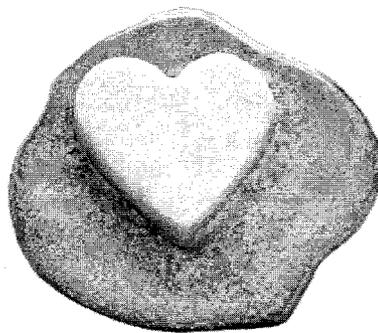


# Fat

## Facts and Fallacies



How much do you know about fats and oils and human health? Let's find out if you know the real story. Just mark the following statements as true or false.

- \_\_\_ Excess fat in the diet is a major cause of heart disease.
- \_\_\_ Saturated fats raise cholesterol levels.
- \_\_\_ The saturated fats in butter and coconut oil contribute to weight gain.
- \_\_\_ Polyunsaturated vegetable oils like canola oil are healthy fats.
- \_\_\_ Margarine is healthier for you than butter.
- \_\_\_ Animal fats are harmful to human health, so you should eat lean meats.
- \_\_\_ If you want to lose weight you should eat less fat and more carbohydrates.
- \_\_\_ When a vegetable oil says "cold-pressed," it means that it has been extracted without using any heat.

How do you feel about your answers? How many did you mark as true? Before we continue, let's point out that your body actually needs fats to be healthy. In other words...

### Fats are Important in Human Health!

First of all, fats are a major component of cell membranes. They are also a major component of brain and nervous system tissues. Secondly, burning fats helps keep the body warm and medium chain saturated fatty acids are the preferred fuel of the heart. Third, fats are necessary for the production of many hormones and they play a role in reducing pain and inflammation and helping the immune system fight infection. Finally, fats keep the skin soft and moist and fat-soluble vitamins are essential to healthy bones and teeth.

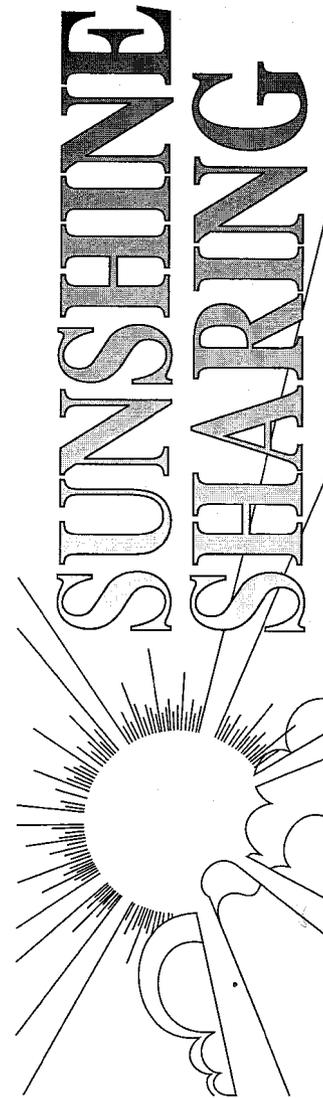
Realizing that fats are essential to good health, it is surprising how demonized they have become. Which is why it may surprise you to learn that all of the above statements are false. That's right. Although these statements are widely believed to be "facts" about fats, the truth is that they are all fallacies.

For decades we've been told that dietary fat causes us to gain weight, contributes to heart disease and otherwise damages our health. We've been told that saturated fats are bad for us and that vegetable oils are good for us. Misinformation about fats abounds and people have responded to this misinformation by changing their diets to cut out even those fats that are necessary for good health. This can be demonstrated by the following statistics.

Between 1910 and 1970, the proportion of traditional animal fat in the American diet fell from 83 percent to 62 percent, and butter consumption declined from 18 lbs. per person per year to 4 lbs. Since the 1970s this decline has continued, but that's only the beginning. During the same period we increased our consumption of vegetable oils, margarine and shortening by 400 percent. Unfortunately, these changes have not been good for our health.

The good news is that the experts are waking up to the fact that dietary fat, especially natural fats, have been getting a bad rap. So, in this issue of *Sunshine Sharing*, we'll explore how fats can be good for your health. We'll talk about how to get the right kinds of fats and avoid the wrong kinds, and how fats can protect your brain and heart, promote weight loss, improve immune function, relieve pain and much more.

**Turn the page to learn how fats can be good for you...**



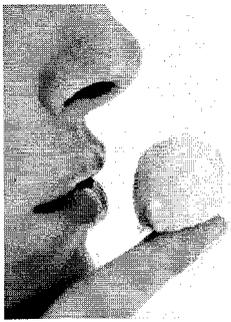
#### Important Notice

The information in *Sunshine Sharing* is for educational purposes only and should not be used to diagnose and treat diseases. If you have a health problem, we recommend you consult a competent health practitioner before embarking on any course of treatment.

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# The Good (and Bad) News About Fats

For decades the rationale of the experts concerning fats has been pretty much backwards. It's high time we acknowledged the importance of fat in our diets and stopped trying to avoid them altogether.

To appreciate the importance of natural fats in the human diet, one need only look at isolated traditional cultures. In the 1930s Dr. Weston Price examined the dietary habits of fourteen isolated traditional cultures that enjoyed superb health. He found that the healthiest peoples ate fatty seafood, dairy products and organ meats liberally. They valued animal fats as absolutely necessary to good health.

In consuming these naturally fatty foods, Dr. Price found that people in these traditional cultures had 10 times more fat-soluble vitamins like A, D, E and K, in their diets than did their modern counterparts. Of course these people also ate plant foods such as fruits, vegetables, legumes, nuts, seeds and grains in their whole, unrefined state, but typically 40-50% of their caloric intake came from *fats*! These diets clearly weren't low fat.

Dr. Price, who was a dentist, observed that traditional diets resulted in people who were free from dental decay and gum disease. He also found they were resistant to disease in general and did not suffer from mental illness. Their bodies were sturdy, strong and naturally attractive and they produced healthy children with ease, generation after generation.

Dr. Price's research shows that much of modern "wisdom" about fats is completely wrong. However, this doesn't mean that all fats are good for us. The fats and oils found in natural plant and animal foods do not occur in isolation. They contain vitamins, minerals and other important nutrients. However, natural fats (like all natural foods) can spoil, decreasing their shelf life.

are), this process not only creates more saturated fats, it also forms more harmful trans fatty acids. Margarine and shortening both undergo a hydrogenation process, resulting in a very unnatural fat.

The alteration of the natural oils also involves degumming them to remove phospholipids like lecithin and minerals like iron, copper, calcium and magnesium. Sodium hydroxide (found in drain cleaners) is added to remove free fatty acids (fatty acids which are not attached to glycerine molecules). This removes more minerals and phospholipids. Oils are then bleached and deodorized to remove betacarotene, aromatic oils (which give natural oils flavor and odor), and any remaining free fatty acids. These processes usually involve heat, which of course, adds more trans fatty acids.

The bottom line is that modern vegetable oils, shortening and margarine are very shelf-stable, but lack the flavor and the nutritional value of natural fats. They are devoid of the fat-soluble vitamins we need as well as other minerals and nutrients that would be found in the natural oil. Their chemical structures also become altered, causing harmful effects on human health.

## Problems with Animal Fats

There is also several problems with modern animal fats. First of all, many chemicals such as pesticides are fat-soluble compounds. This means that if the animals are fed crops that have been treated with a lot of chemicals, these chemicals will concentrate in the animal's fat cells.



This is a good argument in favor of eating only organic meat, eggs and dairy products.

Secondly, most modern animals are fed commercial feeds that are based primarily on grain. This is done to increase the amount of fat in the meat, but it also alters the kind of fat found in the meat. Animals that are grass-fed have less cholesterol, more fat-soluble vitamins and a better fatty acid profile than animals kept in feed-lots. So the best animal fats will be found in meat, eggs and dairy where animals are grass-fed or pasture-raised.

## Healthy Sources of Fats

The fact that many modern fats are bad for you, doesn't mean you should avoid dietary fats altogether. Olive oil is a truly cold-pressed oil and one of the healthiest of all the vegetable oils. Coconut oil is also a good fat and an excellent natural oil for cooking, as it is very heat stable. The natural fats found in nuts, seeds and avocados are also good fats.

Butter is an excellent source of healthy fats, especially if the butter is organic and comes from grass-fed cows. It is high in important fat-soluble vitamins like A, D and K. The natural fat found in organically raised or pasture-raised poultry, eggs, dairy and red meat is also good for us, when eaten as part of a balanced diet that also includes fruits and vegetables.

## Bad Fats: Vegetable Oils, Margarine and Shortening

This is why modern vegetable oils are refined. The process is not unlike making refined sugar or white flour. It takes a nourishing whole food and turns it into a lifeless, empty-calorie food.

When high heat is applied to any unsaturated fat, free radicals and trans fatty acids are formed. Even though many refined oils say "cold-pressed" or "expeller pressed," people usually aren't aware that the extraction process ("pressing") often heats the oil to a high temperature from the mechanical action of the extractor. That's why "cold-pressed" doesn't mean the oil hasn't been subjected to heat. In some cases chemicals are also used in the extraction process.

But, the problems with the extraction process are only the beginning. When an oil is partially hydrogenated (as many vegetable oils





# Getting the Healthy Fats We Need

We've established that the body needs fats (and fat-soluble vitamins) to be healthy. To understand how to get the fats our body needs, we need to understand some basic things about fats.

First of all, all dietary fats and oils are triglycerides. This means that they consist of three different fatty acids attached to a molecule of glycerine. Fatty acids may be saturated or unsaturated. This has to do with the number of carbon atoms not bonded to hydrogen atoms. If all the carbon molecules in a fatty acid are attached to hydrogen molecules, the fat is saturated.

Unsaturated fatty acids can be monounsaturated, meaning only one carbon atom is not attached to hydrogen, or polyunsaturated, which means that two or more carbon atoms are not attached to hydrogen atoms. Fatty acids are also classified by their length. They can be short (4-6 carbon atoms), medium (8-12 carbon atoms) or long chain (14-18 carbon atoms).

Certain long chain polyunsaturated fatty acids must be obtained from the diet and have been given the name, essential fatty acids (EFAs). They are classified as either omega-6 or omega-3 EFAs.

## Omega-6 Essential Fatty Acids

Omega-6 EFAs are needed for healthy bones, skin, hair, reproduction and brain function. One of the major omega-6 fatty acids is gamma-linolenic acid (GLA). Oils rich in GLA may be helpful for PMS symptoms like breast swelling and tenderness, especially when combined with **Vitamin B6** and magnesium supplements like **Magnesium Complex**. GLA is also used in the creation of chemical messengers called eicosonoids that play essential roles in maintaining normal blood pressure and body weight. They also help to reduce platelet aggregation and inflammation.

**Super GLA** contains three oils that are all high in the omega-6 essential fatty acids, linoleic acid and gamma-linolenic acid (GLA). These oils are evening primrose oil, black currant oil and borage oil. These oils also contain omega-3 essential fatty acids. Most Americans, however, don't need to supplement omega-6 fatty acids as they tend to be plentiful in the American diet.

## Omega-3 Essential Fatty Acids

In contrast, omega-3 EFAs tend to be lacking in modern diets. Deficiencies of omega-3 EFAs have been linked to decreased mental abilities, loss of memory, learning disabilities like ADHD, PMS problems, tingling sensations in the nerves, poor vision, increased tendency to form blood clots, reduced immune activity, high blood pressure, and inflammatory disorders like arthritis and cardiovascular disease.

The principle form of omega-3, alpha linolenic acid (ALA) will convert into eicosapentaenoic acid (EPA), and then into docosahexaenoic acid (DHA) in a healthy body. EPA in combination with GLA (from omega-6) is used to make eicosonoids that mediate inflammation, improve immune response and otherwise promote good health. Without EPA, omega-6 EFAs tend to be converted to

eicosonoids that lower immune response, increase inflammation, raise blood pressure and have other undesirable effects.

Omega-3 is found in flax seed oil, flaxseeds, hemp seeds, walnuts, pumpkin seeds, Brazil nuts, sesame seeds, avocados, some dark green leafy vegetables (e.g. kale, mustard greens, collard greens), deep ocean fish (e.g. mackerel, sardines, anchovies, albacore tuna) and wild (not farm-raised) salmon. Supplementing one's intake of omega-3 with **Super Omega-3 EPA** can be helpful for people concerned about reducing their risk of heart disease, easing chronic pain (like arthritis) or helping brain and nerve function.

## DHA—An Important Omega-3

**DHA** is an omega-3 EFA and the most abundant fatty acid in the brain. It is essential for the myelin sheath and is needed for development, growth and maintenance of the brain. Supplementing with DHA may be helpful for improving brain function and memory and reducing the risk of cardiovascular disease. It may also be helpful in neurological conditions such as neuralgia and multiple sclerosis (MS). DHA is the major fatty acid in the retina of the eye and can be helpful for promoting eye health as people age.

DHA is very important for the developing brains of children. It can be given to them in chewable form using **Sunshine Heroes Omega 3 with DHA** for children. Omega-3 fatty acids have been shown to enhance brain development and intelligence in children. They can be helpful in behavior problems such as ADHD.

## Healthy Oils



**Flax seed oil** is a vegetarian source of omega-3 and omega-6 fatty acids in the right proportions, although it does not supply the long chain omega-3s, like EPA and DHA. Flax seed oil also contains lignans, which are linked to lowering the incidence of breast and colon cancer. Flax seed oil can be taken in gel caps or in liquid form. Do not use flax seed oil for cooking.

For low heat cooking, use olive oil, the most natural of all the vegetable oils. Olive oil is high in monounsaturated omega-9 fatty acids, which have been shown to reduce the risk of heart disease. It also seems to have a beneficial effect on the gallbladder. For high heat frying, however, coconut oil is a better choice.

**Continued on page 4**

## Additional Help and Information

For more help in understanding the difference between healthy fats and unhealthy fats, and how to get good fats and fat-soluble vitamins into your diet, contact the person who gave this newsletter to you. Their information should be found at the top of the following page. You can also consult the following sources:

*Know Your Fats* by Mary G. Enig

*Fats that Heal, Fats that Kill* by Udo Erasmus

*The Fat Fallacy* by Will Clower

*Nourishing Traditions* by Sally Fallon and Mary Enig.



# Fat

## The Misunderstood Nutrient

Most people tend to think of fatty foods as “evil” or at least bad for their health. While it’s true some fats, like margarine, shortening and refined vegetable oils aren’t good for you, you do need the right kinds of fats to be healthy.

Good fats can keep your eyes and brain healthy, reduce your risk of cancer and cardiovascular disease, ease pain and inflammation and even help you lose weight.

**Discover how the right kinds of fat can be good for you...**

*Continued from Page Three*

### Medium Chain Saturated Fats

Most people think that saturated fats are bad for you, but the medium chain saturated fats found in coconut oil and butter are very beneficial to both the heart and the immune system. Coconut oil is one of the best oils for frying and contains caprylic acid, a fatty acid that helps fight yeast in the colon. Caprylic acid is found in **Caprylic Acid Combination** and **Caprylimune**.

A great way to supplement good fats in the diet is to make flax seed oil butter. Obtain a high quality butter (ideally organic from pasture-raised cows) and allow the butter to soften to room temperature. Add 1/2 cup of flax seed oil to each cup (1/2 lb.) of butter and blend together with an electric mixer until smooth. This makes a healthy, soft spread butter that contains fat-soluble

vitamins, healthy medium chain saturated fatty acids and omega-6 and omega-3 essential fatty acids.

### Fat Soluble Vitamins

**Krill Oil with K-2** is a good source of omega-3 fatty acids (EPA and DHA) and also contains significant amounts of omega-9 fatty acids (monounsaturated fats like those found in olive oil). The supplement also provides phosphatidylcholine, vitamin A, vitamin E (alpha-tocopherol), astaxanthin and the important fat-soluble vitamin K-2, which helps bone and cardiovascular health.

The fat-soluble **vitamins A&D** are also helpful for bone and cardiovascular health. Most people are low in **Vitamin D3** and supplementing with this vitamin can help build healthy bones, reduce the risk of cancer and heart disease, and improve immunity during the winter months.