is the Mexican wild yam, Dioscorea villosa. This root—not to be confused with our popular, supermarket variety—contains hormone-like substances that may convert to estrogens in the body. Although Mexican yam supplements are available, we don’t recommend them until more studies have been done. In the meantime, the beneficial effects of the soybean are well documented both in the lab and in large population studies.

—Christine Cox
I just turned 50 and, despite the inevitable march of time, something wonderful has happened in the last five years. I’ve grown leaner, stronger and healthier. As I moved into mid-life, I chose to nurture my body rather than accept the negative effects of inadequate self-care. Good exercise and nutrition benefit my health, but they also increase my self-esteem and the pleasure I find in daily living.

Our culture spends massive amounts of energy and money combating the outer signs of aging—buying creams and cosmetics, dying away the gray, and suffering through tummy tucks and face lifts. Meanwhile, we passively assume that our aging bodies will become weak and disabled. Fortunately, research shows that many problems associated with aging—osteoporosis, muscle weakness, loss of balance, heart disease, increased blood pressure and diabetes—are not inevitable. These infirmities are usually caused by poor health habits, not age, and we can often prevent them.

**It’s Never Too Late**

The most encouraging news is that making changes when we’re 40, 50, or even 80 produces big results. According to the Human Physiology Laboratory at the Tufts University Human Nutrition Research Center on Aging, we respond surprisingly well to exercise programs at any age—muscles grow, bone density and metabolism increase, body fat decreases, and blood sugar and balance improve. Reduced muscle strength is the major cause of age-related disability, and the primary cause of muscle weakness is disuse. After only 12 weeks of high-intensity muscle training, healthy males between the ages of 60 and 72 increased knee extensor and flexor strength by 107% and 227%, respectively. These gains were “very similar to those reported for younger subjects after training of similar intensity and duration.” It’s also encouraging that exercising people feel stronger, more independent, and less burdened by their advancing years.

Any movement helps tremendously, but a program combining aerobic conditioning, strength building, and flexibility is best. Start gradually and gently with something that feels positive and rejuvenating. It’s mentally stimulating and physically beneficial to alternate types of exercise on different days. For example, begin with a 15-minute walk three or four days a week, slowly building to 40 minutes. As you increase your time, also increase your pace, but always begin with a 10-minute warm-up, allowing the muscles and lungs to prepare for aerobic work. A cool-down period after exercise protects your heart and muscles from lactic acid build-up.

On alternate days, follow a stretching and strengthening program. Hatha yoga is a form of exercise that increases flexibility and muscle mass. Most health clubs offer classes in strength building, stretching and yoga, and some people keep motivated by exercising with others.

**Nutritional Guidelines**

Nutritional guidelines for healthy aging are the same as those for prevention of cancer, osteoporosis, heart disease, and diabetes. We need to increase whole, unrefined plant foods in our diet. Our goal is to avoid low-nutrient sugar and fat calories, while increasing nutritionally dense dark green and orange vegetables, whole grains, and legumes. Providing adequate nutrients for healthy bones and protection of our cells from free radical damage does require special attention.

Most of us are concerned about prevention of osteoporosis. Exercise is our best insurance policy, but we also need adequate intake of calcium, magnesium, and vitamin D. The most healthful sources of calcium and other bone-building minerals are dark leafy greens, especially from cabbage family vegetables or seaweed. Most of the year we can get adequate vitamin D by brief exposure to the sun, but a study at the Calcium and Bone Metabolism Laboratory at the USDA Human Nutrition Research Center on Aging found that supplementing women in northern climates with 400 mg of vitamin D in the winter significantly decreased bone loss.

The antioxidant vitamins C and E, and selenium are also much in the news, since they protect and repair our bodies at a cellular level. A diet high in fruits and vegetables has plenty of vitamin C, but vitamin E and selenium are a little trickier. Vitamin E is found in cold-pressed vegetable oils, whole grains, dark leafy greens, nuts and seeds, and legumes. However, vitamin E breaks down easily with exposure to oxygen, so sources must be fresh. Selenium content of food is dependent on the selenium levels of the soil on which they are grown. Whole grains are good sources if grown on soils with high selenium levels. Other sources of selenium are Brazil nuts, brewer’s yeast, garlic, and dark leafy vegetables.

So, if you’re middle-aged or older, the clock is forcing you to make choices about your future health. It’s both a relief and a responsibility to know that we can personally influence many aspects of our own aging through exercise and nutrition. If we truly value ourselves and our future, we can express this by caring for our health.

*Elaine Mansfield is a nutrition, exercise, and menopause counselor in Ithaca, NY (607-273-9200).*

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Elaine Mansfield with her mother
THE WELL-VERSED KITCHEN

CARROTS: What’s Up, Doc?

The famed animator Chuck Jones had no intention of changing America’s food habits when, half a century ago, he stuck a carrot in Bugs Bunny’s hand as talisman, protector, and object of desire. Bugs, Jones figured, like carrots. After all, didn’t Peter Cottontail always head first for Farmer Brown’s carrot patch when out raiding for food?

Now, insofar as rabbit culinary preferences go, any old weed would have done nicely for Bugs. Put a carrot in a pile of assorted vegetables and greens and set it before a hungry bunny, and the creature will show no special preference for Daucus carota sativa. But Bugs Bunny is a more influential rabbit than most. Call it the purest of coincidences, but Bugs’s lifespan has coincided very nicely with a marked upsurge in the last few decades of carrot consumption in the country.

That it took a cartoon to make the carrot popular is a strange matter. Still, you can’t blame Americans for not valuing the bright orange vegetable more highly than they do. As a food item, it is notably limited: you can’t do much more with a carrot than boil it or gnaw on it raw, and most cookbooks skip by it with only a nod. Although it was one of the first food plants brought from England to North America by the colonists, the carrot remained almost an afterthought for centuries, something to add to stews and casseroles—but more often to animal fodder. Indeed, during those formative years in America the carrot’s closest relatives enjoyed wider use than the carrot itself—they being plants used almost exclusively as spices: anise, cumin, caraway, dill, chervil, parsley, coriander, and fennel.

Even with the influence of Bugs, American consumption of carrots falls far short of that in Europe, where purple, white, and red varieties are sold alongside the carrot we know. That bright-orange vegetable is a hybrid cultivated in Holland in the 17th century from varieties common in Europe since ancient times, brought there from the carrot’s original home of Afghanistan. Grown in startling abundance throughout Europe, and especially the British Isles, the carrot has long been a staple there, often associated with the diet of poverty. As the actress Joyce Green recalls in her 1947 memoir Salamagundi, her well-to-do mother was horrified at the thought of having to endure a nightly meal of cooked carrots with a little boiled cabbage during World War II, although such a diet kept millions of Britons from starving.

“Carrots are Good for You”

In any event—and every child knows the horrifying phrase—carrots are good for you. Carrots are rich in potassium, a mineral in which too many Americans are deficient. They are low in calories (about 50 to a cup of raw carrots, and 70 to a cup of cooked carrots), fat free, and high in fiber. Also, they make for a nutritional and filling side dish or snack; if you eat only a couple a day, you’ll do much to reduce your blood cholesterol.

Carrots abound in natural sugars; of vegetables, only beets contain more. Their healthful sweetness makes carrots a recommended substitute for sugar in cakes, dressings, and puddings. Shredded carrots atop breakfast cereal have yet to catch on, but adding some to fresh or canned tomatoes in sauces helps cut acidity and reduces the risk of heartburn.

Carrots are shot through with beta carotene, the chemical precursor to vitamin A. The heightened carotene content of our supermarket variety is what makes the carrot orange to begin with. Carotene also gives color to egg yolks, mangos, sweet potatoes, apricots, and grapefruit—and, thanks to the addition of carrot juice—to most yellow cheeses. Eat a few dozen a day and you run the risk of changing your skin to a peculiar, yet harmless shade of yellow. Carotene is released with cooking, and a single cup of cooked carrots contains more than four times the federally recommended daily allowance. Although scientists have yet to agree conclusively on the matter, carotenes are thought to inhibit—and perhaps even prevent—the growth of many kinds of cancers, especially those of the lungs, pancreas, and spleen. For that reason, many doctors suggest that smokers especially add carrots to their diets.

Scientists, too, have yet to figure out why carrots and apples cannot coexist side by side in the refrigerator. Yet there the mystery remains: put a carrot next to an apple, and both will turn bitter overnight. Not even the mighty Chuck Jones knows why.

Gregory McNamee is an author, cook and natural history writer who makes his home in Tucson, Arizona.

### Carotene Content of Some Common Foods

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<tr>
<th>Food</th>
<th>Carotene Content</th>
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<tr>
<td>1 cup carrot juice</td>
<td>6317</td>
<td></td>
</tr>
<tr>
<td>1 sweet potato</td>
<td>2488</td>
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<tr>
<td>1 medium carrot</td>
<td>2025</td>
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<tr>
<td>1 cup cooked spinach</td>
<td>1474</td>
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<td>1 cup cooked kale</td>
<td>962</td>
<td></td>
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<tr>
<td>1 medium mango</td>
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<tr>
<td>3 medium apricots</td>
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<tr>
<td>1 cup orange juice</td>
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* Retinol equivalent per serving
Involuntary Vegetarianism
by Mark Harris

Vegetarianism is the kind of word that can easily stir passions. For some it represents a kind of threat, a challenge to long-held beliefs, for others a frame of hope, a rallying cry for humanity to heal itself and replenish the earth. In either case, my own feeling—supported by a mounting body of evidence—is that vegetarianism is rapidly becoming as inevitable as death, taxes and Web sites. A leaner and more crowded Cyber Age will practically guarantee it.

According to a 1994 report, the country’s forced conversion to vegetarianism will be prompted by a population upsurge, coupled with a dramatic loss in the amount of land available for cultivation. This analysis, published by the Carrying Capacity Network (CCN), carefully examines the connection between economics, population, and the environment. So far, report the authors, American agriculture has been able to meet its own and much of the world’s food needs by tilling this country’s arable land, currently 470 million acres. That’s equal to 1.8 acres for every person, enough to fill grocery shelves here with a cornucopia that’s the world’s envy. Our rich cropland yields so much grain that we cavalierly assume we can feed nearly a third of it to livestock. The problem: by the year 2050, we simply won’t have enough remaining cropland to provide for our meat habits.

People Versus Livestock

Soil erosion, the inexorable urbanization of rural America, and other forces of environmental degradation are predicted to slash the amount of available arable land by a full quarter by this turn-of-the-century mark. The remaining land will be needed to grow food for a hungry population that will double in size to 520 million. “Under those circumstances, we’re not going to be able to produce enough grain to feed both people and livestock,” says David Pimentel, Ph.D., professor of entomology and agricultural sciences at Cornell University, who co-authored the CCN report.

A varied diet that includes both plant and animal products requires more than 1.2 acres of arable land for every person, but by 2050, only 0.6 acres per capita will be available. “Faced with this major reduction in per capita arable land, production patterns will have to be altered to include increased production of grains, legumes, and tubers, while animal production will be sharply curtailed,” concludes Pimentel. “Then the U.S. diet will shift from a mixed plant/animal diet to primarily a vegetarian diet.”

By that time, however, many of us may have already been conscripted into the ranks of vegetarians for other reasons. Ronnie Cummins, national director of the Pure Food Campaign in Washington, D.C., believes Americans may end up abandoning meat simply because they can’t be sure it’s safe. “As the processing of meat becomes more industrialized and mechanized,” says Cummins, “it’s inevitable that meat is going to become more and more contaminated. Close quarters in factory farms abet the spread of disease among animals, and assembly-line processing of meat allows inspectors woefully little time to examine carcasses. As a consequence, people are going to cut back on meat or become vegetarian altogether.”

Mad Cow Fears

Fears have been fueled more recently by the British Mad Cow scare, in which the British government acknowledged that 10 people who died from a rare form of human dementia most likely acquired it from eating the diseased meat of “mad” cows. The U.S. Department of Agriculture has announced the most sweeping changes in meat inspection in nearly a century—replacing the “sniff and poke” method—but not everyone is going for it. A recent Associated Press poll found that news of the Mad Cow disease had changed the eating habits of nearly 20% of Americans.

Possible contamination tells only part of the story about why Americans are increasingly shunning the supermarket meat counters. There are also reports from medical doctors such as Dr. Dean Ornish. Founder of the Preventive Medical Research Institute and a member of New Century Nutrition’s Scientific Advisory Board, Ornish is so convinced of the connection between meat consumption and heart disease that he advises a very low-fat, plant-based diet for people with heart disease. His “reversal program,” which combines meditation and exercise with diet, is the first non-surgical, non-pharmaceutical therapy for heart disease to qualify for insurance reimbursement.

Fortunately, a thin yet brilliant silver lining surrounds the dark forces pushing us toward vegetarianism, and it’s simply better health. Let’s face it, if we’re going to be up to tackling the weighty problems of the future, we’ll need all the strength we can muster.

Mark Harris writes on environmental issues for the Los Angeles Times Syndicate.
Dr. Spock Recalls:
From Mother’s Boy to Independent Thinker

Many times when I speak to children and teenagers, they seem hesitant to change their eating habits, and I understand the problem. Partly, their reluctance is because they may have already acquired a taste for such things as hamburgers and hotdogs, and partly it is because they feel pressure from their friends.

Running Against the Grain

It is not easy to run against the grain of conformity. Yet, unless poor eating habits are broken early, the resulting health problems can be very serious, and often they are deadly.

I must admit from my own experience that daring to be different is rarely easy but I do feel, when done with good conscience, it brings its own rewards. You may find it interesting to know that as a youngster I was quite a mother’s boy. Nonetheless, it was through my mother’s example that I later learned to act and think independently. To her credit, my mother was totally devoted to her six children, of whom I was the eldest, and it was undoubtedly through my identification with her love of babies that I became a pediatrician. But she was excessively controlling and moralistic, and she made my early years painful.

Up until the time I reached 12 years of age, I was required to eat my supper of porridge and applesauce at the children’s low table. We ate promptly at 5:30 p.m. and then, unlike the neighborhood children, we were forbidden to play outside before bedtime at 6:45 p.m. Included on my mother’s list of things not to do were: eating bananas (considered to be indigestible), wearing short underwear (except in the heat of summer), and running in sneakers (not enough support for the feet). I was the kind of kid that bullies could quickly detect. I remember when I was about seven, playing in Chunky Robin’s backyard, when he emerged from his house with a whole stock of bananas. “Everyone has to eat a banana,” he proclaimed. I was really in a quandary. I was afraid of Chunky and what all my friends would say, but I was more afraid of my mother, so I didn’t eat the banana. At this time in my life, I was afraid of my parents, my teachers, tough boys and barking dogs. I knew when I heard the expression “mother’s boy” that it perfectly summed up both my predicament and my personality.

Everyone Laughed at Me

Even into my teenage years, this situation continued. In an effort to save wool for the soldiers during World War I, my parents concluded that the perfect solution would be for me to wear my father’s cast-off suits. Dark gray, loose-fitting, fine-striped, and cuffed, they embodied the exact opposite of my adolescent taste. When I expressed my fear that everyone would laugh at me (which they did!), my mother chastised me with fierce scorn: “You ought to be ashamed of yourself for caring what people think. As long as you know in your heart what’s right, it doesn’t matter.” Of course, I didn’t believe her at that age. But 50 years later, I got some comfort from her teaching—that’s when I found myself convicted of conspiracy, along with the chaplain of Yale University and three others, and sentenced to two years in prison for opposing the war in Vietnam. Later the Court of Appeals overturned the verdict and I didn’t have to serve time, although I’ve spent many nights in prison for nonviolent civil disobedience.

Daring to be Different

Now I realize that if you feel strongly enough about your convictions, you don’t have to win the approval of others. And if you dare to be different, you will soon find that there are others like you. Today, I eat foods that are very different from what many people eat, but I know that it’s healthy so I don’t mind. If you have stories about lifestyle changes you have made and how you have changed your life to stick to a plant-based diet, you can write to me at New Century Nutrition. I would love to hear your stories.

Benjamin Spock, M.D. has practiced pediatrics and written 11 books. With more than 40 million copies sold worldwide, Dr. Spock’s Baby and Child Care has been translated into 39 languages since the time of its first publication 50 years ago.

A Day in the Life of Dr. Spock

- Plant-based Diet
- Meditation (twice daily)
- Exercise (muscle building; three times per week)
- Yoga (stretch)
- Massage (shiatsu)
- Work (writing)

COMING SOON

- Straight Talk About Tobacco
- Kids at the Crossroads: Will School Lunches Make the Grade?
- Vitamin B-12: Should You Worry?