

# Timeless Principles of Healthy Traditional Diets



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## About Weston A. Price, DDS



In the early 1930s, a Cleveland dentist named Weston A. Price (1870-1948) began a series of unique investigations. For over ten years, he traveled to isolated parts of the globe to study the health of populations untouched by industrial civilization. His goal was to discover the factors responsible for good dental health. His studies revealed that dental caries and deformed dental arches resulting in crowded,

crooked teeth are the result of nutritional deficiencies, not inherited genetic defects.

The groups Price studied included remote villages in Switzerland, Gaelic communities in the Outer Hebrides, indigenous peoples of North and South America, Melanesian and Polynesian South Sea Islanders, African tribes, Australian Aborigines and New Zealand Maori. Wherever he went, Dr. Price found that beautiful straight teeth, freedom from tooth decay, good physiques, resistance to disease and optimistic outlooks were typical of native groups still eating their traditional diets, rich in essential nutrients.

When Dr. Price analyzed the foods used by isolated peoples he found that, in comparison to the American diet of his day, they provided at least four times the water-soluble vitamins, calcium and other minerals, and at least TEN times the fat-soluble vitamins, from animal foods such as butter, fish eggs, shellfish, organ meats, eggs and animal fats—the very cholesterol-rich foods now shunned by the American public as unhealthy. These healthy traditional peoples knew instinctively what scientists of Dr. Price's day had recently discovered—that these fat-soluble vitamins, vitamins A and D, were vital to health because they acted as catalysts to mineral absorption and protein utilization. Without them, we cannot absorb minerals, no matter how abundant they may be in our food. Dr. Price discovered an additional fat-soluble nutrient, which he labeled Activator X, that is present in poultry fat and livers, aged cheese, egg yolks, and butter from cows eating rapidly growing green grass in the spring and fall. All primitive groups had a source of Activator X, now thought to be vitamin K<sub>2</sub>, in their diets.

The isolated groups Dr. Price investigated understood the importance of preconceptual nutrition for *both* parents. Many tribes required a period of special feeding before conception in which nutrient-dense animal foods were given to young men and women. These same foods were considered important for pregnant and lactating women and growing children. Price discovered them to be particularly rich in minerals and in the fat-soluble activators found only in organ meats and animal fats.

The isolated people Price photographed—with their fine bodies, ease of reproduction, emotional stability and freedom from degenerative ills—stand in sharp contrast to civilized moderns subsisting on the “displacing foods of modern commerce,” including sugar, white flour, pasteurized milk, lowfat foods, vegetable oils and convenience items filled with extenders and additives.

The discoveries and conclusions of Dr. Price are presented in his classic volume, *Nutrition and Physical Degeneration*. The book contains striking photographs of handsome, healthy, primitive people that illustrate the physical degeneration that occurs when human groups abandon nourishing traditional diets in favor of modern convenience foods.



*The photographs taken by Dr. Weston Price illustrate the difference in facial structure between those eating native diets and those whose parents had adopted the “civilized” diets of devitalized processed foods. The “primitive” Seminole girl (left) has a wide, handsome face with plenty of room for the dental arches. The “modernized” Seminole girl (right), born to parents who had abandoned their traditional diets, has a narrow face, crowded teeth and a reduced immunity to disease.*

*Photos copyright Price-Pottenger Nutrition Foundation*

## Characteristics of Traditional Diets

1. The diets of healthy, nonindustrialized peoples contain no refined or denatured foods or ingredients, such as refined sugar or high fructose corn syrup; white flour; canned foods; pasteurized, homogenized, skim or lowfat milk; refined or hydrogenated vegetable oils; protein powders; synthetic vitamins; or toxic additives and artificial colorings.
2. All traditional cultures consume some sort of animal food, such as fish and shellfish; land and water fowl; land and sea mammals; eggs; milk and milk products; reptiles; and insects. The whole animal is consumed—muscle meat, organs, blood, bones and fat, with the organ meats and fats preferred.
3. The diets of healthy, nonindustrialized peoples contain at least four times the minerals and water-soluble vitamins, and TEN times the fat-soluble vitamins found in animal fats (vitamin A, vitamin D and vitamin K<sub>2</sub>) as the average American diet.
4. All traditional cultures cooked some of their food but all consumed a portion of their animal foods raw.
5. Primitive and traditional diets have a high content of food enzymes and beneficial bacteria from lacto-fermented vegetables, fruit, beverages, dairy products, meat, fish and condiments.
6. Seeds, grains and nuts are soaked, sprouted, fermented or naturally leavened to neutralize naturally occurring anti-nutrients such as enzyme inhibitors, tannins and phytic acid.
7. Total fat content of traditional diets varies from 30 percent to 80 percent of calories but only about 4 percent of calories come from polyunsaturated oils naturally occurring in grains, legumes, nuts, fish, animal fats and vegetables. The balance of fat calories is in the form of saturated and monounsaturated fatty acids.
8. Traditional diets contain nearly equal amounts of omega-6 and omega-3 essential fatty acids.

9. All traditional diets contain some salt.
10. All traditional cultures make use of animal bones, usually in the form of gelatin-rich bone broths.
11. Traditional cultures ensure the health of future generations by providing special nutrient-rich animal foods for parents-to-be, pregnant women and growing children; by proper spacing of children; and by teaching the principles of nutrient-dense diets to the young.

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### Confused About Fats?

The following nutrient-rich traditional fats have nourished healthy population groups for thousands of years:

#### FOR COOKING and EATING

- Butter, preferably pasture-fed
- Tallow and suet from beef and lamb
- Lard from pigs
- Chicken, goose and duck fat
- Coconut, palm and palm kernel oils

#### FOR SALADS

- High-oleic olive oil
- Expeller-expressed sesame and high-oleic sunflower oil, (in small amounts)
- Expeller-expressed flax oil (in small amounts)

#### FOR FAT-SOLUBLE VITAMINS

- Cold-processed fish *liver* oils such as cod liver oil (not fish oils, which do not provide fat-soluble vitamins, can cause an overdose of unsaturated fatty acids, are rancid from processing and usually come from farmed fish)

**WARNING:** The following can cause cancer, heart disease, immune system dysfunction, sterility, learning disabilities, growth problems and osteoporosis:

- All hydrogenated and partially hydrogenated oils;
- Industrially processed seed oils such as soy, corn, safflower, cottonseed and canola;
- Fats and oils (especially polyunsaturated vegetable oils) heated to very high temperatures in processing and frying.

## **Dietary Guidelines**

1. Eat whole, unprocessed foods.
2. Eat beef, lamb, pork, game, organ meats, poultry and eggs from pasture-fed animals.
3. Eat wild fish (not farm-raised), fish eggs and shellfish from unpolluted waters.
4. Eat full-fat milk products from pasture-fed cows, preferably raw and/or fermented, such as raw whole milk, whole yogurt, kefir, cultured butter, full-fat raw cheeses and fresh and sour cream.
5. Use animal fats, such as lard, tallow, egg yolks, cream and butter liberally.
6. Use only traditional vegetable oils—extra virgin olive oil, expeller-expressed sesame oil, small amounts of expeller-expressed flax oil, and the tropical oils—coconut oil, palm oil and palm kernel oil.
7. Take cod liver oil regularly to provide at least 10,000 IU vitamin A and 1,000 IU vitamin D per day.
8. Eat fresh fruits and vegetables, preferably organic. Use vegetables in salads and soups, or lightly steamed with butter.
9. Use organic whole grains, legumes and nuts that have been prepared by soaking, sprouting or sour leavening to neutralize phytic acid, enzyme inhibitors and other anti-nutrients.
10. Include enzyme-rich lacto-fermented vegetables, fruits, beverages and condiments in your diet on a regular basis.
11. Prepare homemade stocks from the bones of chicken, beef, lamb and fish fed non-GMO feed and use liberally in soups, stews, gravies and sauces.
12. Use filtered water for cooking and drinking.
13. Use unrefined salt and a variety of herbs and spices for food interest and appetite stimulation.
14. Make your own salad dressing using raw vinegar, extra virgin olive oil and a small amount of expeller-expressed flax oil.

15. Use traditional sweeteners in moderation, such as raw honey, maple syrup, maple sugar, date sugar, dehydrated cane sugar juice (sold as Rapadura) and green stevia powder.
16. Drink unpasteurized wine or beer only in strict moderation with meals.
17. Cook only in stainless steel, cast iron, glass or good-quality enamel.
18. Use only natural, food-based supplements.
19. Get plenty of sleep, exercise and natural light.
20. Think positive thoughts and practice forgiveness.

## **Dietary Dangers**

1. Do not eat commercially processed foods such as cookies, cakes, crackers, TV dinners, soft drinks, packaged sauce mixes, etc. Read labels!
2. Avoid all refined sweeteners such as sugar, dextrose, glucose, high fructose corn syrup and fruit juices.
3. Avoid white flour, white flour products and white rice.
4. Avoid all hydrogenated or partially hydrogenated fats and oils.
5. Avoid all industrial polyunsaturated vegetable oils made from soy, corn, safflower, canola, cottonseed, grapeseed or rice bran.
6. Avoid foods cooked or fried in polyunsaturated oils or partially hydrogenated vegetable oils.
7. Do not practice veganism. Animal products provide vital nutrients not found in plant foods.

## What's Wrong With Politically Correct Nutrition?

8. Avoid products containing protein powders as they usually contain carcinogens or damaged proteins formed during processing. Likewise, avoid lean meat, skinless poultry, reduced-fat milk and egg whites without the yolks. Consumption of protein without the cofactors occurring in animal fats can lead to deficiencies, especially of vitamin A.
9. Avoid processed, pasteurized milk; do not consume ultrapasteurized milk products, lowfat milk, skim milk, powdered milk or imitation milk products.
10. Avoid factory-farmed eggs, meat and fish.
11. Avoid highly processed luncheon meats and sausage.
12. Avoid rancid and improperly prepared seeds, nuts and grains found in granolas, quick rise breads and extruded breakfast cereals, as they block mineral absorption and cause intestinal distress.
13. Avoid canned, sprayed, waxed and irradiated fruits and vegetables. Avoid genetically modified foods (found in most soy, canola and corn products).
14. Avoid artificial food additives, especially MSG, hydrolyzed vegetable protein and aspartame, which are neurotoxins. Most soups, sauce and broth mixes and most commercial condiments contain MSG, even if not indicated on the label.
15. Avoid caffeine and related substances in coffee, tea and chocolate.
16. Avoid aluminum-containing foods such as commercial salt, baking powder and antacids. Do not use aluminum cookware or deodorants containing aluminum.
17. Do not drink fluoridated water.
18. Avoid synthetic vitamins and foods containing them.
19. Avoid distilled liquors.
20. Do not use a microwave oven.

"Dietary Guidelines" and "Dietary Dangers" were developed in conjunction with the Price-Pottenger Nutrition Foundation, [price-pottenger.org](http://price-pottenger.org).

**"Avoid saturated fats."** Saturated fats play many important roles in the body. They provide integrity to the cell membrane, promote the body's use of essential fatty acids, enhance the immune system, protect the liver and contribute to strong bones. The lungs and the kidneys cannot work without saturated fat. Saturated fats do not cause heart disease. In fact, saturated fats are the preferred food for the heart. Because your body needs saturated fats, it makes them out of carbohydrates and excess protein when there are not enough in the diet.

**"Limit cholesterol."** Dietary cholesterol contributes to the strength of the intestinal wall and helps babies and children develop a healthy brain and nervous system. Foods that contain cholesterol also provide many other important nutrients. Only oxidized cholesterol, found in most powdered milk and powdered eggs, contributes to heart disease. Powdered milk is added to 1% and 2% milk.

**"Use more polyunsaturated oils."** Polyunsaturates in more than small amounts contribute to cancer, heart disease, autoimmune diseases, learning disabilities, intestinal problems and premature aging. Large amounts of polyunsaturated fats are new to the human diet, due to the modern use of commercial liquid vegetable oils. Even olive oil, a monounsaturated fat considered to be healthy, can cause imbalances at the cellular level if consumed in large amounts.

**"Avoid red meat."** Red meat is a rich source of nutrients that protect the heart and nervous system; these include vitamins B<sub>12</sub> and B<sub>6</sub>, zinc, phosphorus, carnitine and coenzyme-Q<sub>10</sub>.

**"Cut back on eggs."** Eggs are nature's perfect food, providing excellent protein, the gamut of vitamins and important fatty acids that contribute to the health of the brain and nervous system. Americans had less heart disease when they ate more eggs. Egg substitutes cause rapid death in test animals.

**"Restrict salt."** Salt is crucial to digestion and assimilation. Salt is also necessary for the development and function of the nervous system.

## What's Wrong With Politically Correct Nutrition?

“**Eat lean meat and drink lowfat milk.**” Lean meat and lowfat milk lack fat-soluble vitamins needed to assimilate the protein and minerals in meat and milk. Consumption of lowfat foods can lead to depletion of vitamin A and D reserves.

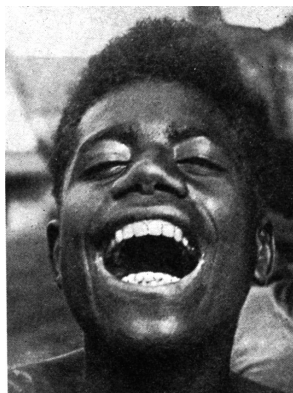
“**Limit fat consumption to 30 percent of calories.**” Thirty percent of calories as fat is too low for most people, leading to low blood sugar and fatigue. Traditional diets contained 30 percent to 80 percent of calories as healthy fats, mostly of animal origin.

“**Eat 6-11 servings of grains per day.**” Most grain products are made from white flour, which is devoid of nutrients. Additives in white flour can cause vitamin deficiencies. Whole grain products can cause mineral deficiencies and intestinal problems unless properly prepared.

“**Eat at least 5 servings of fruits and vegetables per day.**” Fruits and vegetables receive an average of ten applications of pesticides from seed to storage. Consumers should seek out organic produce. Quality counts!

“**Eat more soy foods.**” Modern soy foods block mineral absorption, inhibit protein digestion, depress thyroid function, cause endocrine disruption and contain potent carcinogens.

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*Dr. Price consistently found that healthy isolated peoples, whose diets contained adequate nutrients from animal protein and fat, not only enjoyed excellent health but also had a cheerful, positive attitude. He noted that most prison and asylum inmates have facial deformities indicative of prenatal nutritional deficiencies.*

Photo copyright Price-Pottenger Nutrition Foundation

### TRADITIONAL DIETS MAXIMIZED NUTRIENTS

### MODERN DIETS MINIMIZE NUTRIENTS

Foods from fertile soil	Foods from depleted soil
Organ meats preferred over muscle meats	Muscle meats preferred, few organ meats
Natural animal fats	Processed vegetable oils
Animals on pasture	Animals in confinement
Dairy products raw and/or fermented	Dairy products pasteurized or ultrapasteurized
Grains and legumes soaked and/or fermented	Grains refined, and/or extruded
Soy foods given long fermentation, consumed in small amounts	Soy foods industrially processed, consumed in large amounts
Bone broths	MSG, artificial flavorings
Unrefined sweeteners	Refined sweeteners
Lacto-fermented vegetables	Processed, pasteurized pickles
Lacto-fermented beverages	Modern soft drinks
Unrefined salt	Refined salt
Natural vitamins occurring in foods	Synthetic vitamins taken alone or added to foods
Traditional cooking	Microwave, irradiation
Traditional seeds, open pollination	Hybrid seeds, GMO seeds

## The Many Roles of Saturated Fat

Saturated fats, such as butter, meat fats, coconut oil and palm oil, tend to be solid at room temperature. According to conventional nutritional dogma, these traditional fats are to blame for most of our modern diseases—heart disease, cancer, obesity, diabetes, malfunction of cell membranes and even nervous disorders like multiple sclerosis. However, many scientific studies indicate that it is processed liquid vegetable oil—which is laden with free radicals formed during processing—and artificially hardened vegetable oil—called *trans* fat—that are the culprits in these modern conditions, not natural saturated fats.

Humans need saturated fats because we are warm blooded. Our bodies do not function at room temperature, but at a tropical temperature. Saturated fats provide the appropriate stiffness and structure to our cell membranes and tissues in this warm environment. When we consume a lot of liquid unsaturated oils, our cell membranes do not have structural integrity to function properly, they become too “floppy,” and when we consume a lot of *trans* fat, which is not as soft as saturated fats at body temperature, our cell membranes become too “stiff.”

Contrary to the accepted view, which is not scientifically based, saturated fats do not clog arteries or cause heart disease. In fact, the preferred food for the heart is saturated fat; and saturated fats lower a substance called Lp(a), which is a very accurate marker for proneness to heart disease.

Saturated fats play many important roles in the body chemistry. They strengthen the immune system and are involved in inter-cellular communication, which means they protect us against cancer. They help the receptors on our cell membranes to work properly, including receptors for insulin, thereby protecting us against diabetes. The lungs cannot function without saturated fats, which is why children given butter and full-fat milk suffer less often from asthma than children given reduced-fat milk and margarine. Saturated fats are also involved in kidney function and hormone production.

Saturated fats are required for the nervous system to function properly, and over half the fat in the brain is saturated. Saturated fats also help suppress inflammation. Finally, saturated animal fats carry the vital fat-soluble vitamins A, D and K<sub>2</sub>, which we need in large amounts to be healthy.

Human beings have been consuming saturated fats from animals products, milk products and the tropical oils for thousands of years; it is mainly the advent of modern processed vegetable oil that has caused the epidemic of modern degenerative disease—not the consumption of saturated fats.

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CC, Milwaukee, Wisconsin

“When *Wise Traditions* arrives, we stop everything and read it from cover to cover.”

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## THE WESTON A. PRICE FOUNDATION

The Weston A. Price Foundation is a nonprofit, tax-exempt charity founded in 1999 to disseminate the research of nutrition pioneer Dr. Weston Price, whose studies of isolated nonindustrialized peoples established the parameters of human health and determined the optimum characteristics of human diets.

The Foundation is dedicated to restoring nutrient-dense foods to the American diet through education, research and activism, and it supports a number of movements that contribute to this objective including accurate nutrition instruction, community-supported farms, organic and biodynamic farming, honest and informative labeling, pasture-feeding of livestock, prepared parenting and nurturing therapies. Specific goals include establishment of universal access to clean, pasture-based raw milk through A Campaign for RealMilk (realmilk.com) and a ban on the use of soy formula for infants through its Soy Alert! project.

The Foundation seeks to engage in research to test nutrient content of foods, particularly butter produced under various conditions; to conduct research into the “X” Factor (vitamin K<sub>2</sub>) discovered by Dr. Price; and to determine the effects of traditional preparation methods on nutrient content and availability in whole foods.

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

The Foundation’s quarterly magazine, *Wise Traditions in Food, Farming and the Healing Arts*, is dedicated to exploring the scientific validation of dietary, agricultural and medical traditions throughout the world. It features illuminating and thought-provoking articles on current scientific research; human diets; pasture-based, nontoxic agriculture; and holistic therapies. In addition, it serves as a source for foods that have been conscientiously grown and processed.

The Foundation maintains an extensive system of local chapters to help consumers find healthy foods available in their communities. Chapter contact information is listed in the magazine and on the website at westonaprice.org. The Foundation also publishes a yearly shopping guide to help consumers find healthy foods from supermarkets, health food stores and pasture-based farms.

## The Fat-Soluble Activators

The crux of Dr. Price’s research has to do with what he called the “fat-soluble activators,” vitamins found in the fats and organ meats of grass-fed animals and in certain seafoods, such as fish eggs, shellfish, oily fish and fish liver oil. The three fat-soluble activators are vitamin A, vitamin D and a nutrient he referred to as Activator X, now considered to be vitamin K<sub>2</sub>, the animal form of vitamin K. In traditional diets, levels of these key nutrients were about ten times higher than levels in diets based on the foods of modern commerce, containing sugar, white flour and vegetable oil. Dr. Price referred to these vitamins as activators because they serve as the catalysts for mineral absorption. Without them, minerals cannot be used by the body, no matter how plentiful they may be in the diet.

Modern research completely validates the findings of Dr. Price. We now know that vitamin A is vital for mineral and protein metabolism, the prevention of birth defects, the optimum development of infants and children, protection against infection, the production of stress and sex hormones, thyroid function, and healthy eyes, skin and bones. Vitamin A is depleted by stress, infection, fever, heavy exercise, exposure to pesticides and industrial chemicals, and excess protein consumption (hence our warnings against the consumption of excess protein in the form of lean meat, lowfat milk and protein powders.)

Modern research has also revealed the many roles played by vitamin D, which is needed for mineral metabolism, healthy bones and nervous system, muscle tone, reproductive health, insulin production, protection against depression, and protection against chronic diseases like cancer and heart disease.

Vitamin K<sub>2</sub> plays an important role in growth and facial development, normal reproduction, development of healthy bones and teeth, myelin synthesis, learning capacity and protection against calcification and inflammation of the arteries.

Modern literature on diet and health is rife with misinformation about the fat-soluble vitamins. Many health writers claim that humans can obtain adequate vitamin A from plant foods. But the carotenes in plant foods are not true vitamin A. Instead, they serve as precursors that are converted into vitamin A in the small intestine. Human beings are not good converters of vitamin A, especially as

## The Fat-Soluble Activators

infants or those suffering from diabetes, thyroid problems or intestinal disorders. Thus, for optimal health, humans require animal foods containing liberal amounts of true vitamin A. Similarly, many claim that adequate vitamin D can be obtained from a short daily exposure to sunlight. But the body only makes vitamin D when the sun is directly overhead—that is, in the summer months—at midday. For most of the year (and even in the summer for those who do not make a practice of sunbathing), humans must obtain vitamin D from foods. As for vitamin K<sub>2</sub>, most health books mention only its role in blood clotting, without recognizing the many other vital roles played by this nutrient.

Vitamins A, D and K<sub>2</sub> work synergistically. Vitamins A and D tell cells to make certain proteins; after the cellular enzymes make these proteins, they are activated by vitamin K<sub>2</sub>. This synergy explains reports of toxicity from taking vitamins A, D or K<sub>2</sub> in isolation. All three of these nutrients must come together in the diet or the body will develop deficiencies in the missing activators.

The vital roles of these fat-soluble vitamins and the high levels found in the diets of healthy traditional peoples confirm the importance of pasture-feeding livestock. If domestic animals are not consuming green grass, vitamins A and K<sub>2</sub> will be largely missing from their fat, organ meats, butterfat and egg yolks; if the animals are not raised in the sunlight, broad spectrum vitamin D will be largely missing from these foods.

Because it is so difficult to obtain adequate fat-soluble activators in the modern diet, Dr. Price recommended cod liver oil to provide vitamins A and D, along with a source of vitamin K<sub>2</sub>, such as butter from grass-fed animals or what he called high-vitamin butter oil, made by low-temperature centrifuging of butter from cows eating rapidly growing grass. (Aged cheese and the fat and livers of ducks, geese and Australian emu are other excellent sources of vitamin K<sub>2</sub>.) Consumed in liberal amounts during pregnancy, lactation and the period of growth, these nutrients ensure the optimal physical and mental development of children; consumed by adults, these nutrients protect against acute and chronic disease.

It is important to choose cod liver oil with care as many brands are processed at high temperatures and contain very little vitamin D, with potential toxicity of vitamin A. For recommended brands see [westonaprice.org/cod-liver-oil/](http://westonaprice.org/cod-liver-oil/).

## Myths and Truths About Nutrition

Myth: Heart disease in America is caused by consumption of cholesterol and saturated fat from animal products.

Truth: During the period of rapid increase in heart disease (1920-1960), American consumption of animal fats declined but consumption of hydrogenated and industrially processed vegetable fats increased dramatically (*USDA-HNIS*).

Myth: Saturated fat clogs arteries.

Truth: The fatty acids found in artery clogs are mostly unsaturated (74%) of which 41% are polyunsaturated (*Lancet* 1994 344:1195).

Myth: Vegetarians live longer.

Truth: The annual all-cause death rate of vegetarian men is slightly more than that of non-vegetarian men (0.93% vs 0.89%); the annual all-cause death rate of vegetarian women is significantly more than that of non-vegetarian women (0.86% vs 0.54%) (“Vegetarianism: What the Science Tells Us”, [westonaprice.org](http://westonaprice.org)).

Myth: Vitamin B<sub>12</sub> can be obtained from certain plant sources such as blue-green algae and fermented soy products.

Truth: Vitamin B<sub>12</sub> is not absorbed from plant sources. Modern soy products actually increase the body’s need for B<sub>12</sub> (*Soybeans: Chemistry & Technology* Vol 1 1972).

Myth: For good health, serum cholesterol should be less than 180 mg/dl.

Truth: The all-cause death rate is higher in individuals with cholesterol levels lower than 180 mg/dl (*Circulation*.1992 Sep;86(3):1026-9).

Myth: Animal fats cause cancer and heart disease.

Truth: Animal fats contain many nutrients that protect against cancer and heart disease; elevated rates of cancer and heart disease are associated with consumption of large amounts of vegetable oil (*Federation Proceedings* July 1978 37:2215).

## Myths and Truths About Nutrition

- Myth: Children benefit from a lowfat diet.  
Truth: Children on lowfat diets suffer from growth problems, failure to thrive and learning disabilities (*Am J Dis Child* 1989 May;143(5):537-42).
- Myth: A lowfat diet will make you “feel better . . . and increase your joy of living.”  
Truth: Lowfat diets are associated with increased rates of depression, psychological problems, fatigue, violence and suicide (*Br J Nutr* 1998 Jan;79(1) 23-30).
- Myth: To avoid heart disease, we should use margarine instead of butter.  
Truth: Margarine eaters have twice the rate of heart disease as butter eaters (*Nutrition Week* 3/22/91 21:12).
- Myth: Americans do not consume enough essential fatty acids (EFAs).  
Truth: Americans consume far too much of one kind of EFA (omega-6 EFAs found in most polyunsaturated vegetable oils) but not enough of another kind of EFA (omega-3 EFAs found in fish, fish oils, eggs from pasture-fed chickens, dark green vegetables and herbs, and oils from certain seeds such as flax and chia, nuts such as walnuts and in small amounts in all whole grains) (*American Journal of Clinical Nutrition* 1991 54:438-63).
- Myth: The “cave man diet” was low in fat.  
Truth: Throughout the world, primitive peoples sought out and consumed fat from fish and shellfish, water fowl, sea mammals, land birds, insects, reptiles, rodents, bears, dogs, pigs, cattle, sheep, goats, game, eggs, nuts and milk products (Abrams, *Food & Evolution* 1987).
- Myth: A vegetarian diet will protect you against atherosclerosis.  
Truth: The International Atherosclerosis Project found that vegetarians had just as much atherosclerosis as meat eaters (*Laboratory Investigations* 1968 18:498).

## Myths and Truths About Nutrition

- Myth: Lowfat diets prevent breast cancer.  
Truth: A 1996 study found that women on very lowfat diets (less than 20%) had the same rate of breast cancer as women who consumed large amounts of fat (*New England Journal of Medicine* 2/8/96).
- Myth: Coconut oil causes heart disease.  
Truth: When coconut oil was fed as 7% of calories to patients recovering from heart attacks, the patients had greater improvement compared to untreated controls, and no difference compared to patients treated with corn or safflower oils. Populations who consume coconut oil have low rates of heart disease. Coconut oil may also be one of the most useful oils to prevent heart disease because of its antiviral and antimicrobial characteristics (*Journal of the American Medical Association* 1967 202:1119-1123; *American Journal of Clinical Nutrition* 1981 34:1552).
- Myth: Saturated fats inhibit production of anti-inflammatory prostaglandins.  
Truth: Saturated fats actually improve the production of all prostaglandins by facilitating the conversion of essential fatty acids (“Tripping Lightly Down the Prostaglandin Pathways,” *westonaprice.org*).
- Myth: Arachidonic acid in foods like liver, butter and egg yolks causes production of “bad” inflammatory prostaglandins.  
Truth: Series 2 prostaglandins that the body makes from arachidonic acid both encourage and inhibit inflammation under appropriate circumstances. Arachidonic acid is vital for the function of the brain and nervous system (*Ibid*).
- Myth: Beef causes colon cancer.  
Truth: Argentina, with higher beef consumption, has lower rates of colon cancer than the United States. Mormons have lower rates of colon cancer than vegetarian Seventh Day Adventists (*Cancer Research* 1975 35:3513).

## Myths and Truths About Soy

- Myth: Use of soy as a food dates back many thousands of years.
- Truth: Soy was first used as a food during the late Chou dynasty (1134-246 BC) only after the Chinese learned to ferment soy beans to make foods like *tempeh*, *natto* and *tamari*.
- Myth: Asians consume large amounts of soy foods.
- Truth: Average consumption of soy foods in China is 10 grams (about 2 teaspoons) per day and 30 grams in Japan. Asians consume soy foods in small amounts as a condiment, and not as a replacement for animal foods.
- Myth: Modern soy foods confer the same health benefits as traditionally fermented soy foods.
- Truth: Most modern soy foods are not fermented to neutralize toxins in soybeans, and are processed in a way that denatures proteins and increases levels of carcinogens.
- Myth: Soy foods provide complete protein.
- Truth: Like all legumes, soybeans are deficient in sulfur-containing amino acids methionine and cystine. In addition, modern processing denatures fragile lysine.
- Myth: Fermented soy foods can provide vitamin B<sub>12</sub> in vegetarian diets.
- Truth: The compound that resembles vitamin B<sub>12</sub> in soy cannot be used by the human body; in fact, soy foods cause the body to require more B<sub>12</sub>.
- Myth: Soy formula is safe for infants.
- Truth: Soy foods contain trypsin inhibitors that inhibit protein digestion and affect pancreatic function. In test animals, diets high in trypsin inhibitors led to stunted growth and pancreatic disorders. Soy foods increase the body's requirement for vitamin D, needed for strong bones and normal growth. Phytic acid in soy foods results in reduced bioavailability of iron and zinc which are required

## Myths and Truths About Soy

- for the health and development of the brain and nervous system. Soy also lacks cholesterol, likewise essential for the development of the brain and nervous system. Megadoses of phytoestrogens in soy formula have been implicated in the current trend toward increasingly premature sexual development in girls and delayed or retarded sexual development in boys.
- Myth: Soy foods can prevent osteoporosis.
- Truth: Soy foods can cause deficiencies in calcium and vitamin D, both needed for healthy bones. Calcium from bone broth and vitamin D from seafood, lard and organ meats prevent osteoporosis in Asian countries—not soy foods.
- Myth: Modern soy foods protect against many types of cancer.
- Truth: A British government report concluded that there is little evidence that soy foods protect against breast cancer or any other forms of cancer. In fact, soy foods may result in an increased risk of cancer.
- Myth: Soy foods protect against heart disease.
- Truth: In some people, consumption of soy foods will lower cholesterol, but there is no evidence that lowering cholesterol lowers one's risk of heart disease.
- Myth: Soy estrogens (isoflavones) are good for you.
- Truth: Soy isoflavones are phyto-endocrine disrupters. At dietary levels, they can prevent ovulation and stimulate the growth of cancer cells. Eating as little as 30 mg isoflavones (from about 30 g soy protein) per day can result in hypothyroidism with symptoms of lethargy, constipation, weight gain and fatigue.

## Myths and Truths About Soy

**Myth:** Soy foods are safe and beneficial for women to use in their postmenopausal years.

**Truth:** Soy foods can stimulate the growth of estrogen-dependent tumors and cause thyroid problems. Low thyroid function is associated with difficulties in menopause.

**Myth:** Phytoestrogens in soy foods can enhance mental ability.

**Truth:** A recent study found that women with the highest levels of estrogen in their blood had the lowest levels of cognitive function; in Japanese Americans, tofu consumption in midlife is associated with the occurrence of Alzheimer's disease in later life.

**Myth:** Soy isoflavones and soy protein isolate have GRAS (Generally Recognized as Safe) status.

**Truth:** In the 1990s, Archer Daniels Midland (ADM) withdrew its application to the FDA for GRAS status for soy isoflavones following an outpouring of protest from the scientific community. The FDA never approved GRAS status for soy protein isolate because of concern regarding the presence of toxins and carcinogens in processed soy.

**Myth:** Soy foods are good for your sex life.

**Truth:** Numerous animal studies show that soy foods cause infertility in animals. Soy consumption lowers testosterone levels in men. Tofu was consumed by Buddhist monks to reduce libido.

**Myth:** Soybeans are good for the environment.

**Truth:** Most soybeans grown throughout the world are genetically engineered to allow farmers to use large amounts of herbicides, creating toxic runoff.

**Myth:** Soybeans are good for developing nations.

**Truth:** In Third World countries, soybeans replace traditional crops and transfer the value added of processing from the local population to multinational corporations.

## Soy Infant Formula- Birth Control Pills for Babies

Babies fed soy-based formula have 13,000 to 22,000 times more estrogen compounds in their blood than babies fed milk-based formula. Infants exclusively fed soy formula receive the estrogenic equivalent (based on body weight) of at least five birth control pills per day.

Male infants undergo a "testosterone surge" during the first few months of life, when testosterone levels may be as high as those of an adult male. During this period, baby boys are programmed to express male characteristics after puberty, not only in the development of their sexual organs and other masculine physical traits, but also in setting patterns in the brain characteristic of male behavior.

In animals, soy feeding indicates that phytoestrogens in soy are powerful endocrine disrupters. Soy infant feeding reduces testosterone levels in male marmoset monkeys as much as 70 percent and cannot be ignored as a possible cause of disrupted development patterns in boys, including learning disabilities and attention deficit disorder. Male children exposed to DES, a synthetic estrogen, had testes smaller than normal on maturation.

Almost 15 percent of white girls and 50 percent of African-American girls show signs of puberty, such as breast development and pubic hair, before the age of eight. Some girls are showing sexual development before the age of three. Premature development of girls has been linked to the use of soy formula and exposure to environmental estrogen-mimickers such as PCBs and DDE.

Animal studies indicate that consumption of more than minimal amounts of phytoestrogens during pregnancy may have adverse affects on the developing fetus, the timing of puberty later in life, and thinking and behavior patterns, especially in male offspring.

For a full list of references and further information  
on the dangers of modern soy products  
visit [westonaprice.org/soy-alert/](http://westonaprice.org/soy-alert/).

## Coronary Heart Disease: What the Experts Say

“In Framingham, Massachusetts, the more saturated fat one ate, the more cholesterol one ate, the more calories one ate, the lower people’s serum cholesterol. . . we found that the people who ate the most cholesterol, ate the most saturated fat, ate the most calories, weighed the least and were the most physically active.”

*William Castelli, MD, director,  
The Framingham Study*

“The diet-heart hypothesis has been repeatedly shown to be wrong, and yet, for complicated reasons of pride, profit and prejudice, the hypothesis continues to be exploited by scientists, fund-raising enterprises, food companies and even governmental agencies. The public is being deceived by the greatest health scam of the century.”

*George Mann, ScD, MD, former co-director  
The Framingham Study*

“An analysis of cholesterol values . . . in 1,700 patients with atherosclerotic disease revealed no definite correlation between serum cholesterol levels and the nature and extent of atherosclerotic disease.”

*Michael DeBakey, MD,  
Famous Heart Surgeon*

“The relevant literature [on coronary heart disease] is permeated with fraudulent material that is designed to convert negative evidence into positive evidence with respect to the lipid hypothesis. That fraud is relatively easy to detect.”

*Russell L. Smith, PhD*

“Whatever causes coronary heart disease, it is not primarily a high intake of saturated fat.”

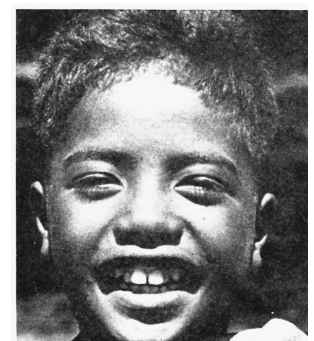
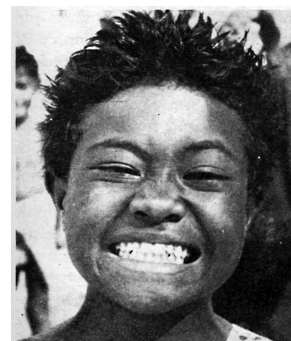
*Michael Gurr, PhD, renowned lipid chemist  
Author of authoritative study on CHD*

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## Principles of Holistic Dentistry

In addition to his work on nutrition, Dr. Price conducted extensive research into the destructive effects of root canals, detailed in his two-volume work *Dental Infections Oral & Systemic and Dental Infections & the Degenerative Diseases*. His conclusions, ignored by the orthodox dental establishment for over eighty years, are gaining renewed acceptance; holistic practitioners are discovering that the first step to recovery from degenerative disease often involves removal of all root canals from the patient’s mouth. The principles of holistic dentistry, based on the research of Weston Price, are as follows:

- ♦ Eat nutrient-dense whole foods, properly grown and prepared.
- ♦ Avoid root canals. If you have root canals and suspect that they are causing disease, have them removed by a knowledgeable dentist.
- ♦ Avoid mercury (amalgam) fillings. If you have amalgam fillings and suspect they are contributing to health problems, have them removed by a holistic dentist who specializes in mercury filling replacement.
- ♦ Orthodontics should include measures to widen the palate.
- ♦ When it is necessary to extract teeth, do so in such a way as to avoid leaving the jaw bone with cavitations, which can become focal points of infection.



*Good dental health begins with the diet of both parents. The Samoan girl on the left was born to parents who ate nutrient-rich native foods. The Samoan boy on the right was born to parents who had abandoned their traditional diet. He has crowded dental arches and will be more susceptible to dental decay and chronic illness.*

*Photos copyright Price-Pottenger Nutrition Foundation*

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**You teach, you teach, you teach!**

Last words of Dr. Weston A. Price

June 23, 1948