HUMAN FAQ

# What about .....FATS?



We certainly have heard the litany often enough: Fat is BAD! Fat *in* you will put fat *on* you! Lite is right! No butter, only margarine! Eat lots of vegetable oils; they're GOOD for you! And on and on. But then the question has to be asked: "If fat is really the culprit, then why does obesity, cancer and heart disease in the US continue to rise *more* as *less* fat is consumed?" Many researchers asked that question and have found that, in actuality, our bodies require fats to function and that not all fats are created equal.

## Necessary Fats

Let us take a look at just why we need fat so we can allow ourselves to eat more naturally and healthfully.

- every cell in our bodies requires a continuous supply of various fatty acids in order to function including our reproductive, immune, and blood-sugar regulating systems
- fats are vital for carrying into our systems the fat-soluble vitamins A, D, E, and K necessary for bone and tissue health
- our brain is 60% fat and fat is essential for its continued functioning
- mother's milk contains over 50% fat in the form of saturated fats and cholesterol
- fat supplies a satiety factor to meals since it takes longer to digest than any other nutrient allowing blood sugar to remain more stable
- fats are necessary for prolonged exercise: in one study, performance increased by 33% after following a high fat diet

## Insufficient Fats

According to Barry Sears, author of Eat Fat, Stay Slim, insufficient levels of fat supplied from food can cause:

- dry skin and eczema
- damage to ovaries in females and infertility in males
- kidney damage and weight-gain through water-retention in the body
- gallstones: when there is little or no fat in the gut, there is nothing to stimulate the production of bile, the gall bladder is not emptied and the bile is held in reserve leading to gallstone formation
- blood-sugar levels to fall and hunger to rise as the body makes its own fats from carbohydrates/sugar
- ***weight gain***: if your body requires ten grams of fat, you can obtain it from 1 oz. Cheddar cheese for about 125 calories or from eight slices of whole-grain bread spread thinly with low-fat spread for the 500 calories it would require to reach the same satiety factor

The founder of The Endocrinoloy Institute of Santa Barbara, Diana Schwarzbein, MD, *says "Years of eating a low-fat diet will result in the interior rearrangement of your body's composition. Muscle mass will shrink, bones will become less dense and body fat will increase."* Fatty acids are essential parts of all body tissues where they are the major part of the cell membrane; they most definitely are *not* just "stored energy" as has been taught. Low fat diets, which mimic starvation, cause the body to make fats "from scratch" from carbohydrates. Such fats are saturated fatty acids: exactly the same kind of saturated fatty acids found in butter, cream and animal fat; and monounsaturated fatty acids: exactly the same kind of fatty acids found in olive oil.

## Transfatty Acids

Unfortunately there are some "bad" fats that are far more harmful than the natural fats (lard, tallow, poultry fat, coconut oil, etc) they were designed to replace. They are called "trans fats" and are created when liquid oils are solidified by partial hydrogenation, a process that stretches foods' shelf life. We know them as and eat them in stick margarine, solid vegetable shortening (ie: Crisco), doughnuts, crackers, cookies, chips, cakes, pies, some breads, and all foods fried in such hydrogenated fat (chicken, fish, potatoes).

Harvard nutritionist Walter Willett blames trans fats for at least 30,000 premature deaths a year, calling their introduction in the 1940s the "biggest food-processing disaster in U.S. history." And pioneering trans-fats researcher Mary G. Enig, Ph.D., says: "Several decades of research show consumption of trans fatty acids promotes heart disease, cancer *[especially breast and colon]*, diabetes, immune dysfunction, obesity and reproductive problems." Even the government has stepped in wanting new food labels to reveal the presence of trans fats and individuals are suing some fast food chain because they continue/ed the use of trans fats even after research was showing how harmful they were.

## Unsaturated vs. Saturated Vegetable Fats

So now we understand that hydrogenated vegetable oils become nasty, but certainly the regular oils are not only OK but healthful, aren't they? Surprisingly most of them are not. We have been taught that unsaturated oils are perfect for our health and that we should eat "lots" of it. However, there are two forms of unsaturated fats: monounsaturated and polyunsaturated.

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; therefore they tend to be liquid at room temperature and are relatively stable. Since they do not go rancid easily, they can be used some in moderate cooking. The monounsaturated fatty acid most commonly found in our food is oleic acid, the main component of olive oil as well as oils from almonds, pecans, cashews, peanuts and avocados; it can help block inflammation in arteries, discourage arthritis and, in animals, avocado consumption reduced cartilage destruction from osteoarthritis. Monounsaturated fats:

- curb the appetite
- lower "bad" LDL cholesterol
- reduce the risk of heart disease

We are told to eat lots of polyunsaturated oils, but Dr. Enig states that many individuals take in 30% of their calories in the form of polyunsaturated fats when no more than 4% of the total diet should consist of such oil. She says, *"One reason the polyunsaturates cause so many health problems is that they tend to become oxidized or rancid when subjected to heat, oxygen and moisture as in cooking and processing. Rancid oils are characterized by free radicals—that is, single atoms or clusters*

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**OILS**

Only organic, cold-pressed oils stored in dark colored bottles should be used. Generally oils are solvent extracted with attendant residues and both BHT & BHA, suspected of causing cancer and brain damage, are often added to replace vitamin E and other natural preservatives destroyed by the processing. Whatever nutrients may remain are lost after being stored in clear glass or, worse, plastic containers. Here is a brief overview of some popular oils used today with Dr. Enig's acceptable ones having a check mark:

✓AVOCADO—monounsaturated and packed with nutrients including potassium and antioxidants

CORN, COTTONSEED, SAFFLOWER, SOYBEAN, & SUNFLOFLOWER OILS—very high omega 6; use of these oils should be strictly avoided including for cooking, frying, & baking.

✓COCONUT & CLARIFIED PALM OIL—traditional vegetable sources of saturated fats high in excellent lauric acid (found in mother's milk); extremely stable, can be kept at room temperature for many months without becoming rancid, and have traditionally protected tropical populations from bacteria and fungus so prevalent in tropical food supplies, and, because they are a medium chain fatty acid, go right to the liver for use rather than being stored as fat making them an excellent fat source for insulin resistant individuals

CANOLA— developed from rape seed which is unsuited for human consumption because of its erucic acid content associated with fibrotic heart lesions; while canola oil was bred to contain little if any erucic acid and has high oleic acid content, it also has a high sulphur content and goes rancid easily plus the omega-3 fatty acids are transformed during processing into trans fatty acids; recent studies indicate it creates a deficiency of vitamin E, a vitamin required for a healthy cardiovascular system and that even low-erucic-acid canola oil causes heart lesions

FLAX—Drs. Enig and Mercola approve of cold-pressed flax seed oil, but according to Poisonous Plants of North America, flax contains *cyanide glucosides* if the flax/linseed is not *properly heat treated*. Ingested in small amounts, such glucosides are known to be *goitrogenic* or causing hypothyroidism. Equine Medicine and Surgery suggests eliminating such items from equine diets.

✓OLIVE OIL— ideal for salads and for cooking at ***moderate*** temperatures; extra virgin olive oil should be cloudy (unfiltered) and have a golden yellow color, (made from fully ripened olives) however do not overdo as it is more likely to contribute to the buildup of body fat than butter, coconut oil or palm kernel oil

PEANUT & SESAME OIL— relatively stable thus appropriate for stir-fry on occasion, but high omega-6

✓TALLOW, POULTRY FAT, LARD & BUTTER—all desirable for cooking if derived from organic, grass-fed/finished animals

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*with an unpaired electron in an outer orbit. These compounds are extremely reactive chemically. They have been characterized as 'marauders' in the body for they attack cell membranes and red blood cells and cause damage in DNA/RNA strands, thus triggering mutations in tissue, blood vessels and skin. Free radical damage to the skin causes wrinkles and premature aging; free radical damage to the tissues and organs sets the stage for tumors; free radical damage in the blood vessels initiates the buildup of plaque...New evidence links exposure to free radicals with autoimmune diseases such as arthritis and with Parkinson's disease, Lou Gehrig's disease, Alzheimer's and cataracts."*

Additionally, when high levels of unnatural polyunsaturated fatty acids (ie: commercial vegetable oils) are consumed, the normal body synthesis of saturated fat is eliminated and the ingested polyunsaturated fats are used for structural fatty acids, leading to an unnatural balance in cellular membranes causing them to become "flabby." This leads to excess cellular permeability such as is found in leaky gut syndrome. In fact, polyunsaturates are unstable, should be treated with care and should never be used in cooking. High dietary polyunsaturates have been shown to:

- increase cholesterol levels in tissues
- increase fat cell synthesis in growing animals
- alter the response of the immune system
- increase peroxidation products such as ceroid pigment
- increase gallstone formation
- **decrease** HDL cholesterol (the "good" one) in the blood
- they are high in Omega 6

If high intake of polyunsaturates can be this bad for you, then surely the saturated fats must be far worse since they have been so demonized in the popular press. Not so, say numerous researchers, Dr. Enig among them. The much-maligned saturated fats such as are in coconut oil in addition to animal fats and which Americans are trying to avoid like the plague, are *not* the cause of our modern diseases. In fact, they play many important roles in the body chemistry:

- they constitute at least 50% of the cell membranes giving them their necessary stiffness and integrity
- they are necessary, at least 50% of the dietary fats need to be saturated, for calcium to be effectively incorporated into the skeletal structure
- they protect the liver from alcohol and other toxins
- they enhance the immune system
- they are needed to properly utilize essential fatty acids
- they are the preferred foods for the heart, which is why the fat around the heart muscle is highly saturated upon which the heart draws in times of stress
- they are essential for proper brain function
- they have important antimicrobial properties protecting us against harmful microorganisms in the digestive tract
- actual evaluation of the fat in artery clogs reveals that only about 26% is saturated with the rest being mostly polyunsaturated

As for saturated fats vaunted weight-gaining properties, a farmer fed some coconut fat to his cattle to put weight on them quickly. Instead, he found the cattle became lean and fit which was not at all what he wanted! Of course deep-fat frying is always to be avoided.

### Omega-3 vs. Omega-6

We are now learning about Omega-3 and Omega-6 fatty acids which are two of the most famous polyunsaturates. The best ratio for the two Omegas is to have them equal yet standard vegetable oils contain a far higher ratio of Omega 6 (linoleic acid, double-unsaturated) to Omega 3 (linolenic acid, triple-unsaturated). Recent research has revealed that this can result in an increased tendency to form blood clots, inflammation, high blood pressure, irritation of the digestive tract, depressed

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immune function, sterility, cell proliferation, cancer and weight gain.

Interestingly enough, Omega 3 fatty acids in perfect ratio are found in egg yolks from grass fed poultry, non-farm fatty fish, and meat and dairy products from grass-fed / finished cattle, bison, wild game, etc. In other words, animal sources that do not consume grain. Grain feeding almost immediately causes the Omega 6 to rise out of proportion. Dr Enig tells of a study which showed organic eggs from hens allowed to feed on insects and green plants contain omega-6 and omega-3 fatty acids in the beneficial ratio of approximately one-to-one while commercial supermarket eggs can contain as much as *nineteen times* more Omega-6 than Omega-3!

Dr. Joseph Mercola, in his book The No Grain Diet, also warns of farmed fish and feed-lot bison (buffalo) that acquire an overabundance of Omega 6 along with their unnatural grain diets. He suggests only wild caught fish and guaranteed grain-free meat or fowl of any kind. He also says that studies have shown that such meat and fowl is actually *higher* in Omega-3 than the more commonly talked of fatty fish: salmon, mackerel, tuna and sardines have been shown to reduce fatal heart attack risk by 44% when eaten only once a week.

There are a few sources of Omega 3-rich vegetable foods such as avocadoes, evening primrose oil, walnuts and flax seed *[see side bar]* but all other oils, whether organic or cold-pressed, whether from nuts or seeds, favor Omega 6. The best sources *are* the natural, grass-fed animal fats.

### Cholesterol

Of course animal fats are also loaded with cholesterol which we have been taught to fear in favor of the very oils we now find are not so good. Could there be misunderstandings about cholesterol as well? Most definitely. Premier fat researcher Mary Enig, Ph.D. says that far from being deleterious, cholesterol is essential.

According to Dr. Enig, our blood vessels can become damaged through irritations caused by free radicals or viruses, or because they are structurally weakend. When the damage occurs, the body's natural healing substance, cholesterol, steps in to repair the damage. Cholesterol is a high-molecular-weight alcohol manufactured in the liver and in most human cells. Like saturated fats, the cholesterol we make and consume plays many vital roles:

- Along with saturated fats, cholesterol in the cell membrane gives our cells necessary stiffness and stability. When the diet contains an excess of polyunsaturated fatty acids, these replace saturated fatty acids in the cell membrane, so that the cell walls actually become flabby.
- When this happens, cholesterol from the blood is "driven" into the tissues to give them structural integrity. This is why serum cholesterol levels may go down temporarily when we replace saturated fats with polyunsaturated oils in the diet.
- Cholesterol acts as a precursor to vital corticosteroids, hormones that help us deal with stress and protect the body against heart disease and cancer; and to the sex hormones like androgen, testosterone, estrogen and progesterone.
- Cholesterol is a precursor to vitamin D, a very important fat-soluble vitamin needed for healthy bones and nervous systems, proper growth, mineral metabolism, muscle tone,

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**DAIRY PRODUCTS**

People of northern European extraction especially, utilized milk products extensively to provide necessary animal fats. In fact, spring milk and cream contained so many anti-microbial factors that they were used as the first "anti-biotics" often curing such illnesses as TB. But these dairy products were strictly from grass fed cows who were milked by hand. That raw, whole milk was then drunk immediately, or cooled and used later that day. Excess milk was deliberately soured creating numerous exceedingly beneficial lacto-acid-producing germs (very helpful for digestion) which suppress all other unwanted, even pathogenic, germs. It was that sour cream from which butter was made. Far different from our modern handling of dairy products:

MASS PRODUCED—from cows bred specifically for grossly enlarged udders prone to mastitis and milked by machine

MASS FED—with enormous amounts of grains containing not only attendant herbicides and pesticides but hormones and medications needed to keep essentially sick cows on their feet despite hypothyroidism and other weaknesses; most never see green grass

MASS STORED—in chemically sterilized container/pipe systems and usually held for a day or so until the trucks pick it up through more chemically sterilized pipes/containers where the process is repeated yet again

PASTEURIZED—initiated to protect us from disease although certified raw dairies have far less incidence of disease than do mass plants; heating milk over 120 F nullifies beneficial enzymes, vitamins and bacterial activity and changes protein structure . . . in fact, in a famous Scottish study, 100% of calves fed their own mother's milk which had been pasteurized, died. Certain factors found within raw fats from properly fed animals protects humans and animals from calcification of the joints and pineal gland plus hardening of the arteries and cataracts; these factors are lost with heating. Lactic acid fermentation is far superior than pasteurization in suppressing pathogens.

HOMOGENIZED—makes the fat and cholesterol more susceptible to rancidity and oxidation, and some research indicates that homogenized fats may contribute to heart disease.

SKIMMED—removes the very fat necessary to carry fat-soluble vitamins necessary for calcium digestion

If you choose to drink milk and/or eat dairy products, and if your genetics allow for it, find raw, organic, grass-fed sources only. This may not be easy since the sale of raw dairy products is forbidden in most states; some farms utilize ownership shares or sell only for animal consumption.

**EGGS**

Eggs from organic, grass-fed poultry, are definitely are a part of a healthful diet:

- eggs do **not** raise blood cholesterol or promote heart disease
- they are a major source of the antioxidants *lutein* and *zeaxanthin* that help prevent cataracts, macular degeneration, and cancer
- yolks are a rich source of *choline*, essential for optimal brain development in early life and intellectual functioning in old age

Dr. Mercola suggests a "power drink" consisting of a freshly juiced green drink with a raw egg yolk *(only from organic, grass-fed poultry!)* whipped in—perfect for a quick breakfast or mid-afternoon snack!

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insulin production, reproduction and immune system function.
- Bile salts, vital for digestion and assimilation of fats in the diet, are made from cholesterol.
- Cholesterol acts as an antioxidant, protecting us against free radical damage that leads to heart disease and cancer, which is the likely explanation for the fact that cholesterol levels increase with age.
- Cholesterol is needed for proper function of our serotonin, the body's natural "feel-good" chemical, receptors in the brain; low cholesterol levels have been linked to aggressive and violent behavior, depression and suicidal tendencies.
- Mother's milk is especially rich in cholesterol and contains a special enzyme that helps the baby utilize this nutrient; babies and children need cholesterol-rich foods throughout their growing years to ensure proper development of the brain and nervous system.
- Dietary cholesterol plays an important role in maintaining the health of the intestinal wall which is one reason why very low-cholesterol vegetarian diets can lead to leaky gut syndrome and other intestinal disorders.

However, like fats, cholesterol may be damaged by exposure to heat and oxygen thus promoting both injury to the arterial cells as well as a pathological buildup of plaque in the arteries. Damaged cholesterol is found in powdered eggs, in powdered milk (frequently added to reduced-fat milks to give them body) and in meats and fats that have been heated to high temperatures such as frying.

High serum cholesterol levels often indicate that the body needs cholesterol to protect itself from high levels of altered, free-radical-containing fats. It can also indicate poor thyroid function (hypothyroidism) frequently due to a diet high in sugar and low in usable iodine, fat-soluble vitamins and other nutrients. The body then floods the blood with cholesterol as an adaptive and protective mechanism, providing a superabundance of materials needed to heal tissues and produce protective natural steroids.

In fact, says researcher Uffe Ravnskov, MD, PhD, *"the level of cholesterol in the blood has little importance for the development of atherosclerosis, if any at all."* Also, many of the studies "proving" good and bad cholesterol are very suspect. Dr. Ravnskov goes on to say: "*Thus, the experimentors claim support from unsupportive epidemiological and clinical studies, and the epidemiologists and the clinicians claim support from inconclusive experimental evidence. The victims of this miscarriage of justice are an innocent and useful molecular construction in our blood, producers and manufacturers of animal fat all over the world, and millions of healthy people who are frightened and badgered into eating a tedious and flavorless diet that is said to lower their bad cholesterol."*

## BALANCE IS THE KEY

Remember that there have been societies who lived long and healthfully (barring accident) on animals alone such as the Eskimo of the North and the Masai of Africa. Dr. Weston Price, during his extensive travel studies in the 1930's, discovered that most primitive societies were not vegetable starved. In fact they would eat enormous quantities of vegetable matter (including the Eskimo and Masai by the ingestion of animal intestinal contents) but could become protein/fat starved if they did not consume abundantly from animal sources also, including grubs, insects, brains and viscera, all of which are exceedingly high in fats. There are numerous true tales of North American explorers becoming very ill, many fatally, when all they could find to eat in frigid winter temperatures was rabbit, a lean meat.

Some modern research is even showing that those descended from certain areas along the coasts of Scotland, Ireland and England where the inhabitants survived for countless generations on fatty sea bounty such as oysters, mussels and salmon with its roe (caviar), become depressed, ill and prone to alcoholism when deprived of such natural high fat fare. Unfortunately, much sea food is now inedible due to major pollution of coastal waters and serious pollution of most sea waters.

Each must find his/her own balance of fat intake for their own personal genetic structure, but unless one is eating the entire animal (raw livers and intestinal contents) as some of our ancestors did rather than just a few choice muscle pieces as we tend to do today, an abundant intake of fresh, and some fermented, vegetables is still a requirement! Dr. Price found the longest living peoples easily ate over two pounds per day of obviously organically grown vegetables along with high quality proteins and fats, some whole grains, many fermented foods and plenty of fresh, pure water. High vegetable intake is necessary for our acid/alkaline balance; interestingly enough, fat has a neutral pH ash.

Diane Schwarzbein, MD points out that a less-active lifestyle does not mean that you require less fat because:
- the rebuilding within your body (bones, cells, enzymes, hair, hormones, muscles, nails, neurotransmitters and so on) goes on at all times, regardless of your level of activity
- *real* fats are life-giving substances
- eating fat does not make you fat, because fat does not cause the release of insulin

We can only approximate what was, but we can make sure we do not fall under the spell of the food processors with their non-food, harmful offerings. We can increase our organically grown vegetable intake (or using **DYNAMITE®** fertilizers to grow our own) with lots of raw salads. We can search for only wild caught fish and grass-fed/finished fowl and animal products for their beneficial fats (Dr. Mercola provides possibilities). We can avoid the fractionated and pummeled as we gravitate towards the whole and natural. We can *move* as our ancestors did by walking, running, working, swimming, dancing, playing, etc. to use up the extra calories that absolutely necessary fat brings along with it rather than avoiding its tremendous health benefits for the sake of those calories alone. And of course we can take our **DYNAMITE®** supplements to ensure an ample supply of balanced bio-available minerals and vitamins, without which *nothing* else will function optimally.

***RESOURCES:***

*Nutrition and Physical Degeneration by Weston A. Price, DDS/www.westonaprice.org*
*The Schwarzbein Principle by Diana Schwarzbein, MD/www.schwarzbeinprinciple.com*
*Nourishing Traditions by Sally Fallon & Mary Enig, PhD/www.price-pottinger.org*
*Eat Fat, Stay Slim by Barry Sears/www.second-opinions.co.uk/eatfat.htm*
*The Cholesterol Myths by Uffe Ravnskov, MD, PhD./www.ravnskov.nu*
*The Milk Book by William Campbell Douglass, MD/www.realmilk.com*
*The No Grain Diet by Joseph Mercola, DO/www.mercola.com*
*The Healing Miracles of Coconut Oil by Bruce Fife, N.D.*