Diet for Optimal Health

The 6 Keys to Health:

- 1. Proper Nerve Supply....Get your Nervous System Checked!!
- 2. Exercise for Detox ... 30 minutes per day
- 3. Real Food ...at least 50% raw, fresh
- 4. Water 50% of your body weight in ounces
- 5. Rest ... no TV before bed, and sleep by 10
- 6. Prayer and Meditation Daily

Supplements:

Everybody Everyday

- 1. Fish oils
- 2. Pro-biotics

You may need:

- 1. mineral Supplements
- 2. digestive enzymes

Good Fats:

Saturated Fats from Raw Butter and Coconut oil.

Bad Fats:

All vegetable oils except cold pressed olive oil

(Vegetable oils are soaked in solvents to extract the oil and then the oil is heated to burn off the solvents creating free radicals)

Good Meats:

Hormone free, Grass fed beef/ lamb/ buffalo. Range free, hormone free chicken/turkey/duck. Wild salmon, Tuna and other wild fish are high in Good fats

Bad Meats:

Grain fed beef, factory farmed animals, get sick and have to be fed antibiotics, sick animals give sick meat. Commercially produced pork is loaded with hormones and antibiotics. Commercially produced hamburger, hot dogs!

Good Fibers:

Vegetable fibers (broccoli, raw carrots, bell peppers, apples, oranges, cauliflower, etc...) 1 lb of vegetables for every 50 lbs of body weight (Vegetable juicing). Eat a lot of nuts and salads. Bean salads (Kidney beans, peas, green beans, garbanzo avocados, Anything that has a lot of color and grows in the garden, not processed. **Soluble fiber** is found in oats, oatmeal, oat bran, beans, legumes, barley, citrus fruits and many other fruits.

Bad fibers:

Cereal fibers, Fiber from most breads, rice (rice bran is good fiber).

Dangerous foods/ products: Aspartame, Splenda, trans fatty acids, All processed Soy products, any product containing hydrogenated oils, all fast food, All fluoride products, pasteurized or homogenized dairy products (raw dairy is Great for you)

For more information ask Dr. John Bergman 714-962-5891 www.bergmanchiropractic.com

Protects your heart	Prevents constipation	Blocks diarrhea	Improves lung capacity	Cushions joints
Combats cancer	Controls blood pressure	Saves your eye sight	Shields against Alz- heimer's	Slows aging process
Aids digestion	Lowers Cholesterol	Protects your heart	Stabilizes blood sugar	Guards against liver disease
Battles diabetes	Lowers cholesterol	Help stop strokes	Controls blood pressure	Smoothes skin
Protect your heart	Quiets a cough	Strengthen bones	Controls blood pressure	Block diarrhea
Prevents constipa- tion	Helps hemorrhoids	Lowers cholesterol	Combats cancer	Stabilizes Blood sugar
Controls blood pressure	Combats cancer	Strengthens bones	Protects your heart	Aids weight loss
Combats cancer	Protects your heart	Stabilizes blood sugar	Boosts memory	prevents constipation
Strengthens bones	Saves eyesight	Combats cancer	Protects your heart	Controls blood pressure
Combats cancer	Prevents constipa- tion	Promotes weight loss	Protects your heart	Helps hemorrhoids
Saves eyesight	Controls blood pressure	Lowers cholesterol	Combats cancer	Supports immune system
Saves eyesight	Protects your heart	Prevents constipation	Combats cancer	Promotes weight loss
Against prostrate cancer	Combats breast can- cer	Strengthens bones	Banishes bruises	Guards against heart disease
Protects your heart	Combats cancer	Helps Insomnia	Slows aging process	Shields against Alz- heimer's
Promotes weight loss	Protects your heart	Lowers cho- lesterol	Combats cancer	Controls blood pressure
Aids digestion	Soothes sore throat	Clears sinuses	Combats cancer	Boosts immune system
Promotes weight loss	Help prevent strokes	Lowers cho- lesterol	Combats cancer	Controls blood pressure
Protects your heart	Boosts memory	Protects your arteries	Combats cancer	Supports immune system
Aids digestion	Battles diabetes	Protects your heart	Improves mental health	Boosts immune system
Lowers cholesterol	Controls blood pressure	Combats cancer	Kills bacteria	Fight fungus
Protects against heart attack	Promotes weight loss	Help prevent strokes	Combats prostate cancer	Lowers cho- lesterol
Great for sight, antioxidant	Conquers kidney stones	Combats cancer	Enhances blood flow	Protects your heart
Combats cancer	Protects your heart	Helps prevent strokes	Promotes weight loss	Kills bacteria
	Combats cancer Aids digestion Battles diabetes Protect your heart Prevents constipation Controls blood pressure Combats cancer Strengthens bones Combats cancer Saves eyesight Against prostrate cancer Protects your heart Promotes weight loss Aids digestion Promotes weight loss Protects your heart Aids digestion Combats cancer	Combats cancer Controls blood pressure Aids digestion Lowers Cholesterol Battles diabetes Lowers cholesterol Protect your heart Quiets a cough Prevents constipation Controls blood pressure Combats cancer Protects your heart Strengthens Saves eyesight Combats cancer Prevents constipation Saves eyesight Controls blood pressure Saves eyesight Protects your heart Against prostrate Combats breast cancer Protects your heart Combats cancer Protects your heart Combats breast cancer Promotes weight loss Protects your heart Aids digestion Soothes sore throat Promotes weight loss Help prevent strokes Protects your heart Boosts memory Aids digestion Battles diabetes Lowers Controls blood pressure Protects against heart attack Great for sight, antioxidant Conquers kidney stones	Combats cancer Controls blood pressure Aids digestion Lowers Cholesterol Protects your heart Battles diabetes Lowers cholesterol Help stop strokes Protect your heart Quiets a cough Strengthen bones Prevents constipation Controls blood pressure Combats cancer Protects your heart Stabilizes blood sugar Strengthens Saves eyesight Combats cancer Combats cancer Prevents constipation Promotes weight loss from the protects your heart Combats cancer Saves eyesight Protects your heart Prevents constipation Saves eyesight Protects your heart Prevents constipation Against prostrate Combats breast cancer Protects your heart Combats cancer Helps Insomnia Promotes weight loss Protects your heart Lowers cholesterol Aids digestion Soothes sore throat Clears sinuses Promotes weight loss Protects your heart Lowers cholesterol Protects your heart Prevents Combats cancer Helps Insomnia Promotes weight loss Protects your heart Lowers cholesterol Aids digestion Soothes sore throat Clears sinuses Promotes weight loss Battles diabetes Protects your arteries Aids digestion Battles diabetes Protects your heart Lowers Controls blood presscholesterol Protects against heart Promotes weight loss ure Protects against heart Promotes weight loss Help prevent strokes Combats cancer Protects your heart Helps prevent strokes	Combats cancer Controls blood pressure Saves your eye sight Shields against Alzheimer's Aids digestion Lowers Cholesterol Protects your heart Stabilizes blood sugar Battles diabetes Lowers cholesterol Help stop strokes Controls blood pressure Protect your heart Quiets a cough Strengthen bones Controls blood pressure Prevents constipation Helps hemorrhoids Lowers cholesterol Combats cancer Comtrols blood pressure Combats cancer Strengthens bones Protects your heart Stabilizes blood Boosts memory Strengthens Saves eyesight Combats cancer Protects your heart Strengthens Saves eyesight Combats cancer Protects your heart Saves eyesight Controls blood pressure Combats cancer Saves eyesight Controls blood pressure Lowers Combats cancer Saves eyesight Protects your heart Prevents Combats cancer Saves eyesight Protects your heart Prevents Combats cancer Saves eyesight Protects your heart Prevents Combats cancer Protects your heart Combats breast cancer Strengthens bones Banishes bruises Cancer Protects your heart Lowers Combats cancer Protects your heart Lowers Cholesterol Aids digestion Soothes sore throat Lowers Cholesterol Protects your heart Boosts memory Protects your arteries Aids digestion Battles diabetes Protects your heart Improves mental health Lowers Controls blood pressure Combats cancer Protects against hart Promotes weight loss Help prevent strokes Combats prostate Combats cancer Protects your heart Promotes weight loss Help prevent strokes Combats prostate Combats cancer Protects your heart Promotes weight loss Help prevent strokes Combats prostate Combats cancer Protects your heart Promotes weight loss Help prevent strokes Combats prostate Combats cancer Protects your heart Promotes weight loss Combats cancer Combats cancer Combats cancer Combats cancer Combats cancer Combats cancer Combats canc

Honey	Heals wounds	Aids digestion	Guards against ulcers	Fights Allergies	Increase energy
Lemons	Combats cancer	Protects your heart	Controls blood pressure	Smoothes skin	Stops scurvy ,wound healing
Limes	Combats cancer	Protects your heart	Controls blood pressure	Smoothes skin	Stops limes Disease, scurvy
Mangos	Combats cancer	Boosts memory	Regulates Thyroid	Aids digestion	Shields against Alzheimer's
Mushrooms	Controls blood pressure	Lowers cholesterol	Kills bacteria	Combats cancer	Strengthen bones
Oats	Lowers cholesterol	Combats cancer	Battles diabetes	Prevents constipation	Smoothes skin
Olive Oil	Protects your heart	Promotes weight loss	Combats cancer	Battles Diabetes	Smoothens skin
Onions	Reduce risk of heart attack	Combats cancer	Protects your heart	Kills fungus	Kills bacteria and virus
Oranges	Supports immune system	Combats cancer	Protects your heart	Straightens respiration	Aids wound healing
Peaches	Prevents constipation	Prevents cancer	Helps stop strikes	Aids digestion	Helps Hemorrhoids
Peanuts	Protects against heart disease	Promotes weight loss	Combats cancer	Lowers cholesterol	Aggravates diverticulitis
Pineapple	Strengthen bones	Relieves colds	Aids digestion	Dissolves warts Helps diarrhea	Anti- Inflammatory
Prunes	Slows aging	Prevents constipation	Boosts memory	Lowers cholesterol	Protects against heart disease
Rice	Protects your heart	Battles Diabetes	Conquers kidney stones	Combats cancer	Helps stop strokes
Strawberries	Combats cancer	Protects your heart	Boosts memory	Protects your heart	Helps prevent birth defects
Sweet Potato	Helps eye sight	Lifts mood	Combats cancer	Strengthen bones	Slows weight loss
Tomatoes	Protects prostrate	Combats cancer	Lowers cholesterol	Protects your heart	Aids digestion
Walnuts	Lowers cholesterol	Combats cancer	Boosts memory	Lifts mood	Protects against heart disease
Water	Promotes weight loss	Combats cancer	Prevents kidney stones	Smoothens skin	Detoxifies your system
Watermelon	Protects prostrate	Promotes weight loss	Lowers cholesterol	Helps prevent stroke	Controls blood pressure
Wheat germ	Combats colon cancer	Prevents constipation	Lowers cholesterol	Helps prevent stroke	Improves digestion
Wheat bran	Combats colon cancer	Aids digestion	Promotes healthy arteries	Helps stop stroke	Improves digestion
CHIROPRACTIC	Restores normal motion to the joint	Turns the power of our nerves up!	Effective for over 20,000 different conditions	Prevents poor aging and arthritis	Keeps people in the state of wellness

Altered partially hydrogenated fats made from vegetable oils actually block utilization of essential fatty acids, causing many deleterious effects including sexual dysfunction, increased blood cholesterol and paralysis of the immune system.

It should be cloudy, indicating that it has not been filtered, and have a golden yellow color, indicating that it is made from fully ripened olives. Olive oil has withstood the test of time; it is the safest vegetable oil you can use, but don't overdo. The longer chain fatty acids found in olive oil are more likely to contribute to the buildup of body fat than the short- and medium-chain fatty acids found in butter, coconut oil or palm kernel oil.

The Cause And Treatment Of Heart Disease

The cause of heart disease is not animal fats and cholesterol but rather a number of factors inherent in modern diets, including excess consumption of vegetables oils and hydrogenated fats; excess consumption of refined carbohydrates in the form of sugar and white flour; mineral deficiencies, particularly low levels of protective magnesium and iodine; deficiencies of vitamins, particularly of vitamin C, needed for the integrity of the blood vessel walls, and of antioxidants like selenium and vitamin E, which protect us from free radicals; and, finally, the disappearance of antimicrobial fats from the food supply, namely, animal fats and tropical oils.52

These once protected us against the kinds of viruses and bacteria that have been associated with the onset of pathogenic plaque leading to heart disease.

While serum cholesterol levels provide an inaccurate indication of future heart disease, a high level of a substance called homocysteine in the blood has been positively correlated with pathological buildup of plaque in the arteries and the tendency to form clots-a deadly combination. Folic acid, vitamin B6, vitamin B12 and choline are nutrients that lower serum homocysteine levels.53 These nutrients are found mostly in animal foods.

The best way to treat heart disease, then, is not to focus on lowering cholesterol-either by drugs or dietbut to consume a diet that provides animal foods rich in vitamins B6 and B12; to bolster thyroid function by daily use of natural sea salt, a good source of usable iodine; to avoid vitamin and mineral deficiencies that make the artery walls more prone to ruptures and the buildup of plaque; to include the antimicrobial fats in the diet; and to eliminate processed foods containing refined carbohydrates, oxidized cholesterol and free-radical-containing vegetable oils that cause the body to need constant repair.

Perhaps the most concrete evidence of the dangers of microwaves comes from Dr. Hans Hertel, a Swiss food scientist, who carried out a small but high-quality study on the effects of microwaved food on humans. His conclusions were clear and alarming: microwave cooking significantly altered the food's nutrients enough so that changes occurred in the participants' blood--changes that suggested deterioration. The changes included:

- Increased cholesterol levels
- More leukocytes, or white blood cells, which can suggest poisoning
- Decreased numbers of red blood cells
- Production of radiolytic compounds (compounds unknown in nature)
- Decreased hemoglobin levels, which could indicate anemic tendencies

Dr. Hertel and his team published the results in 1992, but a Swiss trade organization, the Swiss Association of Dealers for Electro-apparatuses for Households and Industry, had a gag order issued, which prohibited Dr. Hertel from declaring that microwaves were dangerous to health. The gag order was later removed in 1998, after the Swiss court ruled that the gag order violated the right to freedom of expression. Switzerland was ordered to pay Dr. Hertel compensation as well.

So what can you do to avoid microwaves? Well, my first suggestion is to get rid of it in your home so you won't be tempted to use it. If it's not there, then you can't use it! Then, try consuming a lot of your food raw. Ideally, at least one-third of the food in your diet should be raw, since this is the form that will give you the maximum amount of nutrients. A quick and easy way to consume a large amount of

and involved some 6,000 people from the town of Framingham, Massachusetts. Two groups were compared at five-year intervals-those who consumed little cholesterol and saturated fat and those who consumed large amounts. After 40 years, the director of this study had to admit:

"In Framingham, Mass, the more saturated fat one ate, the more cholesterol one ate, the more calories one ate, the lower the person'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."3 The study did show that those who weighed more and had abnormally high blood cholesterol levels were slightly more at risk for future heart disease; but weight gain and cholesterol levels had an inverse correlation with fat and cholesterol intake in the diet.4 In a multi-year British study involving several thousand men, half were asked to reduce saturated fat and cholesterol in their diets, to stop smoking and to increase the amounts of unsaturated oils such as margarine and vegetable oils.

After one year, those on the "good" diet had 100% more deaths than those on the "bad" diet, in spite of the fact that those men on the "bad" diet continued to smoke! But in describing the study, the author ignored these results in favor of the politically correct conclusion: "The implication for public health policy in the U.K. is that a preventive program such as we evaluated in this trial is probably effective. . . . "5

The U.S. Multiple Risk Factor Intervention Trial, (MRFIT) sponsored by the National Heart, Lung and Blood Institute, compared mortality rates and eating habits of over 12,000 men. Those with "good" dietary habits (reduced saturated fat and cholesterol, reduced smoking, etc.) showed a marginal reduction in total coronary heart disease, but their overall mortality from all causes was higher.

Similar results have been obtained in several other studies. The few studies that indicate a correlation between fat reduction and a decrease in coronary heart disease mortality also document a concurrent increase in deaths from cancer, brain hemorrhage, suicide and violent death.6

The Lipid Research Clinics Coronary Primary Prevention Trial (LRC-CPPT), which cost 150 million dollars, is the study most often cited by the experts to justify lowfat diets. Actually, dietary cholesterol and saturated fat were not tested in this study as all subjects were given a low-cholesterol, low-saturated-fat diet.

Instead, the study tested the effects of a cholesterol-lowering drug. Their statistical analysis of the results implied a 24% reduction in the rate of coronary heart disease in the group taking the drug compared with the placebo group; however, nonheart disease deaths in the drug group increased-deaths from cancer, stroke, violence and suicide.7

Even the conclusion that lowering cholesterol reduces heart disease is suspect. Independent researchers who tabulated the results of this study found no significant statistical difference in coronary heart disease death rates between the two groups.8 However, both the popular press and medical journals touted the LRC-CPPT as the long-sought proof that animal fats are the cause of heart disease, America's number one killer.

Studies That Challenge The Lipid Hypothesis

While it is true that researchers have induced heart disease in some animals by giving them extremely large dosages of oxidized or rancid cholesterol-amounts ten times that found in the ordinary human diet-several population studies squarely contradict the cholesterol-heart disease connection.

A survey of 1700 patients with hardening of the arteries, conducted by the famous heart surgeon Michael DeBakey, found no relationship between the level of cholesterol in the blood and the incidence of atherosclerosis.9

A survey of South Carolina adults found no correlation of blood cholesterol levels with "bad" dietary habits, such as use of red meat, animal fats, fried foods, butter, eggs, whole milk, bacon, sausage and cheese.10 A Medical Research Council survey showed that men eating butter ran half the risk of developing heart disease as those using margarine.11

Mother's milk provides a higher proportion of cholesterol than almost any other food. It also contains over 50% of its calories as fat, much of it saturated fat. Both cholesterol and saturated fat are essential for growth in babies and children, especially the development of the brain.12 Yet, the American Heart Association is now recommending a low-cholesterol, lowfat diet for children! Commercial formulas are low in saturated fats and soy formulas are devoid of cholesterol. A recent study linked lowfat diets with failure to thrive in children.13

Numerous surveys of traditional populations have yielded information that is an embarrassment to the Diet Dictocrats. For example, a study comparing Jews when they lived in Yemen, whose diets contained fats solely of animal origin, to Yemenite Jews living in Israel, whose diets contained margarine and vegetable oils, revealed little heart disease or diabetes in the former group but high levels of both diseases in the latter.14 (The study also noted that the Yemenite Jews consumed no sugar but those in Israel consumed sugar in amounts equaling 25-30% of total carbohydrate intake.)

A comparison of populations in northern and southern India revealed a similar pattern. People in northern India consume 17 times more animal fat but have an incidence of coronary heart disease seven times lower than people in southern India.15 The Masai and kindred tribes of Africa subsist largely on milk, blood and beef. They are free from coronary heart disease and have excellent blood cholesterol levels.16

Eskimos eat liberally of animal fats from fish and marine animals. On their native diet they are free of disease and exceptionally hardy.17 An extensive study of diet and disease patterns in China found that the region in which the populace consumes large amounts of whole milk had half the rate of heart disease as several districts in which only small amounts of animal products are consumed.18

Several Mediterranean societies have low rates of heart disease even though fatincluding highly saturated fat from lamb, sausage and goat cheese-comprises up to 70% of their caloric intake. The inhabitants of Crete, for example, are remarkable for their good health and longevity.19 A study of Puerto Ricans revealed that, although they consume large amounts of animal fat, they have a very low incidence of colon and breast cancer.20

A study of the long-lived inhabitants of Soviet Georgia revealed that those who eat the most fatty meat live the longest.21 In Okinawa, where the average life span for women is 84 years-longer than in Japan-the inhabitants eat generous amounts of pork and seafood and do all their cooking in lard.22 None of these studies is mentioned by those

urging restriction of saturated fats.

The relative good health of the Japanese, who have the longest life span of any nation in the world, is generally attributed to a lowfat diet. Although the Japanese eat few dairy fats, the notion that their diet is low in fat is a myth; rather, it contains moderate amounts of animal fats from eggs, pork, chicken, beef, seafood and organ meats. With their fondness for shellfish and fish broth, eaten on a daily basis, the Japanese probably consume more cholesterol than most Americans.

What they do not consume is a lot of vegetable oil, white flour or processed food (although they do eat white rice.) The life span of the Japanese has increased since World War II with an increase in animal fat and protein in the diet.23 Those who point to Japanese statistics to promote the lowfat diet fail to mention that the Swiss live almost as long on one of the fattiest diets in the world. Tied for third in the longevity stakes are Austria and Greece-both with high-fat diets.24

As a final example, let us consider the French. Anyone who has eaten his way across France has observed that the French diet is just loaded with saturated fats in the form of butter, eggs, cheese, cream, liver, meats and rich patés. Yet the French have a lower rate of coronary heart disease than many other western countries.

In the United States, 315 of every 100,000 middle-aged men die of heart attacks each year; in France the rate is 145 per 100,000. In the Gascony region, where goose and duck liver form a staple of the diet, this rate is a remarkably low 80 per 100,000.25 This phenomenon has recently gained international attention as the French Paradox. (The French do suffer from many degenerative diseases, however. They eat large amounts of sugar and white flour and in recent years have succumbed to the timesaving temptations of processed foods.)

A chorus of establishment voices, including the American Cancer Society, the National Cancer Institute and the Senate Committee on Nutrition and Human Needs, claims that animal fat is linked not only with heart disease but also with cancers of various types. Yet when researchers from the University of Maryland analyzed the data they used to make such claims, they found that vegetable fat consumption was correlated with cancer and animal fat was not.26

Understanding The Chemistry Of Fats

Clearly something is wrong with the theories we read in the popular press-and used to bolster sales of lowfat concoctions and cholesterol-free foods. The notion that saturated fats per se cause heart disease as well as cancer is not only facile, it is just plain wrong. But it is true that some fats are bad for us. In order to understand which ones, we must know something about the chemistry of fats.

Fats-or lipids-are a class of organic substances that are not soluble in water. In simple terms, fatty acids are chains of carbon atoms with hydrogen atoms filling the available bonds. Most fat in our bodies and in the food we eat is in the form of triglycerides, that is, three fatty-acid chains attached to a glycerol molecule.

levated triglycerides in the blood have been positively linked to proneness to heart disease, but these triglycerides do not come directly from dietary fats; they are made in the liver from any excess sugars that have not been used for energy. The source of these excess sugars is any food containing carbohydrates, particularly refined sugar and white flour.

Fatty Acid Classifications By Saturation

Fatty acids are classified in the following way:

Saturated: A fatty acid is saturated when all available carbon bonds are occupied by a hydrogen atom. They are highly stable, because all the carbon-atom linkages are filled-or saturated-with hydrogen. This means that they do not normally go rancid, even when heated for cooking purposes. They are straight in form and hence pack together easily, so that they form a solid or semisolid fat at room temperature. Your body makes saturated fatty acids from carbohydrates and they are found in animal fats and tropical oils.

Monounsaturated: Monounsaturated fatty acids have one double bond in the form of two carbon atoms double-bonded to each other and, therefore, lack two hydrogen atoms. Your body makes monounsaturated fatty acids from saturated fatty acids and uses them in a number of ways.

Monounsaturated fats have a kink or bend at the position of the double bond so that they do not pack together as easily as saturated fats and, therefore, tend to be liquid at room temperature. Like saturated fats, they are relatively stable. They do not go rancid easily and hence can be used in cooking. The monounsaturated fatty acid most commonly found in our food is oleic acid, the main component of olive oil as well as the oils from almonds, pecans, cashews, peanuts and avocados.

Polyunsaturated: Polyunsaturated fatty acids have two or more pairs of double bonds and, therefore, lack four or more hydrogen atoms. The two polyunsaturated fatty acids found most frequently in our foods are double unsaturated linoleic acid, with two double bonds-also called omega-6; and triple unsaturated linolenic acid, with three double bonds-also called omega-3. (The omega number indicates the position of the first double bond.)

Your body cannot make these fatty acids and hence they are called "essential." We must obtain our essential fatty acids or EFA's from the foods we eat. The polyunsaturated fatty acids have kinks or turns at the position of the double bond and hence do not pack together easily. They are liquid, even when refrigerated.

The unpaired electrons at the double bonds makes these oils highly reactive.

They go rancid easily, particularly omega-3 linolenic acid, and must be treated with care. Polyunsaturated oils should never be heated or used in cooking. In nature, the polyunsaturated fatty acids are usually found in the cis form, which means that both hydrogen atoms at the double bond are on the same side.

All fats and oils, whether of vegetable or animal origin, are some combination of saturated fatty acids, monounsaturated fatty acids and polyunsaturated linoleic acid and linolenic acid. In general, animal fats such as butter, lard and tallow contain about 40-60% saturated fat and are solid at room temperature.

Vegetable oils from northern climates contain a preponderance of polyunsaturated fatty acids and are liquid at room temperature. But vegetable oils from the tropics are highly saturated. Coconut oil, for example, is 92% saturated. These fats are liquid in the tropics but hard as butter in northern climes. Vegetable oils are more saturated in hot climates because the increased saturation helps maintain stiffness in plant leaves. Olive oil with its preponderance of oleic acid is the product of a temperate climate. It is liquid at warm temperatures but hardens when refrigerated.