INTRODUCTION

This article contains what I consider to be extremely important information on fats and oils. Most information related to diet is a mix of propaganda, opinion, myth, fact and common sense. I have always tried to keep an open mind as I read and research the latest diet recommendations and, consequently, our family has tried many different diets over the years. We were vegetarians for many years and our daughters were raised on a mostly vegetarian diet. We were convinced that this was a healthful diet. All 5 of us were well and never took so much as an aspirin. Then I started to have my doubts. As our daughters became adolescents, I began to suspect that they had sluggish thyroid glands. How could this be? As I hit my late 40s, my hair began shedding at an alarming rate. I started to wonder what was lacking in our “healthy“ diet, as I believe that physical symptoms are a sign of a nutritional deficiency. To my horror, I learned that soy products depressed thyroid function - and our daughters ate tofu at least four times a week! I also discovered that my hair was falling out because of hormone imbalances. Not wanting to use synthetic or even “natural” hormones, like progesterone cream, I looked for a nutritional solution - and discovered that many hormone imbalances stem from a lack of “good” fats in one’s diet! Thanks to Diana Schwarzbein (an endocrinologist who wrote the book, The Schwarzbein Principle), and to Lynne August, MD (a very forward thinking doctor who uses diet and supplements to heal), to Sally Fallon, who has written the astonishing book Nourishing Traditions, to Bruce Fife, who has written books about coconut oil, and to Udo Erasmus, who wrote the groundbreaking book Fats That Heal, Fats That Kill, and to Johanna Budwig and the many others who helped me to see that, contrary to popular opinion, “good” fats and “good” cholesterol are essential to good health! If you come to our house now, you’ll see us eating eggs, butter, coconut oil, fish, and meat!

This article attempts to share with you what I have learned and how we have added “good” fats into our diet, because not all fats are created equal. There are “essential” fats, which are very hard to come by these days, and there are “deadly” fats, which, unfortunately, are present in just about every processed food and every restaurant meal. I imagine much of what I’ve written will blow your mind, as it contradicts what most food manufacturers, scientists, nutritionists, pharmaceutical companies and doctors are preaching! My hope is that this information will inspire you and help you to sift fact from myth, common sense from fad, as you seek to improve your health.

FEAR OF FAT
“As a nutritionist for the past two decades, I have discovered that the majority of my female (and, increasingly, male) clients suffer from a condition known as “fear of fat”. Although Americans are too fat, I believe that many are also suffering from an essential fatty acid deficiency. This deficiency may be contributing to the rise in breast cancer, attention deficit disorder (hyperactivity), depression, diabetes, arthritis, immune system dysfunction, and PMS and menopausal problems, not to mention nail, hair and skin conditions such as eczema and psoriasis.

The most common misconception about fat is that eating fat makes you fat.”
Ann Louise Gittleman, MS, CNS “The ‘Right Fats’ for Weight Loss”

“In our fat phobia, we are depriving ourselves and our children of fats required for optimum intelligence, learning ability, emotional stability, and civilized behavior. The results hurt us, damage our children’s future, and can even kill us.” Udo Erasmus, B.Sc., Ph.D. “The Right Fat Diet”

It would be impossible to list all the health problems that can occur as a result of depriving your body of “good” fat, but here are a few signs and symptoms:

**HEALTH PROBLEMS CAUSED FROM LOW/NO-FAT DIETS**

- Hormonal imbalances
- Brittle nails
- Carbohydrate and stimulant cravings
- Constipation
- Dry, limp, thinning hair
- Infertility/sterility
- Insomnia
- Loss of lean body mass with body-fat gain around the middle
- Mood disorders
- Scaly, itchy skin (eczema)

(The Schwarzbein Principle, p. 64 and Your Body’s Many Cries for Water, p.157)

**CLAIMS AND FACTS ABOUT FAT**

"Claim: Eating fat makes you fat. If you do not eat fat, you won't gain fat.
Fact: A low-fat diet makes you fat. Eating fat causes you to lose body fat and reach your ideal body composition. Furthermore, eating the right kind of dietary fat is essential for life. Eating fat is essential for reproduction, for the regeneration of healthy tissues and for maintaining ideal body composition.

“Even if you are overweight, if you are eating a low-fat diet you are starving your body. Every day that you eat a low-fat diet, your metabolism slows down.” (The Schwarzbein Principle, p.26)

Claim: Eating fat and cholesterol adversely affects your cholesterol profile and puts you at risk for heart attacks.
Fact: Eating a low-fat diet causes heart attacks. High insulin levels produced by a low-fat, high-carbohydrate diet result in plaquing of the arteries, because insulin directs all the biochemical processes that lead to plaque formation in arteries. Eating fat and cholesterol can prevent heart attacks by lowering insulin levels and switching off the internal production of cholesterol.

Fact: Low-fat diets (high in carbohydrates) cause insulin levels to rise too high …..a major player in cancer-cell replication. Dietary fat lowers insulin levels. Dietary fat is also essential for hormone production, which in turn is essential for a healthy immune system. In other words, dietary fat provides the immune system with key components that fight the growth of cancer cells.

Claim: Eating fat increases your risk of high blood pressure (hypertension).
Fact: Cutting fat from your diet increases the risk of high blood pressure because, without fat, insulin levels rise higher in response to food. Insulin stimulates various biochemical processes that can lead to increased blood pressure.

Claim: A low-fat, high-carbohydrate diet, which is the current ‘standard of care’ treatment for diabetes, makes patients healthier.
Fact: Long-term low-fat, high carbohydrate dieting leads to insulin resistance and, if continued, results in Type II diabetes. This same diet makes diabetics sicker.

It is important to note that these claims are not backed up by long-term scientific studies. But the facts are supported by physiology and biochemistry
So, maybe you are starting to think that fat isn’t unhealthy after all! But before you run out for an order of french fries, you need to know which fats are healthy and which fats are damaged and, therefore, deadly.

**What is a “damaged fat”?**
Basically, a damaged fat is a fat that has been altered - either with chemicals (solvents), high heat, exposure to air (oxidation) or light.

Damaged fats fall into three categories:
- Trans fats
- Hydrogenated
- Oxidized

**What is a “trans fat”?**
A trans fatty acid is an artificial fatty acid, structurally different from natural fats. Trans fatty acids are created as a result of modern food processing techniques. They are foreign to the human body. Trans fatty acids form when monounsaturated and polyunsaturated oils are heated to high temperatures during their creation.

“Because these fats are unlike the natural fatty acids needed for good health, our bodies are incapable of utilizing them in a productive manner. It’s like pouring apple cider into the gas tank of your car - it gums up the works………In like manner, trans fatty acids cause our cells to freeze up, so to speak, leaving them dysfunctional. **The more trans fatty acids eaten, the greater the cellular destruction until entire tissues and organs become seriously affected. Disease is the result.**” (The Healing Miracles of Coconut Oil p.48)

“Dr. Willett isn’t alone: many researchers believe trans fatty acids have a greater influence on the development of cardiovascular disease than any other dietary fat.” Ibid. p.49

The following is an article which was in the Albuquerque Journal. I have shared the entire article, because it shows that it is now common knowledge that trans fats are deadly, that they are in all processed foods and that no one is getting too excited about this disturbing news! Notice that our government,
instead of requiring that trans fats be eliminated from all processed foods, is simply requiring that the quantities of trans fats be listed on food labels!!

“Trans Fats Prove Bad at Any Level
San Jose, Calif. - A fat commonly found in everything from cookies to tortillas is unhealthy at any level, scientists concluded in a sweeping report released Wednesday, prompting the federal government to announce it will require “trans fat” levels be listed on all food labels.

The scientists determined there is a strong link between trans fat, a byproduct of food processing, and increased LDL, or ‘bad’, cholesterol levels, which in turn leads to increased heart problems.

Consumers likely won’t see trans fat included on product labels for at least several more years, though, making it all but impossible in the interim for shoppers to learn how much of the artery-clogging substance is in their favorite foods. And even when product labels are amended to include trans fat, they won’t spell out for consumers how much is too much, government officials said.

That’s because researchers could not agree upon a ‘recommended daily allowance’ of trans fat. Any level above zero is harmful, they said.

But telling consumers to completely avoid the fat is unrealistic, the scientists determined, because trans fat is found in more than 42,000 manufactured food products. Instead, the recommendation is that consumers compare the trans fat content of various products and opt to use the ones with lower values.

The fat is created during traditional food processing when liquid oils are converted into semi-solids, and appear in many margarine products and shortenings. It also occurs naturally in dairy products and beef.

The biggest culprits tend to be baked goods, such as cookies and pies, as well as crackers, chips and candy. Fried foods, including chicken, fish and potatoes, also have high levels. But lower levels appear in some unlikely places, including flour tortillas, some brands of corn flakes, ramen noodles and even Slim Fast Breakfast and Lunch Bars.

Trans fat began to inundate products decades ago when it was determined that by hydrogenating oils, you could create foods that could stay on store shelves for long periods of time without going rancid.” by Julie Sevrens Lyons Knight Ridder Newspapers Albuquerque Journal July 11,2002

It is very disturbing to contemplate that trans fats are in our food for the sake of a long shelf life - a decision based on convenience and profit, not on our
Our supermarket aisles are lined with “foods” that are not only nutritionally dead, but downright toxic. Americans pour billions of dollars into “the war on cancer” with one hand, while consuming “foods” riddled with trans fats and other cancer-causing substances with the other.

“A 1989 Washington Post article documented the diet of a teenage girl who ate 12 donuts and 24 cookies over a three day period. Total trans worked out to at least 30 grams per day, and possibly much more. The fat in the chips that teenagers consume in abundance may contain up to 48% trans which translates into 45.6 grams of trans fat in a small ten-ounce bag of snack chips - which a hungry teenager can gobble up in a few minutes. High school sex education classes do not teach American teenagers that altered fats in their snack foods may severely compromise their ability to have normal sex, conceive, give birth to healthy babies and successfully nurse their infants.” (The Oiling of America, p.15)

I would like to state here that, as much as I wish it wasn’t true, because I love chips, as far as trans fats go, there is no difference between a chip you buy at Whole Foods versus one you buy at a supermarket - they’ve all been fried at high temperatures in toxic vegetable oils.

I would also like to state that our schools should be doing all that they can to educate our children about health and diet. We read article after article about the alarming increase of obesity and diabetes in children, while our schools, and their corporate sponsors, conveniently provide machines in their hallways which dispense chips, cookies and soft drinks to our children.

And, when it comes to fast food restaurants, you really have to say to yourself, “It may be fast, but is it food?” “Fast food chains have reacted to the misguided fear of saturated oils by switching to polyunsaturated oils for cooking, which means that people are eating even more trans-fatty acids. While fast-food franchises have met the demands of the public by switching from saturated oils to polyunsaturated oils, they are only further contributing to the decline in people’s health.” (The Schwarzbein Principle, p.279)

“Fred Kummerow at the University of Illinois, blessed with independent funding and an abundance of patience, carried out a number of studies that indicated the trans fats increased risk factors associated with heart disease, and that vegetable-oil-based fabricated foods, such as Egg Beaters, cannot
support life. George Mann, formerly with the Framingham project, possessed neither funding nor patience - he was, in fact, very angry with what he called the Diet/Heart scam. His independent studies of the Masai in Africa, whose diet is extremely rich in cholesterol and saturated fat, and who are virtually free of heart disease, had convinced him that the lipid hypothesis was ‘the public health diversion of this century…the greatest scam in the history of medicine.’”  

Ibid, p.13

All polyunsaturated vegetable oils that you buy in a supermarket and virtually all processed foods contain trans fats. And to top it off, there’s something even worse that food manufacturers do to vegetable oils. They hydrogenate them!

**What is “hydrogenation”?**
Hydrogenation is a process in which an unsaturated vegetable oil is chemically altered to turn it into solid fat. “Hydrogenation involves heating oils to high temperatures while bombarding them with hydrogen atoms, thus creating toxic trans fatty acids.” (The Healing Miracles of Coconut Oil, p.47) “Shortening and margarine are two hydrogenated oils which should be completely eliminated from your diet.” (Ibid) “On average they contain about 35 percent trans fatty acids, but some brands may run as high as 48 percent.

‘These are probably the most toxic fats ever known,’ says Walker Willett, M.D., professor of epidemiology and nutrition at Harvard School of Public Health. Dr. Willett disagrees with those who say that the hydrogenated fats found in margarine or shortening are less likely to raise cholesterol than the saturated fats found in butter: **It looks like trans fatty acids are two to three times as bad as saturated fats in terms of what they do to blood lipids.**”  

Ibid, p.49

“Many of the foods you buy in the store and in restaurants are prepared with or cooked in hydrogenated oil. Fried foods sold in grocery stores and restaurants are usually cooked in hydrogenated oil. Many frozen, processed foods are cooked or prepared in hydrogenated oils. Hydrogenated oils are used in making french fries, biscuits, cookies, crackers, chips, frozen pies, pizzas, peanut butter, cake frosting, candy and ice cream substitutes such as mellorine.”  

Ibid, p.50

“The biggest reason for the art of hydrogenation is firmly stated by Mr.
Eckey… hydrogenation provides an amazing shelf life and savings for consumers. John Tobe remarked that ‘you save yourself a couple of pennies by buying a hydrogenated product, and will probably pay the doctor or the druggist or the hospital thousands of dollars through the years for the lousy few pennies these great benefactors of mankind, the processors, have saved you. They should be given citations and medals for their great work for humanity. You saved pennies but gained ill health.’” Tom Valentine, Facts on Fats and Oils (Nourishing Traditions, p.264)

**Did you know that margarine is “plastic butter”?**

“These oils (in margarine and tub spreads) are as refined as the gasoline in your car. In the refinery they are treated with a caustic soda solution which removes the lecithin, an essential nutrient. Then the oil is steam-cleaned under a vacuum at tremendous temperature. This second step should destroy any remaining food value in the oil, but, just in case, the oil is then bleached at high temperature to remove any color.

The liquid oil is then chemically treated by being bombarded with hydrogen under pressure in the presence of the metal nickel. This ‘hydrogenation’ process is what makes the oil look like real butter. But now it’s no longer a ‘polyunsaturated’ which is supposed to be so good for you. The remaining step in the manufacture of plastic butter is to steam-clean it again at high temperatures to deodorize it. Then the preservative and color are added, and it is ready for your table.” William Campbell Douglass, MD, The Milk Book (from Nourishing Traditions, p.226)

“A Medical Research Council survey showed that men eating butter ran half the risk of developing heart disease compared to those using margarine.” (Ibid p.6)

“Margarine is a source of unwelcome aluminum (and nickel) in our foods. Aluminum is a serious concern, associated with senility, osteoporosis, and cancer.” Fats that Heal, Fats that Kill, p.244

**What is an “oxidized fat”?**

Oils can become damaged through exposure to air. Oxidation occurs more easily to fats that are removed from their natural source (e.g. corn oil taken out of corn). Oxidation also occurs more easily at higher temperatures. Oils which haven’t been subjected to high temperatures retain the antioxidants that nature placed there.
It is interesting to note that only oxidized fats and oxidized cholesterol are found in arterial plaque. Non-oxidized fats and cholesterol do not accumulate in plaque. Oxidized fats are abundant in our modern diet. Processed vegetable oils are particularly bad. These refined oils have been stripped of the natural antioxidants that protect them from oxidation and free-radical generation.” (The Schwarzbein Principle p.32-33)

**How do refined oils become “dead” and “deadly”?**

“Most commercial oil industries use a high heat and chemical process to extract oils from seeds, vegetables and grains. The standard procedure is to press the seed, nut or bean, then to soak them in chemical solvents to allow more oil to be extracted. Oils are then degummed, refined, then bleached. Finally, oils are deodorized using steam distillation under pressure. This process heats oils to 464-518 degrees for 30-60 minutes. Deodorizing virtually destroys any remaining nutrients in the oil, and removes the various chemicals and peroxides that have been used during refining and bleaching.

“Heat is a serious threat to any unsaturated fatty acid, and especially to the essential fatty acids. When heated to temperatures above 302 degrees, unsaturated fats become mutagenic, which means they can damage our genes and those of our offspring. Further damage occurs at higher temperatures. When oils are heated to 320 degrees, trans-fatty acids begin to form. The higher the temperature, the more trans-fatty acids form.”

Sabrina Marie, “Change Your Oil, Change Your Life!” p. 8, A Grain of Salt, Spring 1999

In addition to becoming damaged through exposure to air and heat, oils can become damaged by light. Processed oils are always packaged in clear glass, or, even worse, clear plastic bottles and sit on store shelves under bright light for weeks or months, furthering the damage that was already incurred during the processing of the oils. They are toxic before you even open them.

**How can eating refined vegetable oils make me fat?**

“The use of refined vegetable oil actually promotes weight gain, not just from its calorie content, but because of its harmful effects on the thyroid - the gland
that controls metabolism. **Polyunsaturated vegetable oils depress thyroid activity, thus lowering metabolic rate** - just the opposite of coconut oil. Eating polyunsaturated oils, like soybean oil, will contribute more to weight gain than any other fat known, even more than beef tallow and lard.” (Bruce Fife, “Nature’s Miracle Oil”, A Grain of Salt, Spring 2002, p.11)

“There are many changes in hormones caused by unsaturated fats. Their best understood effect is their interference with the function of the thyroid gland.” (Ibid)

**How can eating refined oils affect fertility!?**

“Both Weston Price and Francis Pottenger accurately predicted that western man would develop more and more diseases as he substituted vegetable oils for animal fats, and that reproduction would become increasingly difficult. By some estimates, 25 percent of American couples are now infertile, a condition that may send the population reductionists into paroxysms of glee, but that causes untold heartache to millions of individuals. Infertility treatments are problematic, painful and expensive compared to the primitive prescription: more animal fat. (Nasty, Brutish and Short?, Sally Fallon, p.11)

**Wait a minute - did you just say eat more animal fat? I thought saturated fat was “bad”!**

“Saturated fat has been labeled a dietary villain that we should avoid at all costs. We buy lean cuts of meat, non-fat milk, and low-fat foods of all types in order to limit our intake of this dreaded substance. By why is saturated fat so bad? There is really only one reason; saturated fat is easily converted by the liver into cholesterol. ….Contrary to popular belief, neither saturated fat or cholesterol causes heart disease. This is a fact that all fat researchers and medical professionals know, but many of the rest of us do not.” (The Healing Miracles of Coconut Oil, p.41)

“For calcium to be effectively incorporated into the skeletal structure, at least 50 percent of the dietary facts should be saturated.” (Nourishing Traditions, p.11)

“Calcium metabolism is closely linked to essential fatty acid metabolism. This makes calcium problems at least a first cousin to diseases of fatty degeneration.” (Fats That Heal, Fats That Kill, p.376)

Yes, you read that right! Isn’t it amazing to consider that osteoporosis, which has become rampant in the U.S., could be caused by American women eating low-fat dairy products, no butter and so on? In order for calcium to be
properly absorbed, essential fatty acids (good fats) and saturated fat must be present!
I realize that these are provocative statements and I could take pages and pages to defend them, but I won’t. I highly recommend that you read the books and go to the websites (listed on the last page) for more in depth explanations!

“Saturated fat remains stable even when heated to normal cooking temperatures. This is why it is far superior to polyunsaturated oil for cooking purposes.” (The Healing Miracles of Coconut Oil, p.47)

Saturated fats are found mostly in animal foods (meat, butter etc.) and in coconut and palm oil.

How about monounsaturated fats? Isn’t canola oil healthy?
Olive oil, canola oil and peanut oil contain monounsaturated fats. Canola oil, the “new” oil, has been marketed as a healthful oil. Canola oil contains 10% Omega 3 (a “good” fat) before it is processed. All the Omega 3’s are destroyed as soon as canola oil is heated during processing.
Not only that, canola oil contains erucic acid, which causes heart lesions, especially when your diet is also low in saturated fat. Fallon p.19-20
Canola oil also contributes to vitamin E deficiency. Ibid p.128

“Canola oil, the hybrid form of rapeseed, contains as much as 50 percent trans fats,” (Sad Truth of American Diet, Part 3, Natural Medicine Alert, 2002)

So, I can’t really rate an oil that contains 50% trans fats as “good”. The only monounsaturated oil that gets a “good” rating is extra-virgin olive oil.

What is so great about extra-virgin olive oil?
In the Mediterranean, people have based their diets on the olive for 6,000 years. Olive oil has definitely stood the test of time! In Greece, every man, woman and child consumes an average of five gallons of olive oil a year.

Extra-virgin and virgin olive oils are the only mass market oils that have not been heated above 150 degrees centigrade.
Because olive oil is monounsaturated it can be heated to 325 degrees without destroying its fatty acids. Properly produced extra virgin olive oil is very high in vitamin A and vitamin D, both antioxidants. Olive oil has high concentrations of oleic acid, which keeps our arteries supple. It also contains beta carotene, vitamin E, and chlorophyll which supplies many nutrients, including magnesium. Olive oil may help prevent “the mental decline that can come with age”. Extra-virgin pressed olive oil contains an antioxidant which
makes it protective against heart disease and cancer.
“Studies carried out with virgin olive oil show that it helps membrane
development, cell formation, and cell differentiation…….In patients with
peripheral artery disease on fat-lowering diets, a switch from corn oil
(refined) to virgin olive oil (unrefined) for six months resulted in significantly
decreased ‘bad’ LDL cholesterol, and significantly increased ‘good’ HDL
cholesterol…….virgin olive oil has also been shown to reduce the production
of cholesterol gallstones and to favor bile secretion, which improves
elimination of the toxic end products of liver detoxification and improves
digestion of fats.” (Fat That Heal, Fats that Kill, p.257)
It is preferable to eat extra-virgin olive oil unheated - in salad dressings etc.,
but it can be used in cooking as long as you don’t overheat it.

What does “Extra Virgin” Mean?
Extra virgin olive oil is cold pressed olive oil produced from the first
pressing of top grade olives. Extra virgin olive oil has the highest nutritional
value and the best taste. “Virgin” olive oil is made from the second or third
pressing of the olives. “Pure” olive oil may be from the third or fourth
pressing and has been refined, using extreme heat and chemicals to extract
the oil from the remaining pulp.
The term “cold pressed” can be confusing. The oil may have been
mechanically pressed, but it could be the third or fourth pressing, after which
the oil is refined with heat and chemicals. Extra virgin olive oil is produced
from only one mechanical pressing and is not refined with heat and chemicals.
Store your extra virgin olive oil in a dark glass or ceramic container and keep
it in a cupboard, away from air and light, to preserve it’s freshness. It can be
refrigerated, but it will thicken. It will “melt” quickly when returned to room
temperature. You can cook with it, but it is most beneficial eaten “raw”
(unheated). Our favorite salad dressing consists of fresh lemon juice, extra-
virgin olive oil, Celtic sea salt, dried herbs and several cloves of smashed
garlic.

Are there any “good” polyunsaturated oils?
Remember, any polyunsaturated vegetable oil becomes toxic when
heated. “It is not healthy to eat any polyunsaturated oil that has been
extracted from its natural source by using a heat process. But it is even worse
to cook with this type of damaged fat.” (The Schwarzbein Principle, p.27)
Polyunsaturated oils occur naturally in nuts, seeds, grains and other whole foods. They are not harmful to the body when eaten in a “whole” or natural state. However, once the oils are extracted, using heat or chemical solvents, they are rendered toxic.

TRY TO AVOID EATING THESE FATS AND OILS !!

<table>
<thead>
<tr>
<th>Almond oil</th>
<th>Sesame oil</th>
<th>Canola oil</th>
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<tr>
<td>Safflower oil</td>
<td>Sunflower seed oil</td>
<td>Peanut oil</td>
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<td>Corn oil</td>
<td>Cottonseed oil</td>
<td>Crisco (shortenings)</td>
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<tr>
<td>Soy oil (soybean oil)</td>
<td>Walnut oil</td>
<td>Margarine (any brand)</td>
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<td>Poppy seed oil</td>
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<td>Tub spreads</td>
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This list is very sobering. If you start to read labels at the supermarket, co-op, Wild Oats or Whole Foods, you will see that practically all processed foods, even so-called “natural foods” or “health foods”, from bread to mayonnaise to canned beans to snack bars, contain damaged, toxic oils!

DISEASES CAUSED BY CONSUMPTION OF DAMAGED OILS

<table>
<thead>
<tr>
<th>Cancer</th>
<th>Immune system dysfunction</th>
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<td>Heart disease</td>
<td>Liver damage</td>
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<td>Reproductive organ damage</td>
<td>Lung damage</td>
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<td>Digestive disorders</td>
<td>Depressed learning ability</td>
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<td>Weight gain</td>
<td>Impaired growth</td>
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<td>Depressed thyroid function</td>
<td>PMS</td>
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<td>Depression, mood swings</td>
<td>Osteoporosis</td>
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What about cold pressed, organic vegetable oils?

In response to the question, “What if I eat only organically grown vegetable oils?” Ray Peat, Ph.D., doesn’t mince his words “Even without the addition of agricultural chemicals, an excess of unsaturated vegetable oils damages the human body. **Cancer can’t occur, unless there are unsaturated oils in the diet.** Alcoholic cirrhosis of the liver cannot occur unless there are unsaturated oils in the diet. **Heart disease can be produced by unsaturated oils, and prevented by adding saturated oils to the diet.**” (Unsaturated Vegetables Oils:
“All systems of the body are harmed by an excess of these oils. There are three main kinds of damage: one, hormonal imbalances, two, damage to the immune system, and three, oxidative damage.” (Ibid, p.3)

And Udo Erasmus explains that, in this country, the term “cold-pressed” is meaningless. With the exception of olive oil, “cold-pressed” canola, peanut, soy, and safflower oils have been heated to high temperatures during processing.

**What is a “free radical”?**

A free radical is a renegade molecule which damages cells and tissues. **ALL oxidized fats and trans fats are free radicals.**

“Free radicals are molecules with an extra electron. Since electrons must be paired, these molecules roam your body trying to pair with other electrons by stealing other electrons from your tissues. As a result, free radicals damage the system on a cellular level.” The Schwarzbein Principle, p.32-33

A few examples of diseases caused by free radicals - Alzheimer’s, cataracts, Parkinson’s and arthritis……..

**Sources of free radicals (the “deadly” list)**

Processed vegetable oils and fats
Heated vegetable oils
Oils exposed to sunlight or artificial light
Tobacco smoke
Polluted air
Exhaust
Hairspray
Sugar
Aspartame
Chemical additives in foods, shampoos, lotions etc.
Drinking and bathing in chlorinated water

“In addition, free radicals are created in our bodies during normal metabolism of food. Free radicals are constantly being neutralized in a healthy body by natural antioxidants (vitamins, for example) provided by your diet. The problem arises when, instead of eating foods that would provide antioxidants to neutralize free radicals, people eat “food products” that generate even more free radicals.” (The Schwarzbein Principle, p.33)

There are many components to good health. One big piece of the puzzle
involves understanding the action of free radicals and antioxidants in our bodies. Think of free radicals as rust inside your body. In order to clear your body of rust, you have to minimize using the things on the free radical list and try to maximize your consumption of antioxidant foods and supplements.

**What is an antioxidant?**

Antioxidants are molecules that neutralize free radicals, making them harmless. Example - vitamins A, C, E and beta-carotene are antioxidant. Antioxidants are found in fresh fruits, vegetables, oils rich in essential fatty acids, some herbs and supplements. Garlic and onions are wonderful antioxidant foods. Coconut oil is a fantastic antioxidant food.

“The only way to stop a free radical is with an antioxidant.” (The Healing Miracles of Coconut Oil, p.83)

In addition to avoiding foods that contain oxidized, trans fats that create free radicals in our bodies, and eating whole foods that are naturally anti-oxidant, we also must eat foods that contain essential fatty acids.

**What is an Essential fatty acid (EFA) ?**

Essential fatty acids are, as their name implies, ESSENTIAL for good health. Essential fatty acids are needed for the manufacture of cell membranes, hormones and nerve coverings in the body. Essential fatty acids are the “good” fats. Unfortunately, our bodies cannot make essential fatty acids - we must get them from our foods. And, as I keep reiterating, the essential fatty acids naturally occurring in oils are destroyed when oils are refined and processed at high temperatures.

**What will essential fatty acids do for my health?**

- Healthy skin, hair and nails
- Improved sleep
- Lift depression
- Lower “bad” cholesterol
- Normalize triglycerides
- Increase metabolic rate; help mobilize and burn excess fat in the body
- Mental and emotional stability
• Build healthy cell membranes
• Build a variety of hormones and hormone-like substances
• Act as carriers for important fat-soluble vitamins A, D, E and K
• Assist the body in converting carotene to vitamin A
• Essential for mineral absorption (i.e. calcium!) and a host of other processes
• Decrease tumor formation
• Improve hearing, vision and mental clarity
• Eliminate food cravings
• Anti-inflammatory; eases arthritis

“The right fats, those which our body cannot make but every cell in our body requires to function, and must therefore obtain from foods, consist of two essential fatty acids - omega 3 and omega 6.” Udo Erasmus, B.Sc., Ph.D. “The Right Fat Diet”

**Omega-6 (linoleic acid) and Omega-3 (alpha-linoleic acid) should be eaten in a ratio of three Omega-6 to one Omega-3.**

However, our Western diet usually contains a ratio of ten to twenty Omega 6 to one Omega 3, which explains why so many Americans have degenerative diseases!

“Some experts believe certain degenerative conditions - including heart disease, cancer, diabetes and arthritis - are expressions of omega-6 (linoleic acid) excess and omega-3 (alpha-linoleic) deficiency. This imbalance is found at both ends of the dietary spectrum: among strict vegetarians and heavy consumers of corn-and-grain-fed animals. Milk and eggs from these animals also over supply omega-6 and lack omega-3 fats.”

Numerous studies have shown that excess omega-6 promotes blood clotting and uncontrolled cellular proliferation - conditions that occur in cardiovascular disease, cancer and arthritis. In contrast, a high omega-3 to omega-6 ratio has been found to be effective in reducing cardiovascular disease, cooling joint inflammation and stemming the spread of cancer by supporting production of anticlotting, anti-inflammatory and antiproliferative prostaglandins.” (“Chewing the Fat” by Don Matesz, Alternative Medicine, August 2002)
How many essential fatty acids are there?
There are dozens of different types of fatty acids. Each of the fatty acids affects the body differently.
“The conditionally essential fatty acids include
**gamma-linolenic acid (GLA),**
**arachidonic acid (AA)**
**icosapentaenoic acid (EPA)** and
**docosahexaenoic acid (DHA).** . . . .All four of these fatty acids can be made by cells in the body, but there are a number of interfering food substances or illnesses or genetic inadequacies that make these latter fatty acids become dietary essentials for some people. These interfering conditions include consumption of trans fatty acids, over-consumption of omega-6 linoleic acid from commercial vegetable oils, zinc deficiency, alcohol consumption and various vitamin deficiencies. People whose ancestors were largely meat eating often cannot make these conditionally essential fatty acids and must obtain them from dietary sources.” (“Know Your Fats”, Mary G. Enig, Ph.D.) (Nourishing Traditions, p.307)

**Gamma Linolenic Acid (GLA)**
GLA creates healthy beautiful skin. A steady supply of GLA helps our skin to retain moisture and to stay supple and smooth. Without GLA (found in evening primrose, borage and black currant oil) our skin can’t retain moisture and it will be very dry and rough.

New research shows that black currant seed oil contains an average of twice as much GLA as evening primrose oil - 17% compared with 8-9% - and costs about 30% less.

“GLA-rich oils have been used to treat cancer, premenstrual syndrome, breast disease, scleroderma, colitis, irritable bowel syndrome and cystic fibrosis. They have been shown to increase liver function and mental acuity.”
(Nourishing Traditions, p.619) GLA also boosts metabolism!

**Conjugated Linoleic Acid (CLA)**
CLA used to be found in grass-fed beef and in foods that came from grass-fed cows, such as milk, butter and cheese. Butter and cream were our highest sources of CLA. In the late 70’s, when we started feeding our cows grain, about 80-90% of the CLA in our diet disappeared. Interestingly, the 1970’s is when the obesity rate began to rise.

Conjugated Linoleic Acid (CLA) is found in butterfat, lamb and beef. “Many studies over the past 12 years have established that, at least in
laboratory animals, CLA offers some protection against breast cancer and other malignancies, apparently through its role as a potent antioxidant. In addition to anticancer benefits, CLA also seems to dramatically reduce the deposition of fat. Livestock eating feed supplemented with CLA tend to lay down more lean tissue. “Breast cancer cells absorb CLA, and studies show that when they do, it destroys up to 81% of them within 12 days.” (“Woman’s World“, 7/14/98)

“A component of milk fat, known as conjugated linoleic acid (CLA) has shown, in animal tests, to inhibit the development of chemical-carcinogen induced skin, stomach and breast cancers. Furthermore, this component of milk fat has been shown to stop the growth of skin, colorectal, prostate, ovarian and breast cancer cells. In addition, CLA may prevent the clogging of arteries and boost the body’s immune system.” (www.dairycorp.com/au/buttter 7/15/02)

And, good news for those who exercise and take CLA, “CLA shifts muscles into high gear, stimulating an average five-to-fourteen percent increase in muscle mass.” (“Woman’s World“, 7/14/98)

When CLA is given as a supplement it is derived from sunflower and/or safflower oil. Louise Gittelman suggests taking 1-2 grams of CLA per meal. “Latest studies suggest that by taking a daily dose, you can lose seven to eight pounds of weight and reduce your body fat by a whopping 20% within three months. This can be accomplished simply by adding a moderate exercise program and including 1-2 grams of CLA per meal. CLA also reduces cancer risk, and reduces diabetic complications and even reduces cardiovascular risk.” (A Grain of Salt, Fall 2002)

**Icosapentaenoic Acid (EPA)**
Necessary for proper function of the brain and eyes. Needed in infants’ diets to prevent learning disabilities.

**Docasahexaenoic Acid (DHA)**
“DHA is a primary component of brain and eye cell membranes, and it’s necessary for the development and function of these organs…. In adults, DHA deficiency has been linked to neurological problems. These include attention-deficit and hyperactivity disorders, depression, multiple sclerosis, Parkinson’s and Alzheimer’s disease.” (“Chewing the Fat”, Alternative Medicine, August 2002)

**Our brain is 60% fat!** “Research has established that when the essential
fats are inadequately supplied, behavior changes. This is true for omega 3 deficiency and also true for omega 6 deficiency. Both are present in the brain, in a one to one ratio."

“Essential fats have a remarkable calming effect.” “It is a crime to calm ADHD kids down with Ritalin. These kids are not suffering from drug deficiency and, according to Fred Baughman, MD, Ritalin may lead to brain atrophy. On low fat and junk food diets, the main missing ingredients are the essential fats the brain requires to function normal.”

“A study shows that juvenile delinquents non-responsive to counseling become counselable when they get the essential fats the brain needs to function normally.”

“Essential fats elevate mood and lift depression.”

“Schizophrenics hallucinate less when the essential fats that the brain requires are provided.”

“Essential fats bring improvement in degeneration of brain function that occurs with aging.” (Udo Erasmus, “The Right Fat Diet”)

Lyprinol and ETA - A Unique Omega-3 Fatty Acid!

Lyprinol, a patented fatty acid complex made from the New Zealand Green-Lipped Mussel, contains ETA, an essential fatty acid related to EPA (see above). ETA is the most biologically active of the omega-3 oils! The oil in Lyprinol is 200 times more potent than any other omega-3 fatty acid product. Double-blind university studies have shown pain relief for rheumatoid and osteoarthritis patients. Lyprinol does this by blocking the action of leukotrienes, pro-inflammatory eicosanoids (hormone-like substances in our cells). Lyprinol should relieve any persistent inflammatory problems, including allergies and asthma. Lyprinol encourages a healthy omega-3/omega-6 balance in your body. We use and sell lots of Lyprinol because it works!

How can I get Essential Fatty Acids in my diet?
The following lists were gleaned from The Schwarzbein Principle, p.46 & Nourishing Traditions, p.307

<table>
<thead>
<tr>
<th>Omega-3 (Alpha-linoleic)</th>
<th>Omega-6 (Linoleic)</th>
<th>GLA (Gamma-linoleic acid)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flaxseed/oil</td>
<td>Chicken</td>
<td>Black currant oil</td>
</tr>
<tr>
<td>Hemp oil</td>
<td>Eggs</td>
<td>Borage Oil</td>
</tr>
<tr>
<td>Salmon</td>
<td>Flaxseed</td>
<td>Evening primrose oil</td>
</tr>
</tbody>
</table>
Sardines                             Turkey                    Blue-green algae  
Tuna                                    Raw nuts  
Mackerel                             Sunflower seed  
Anchovies                         Almonds  
Chia seed                           Evening primrose oil  
Purslane                             Sesame seed  
Walnuts, macadamia       Borage oil  
Pumpkin seeds  
Mackerel  
Cod-liver oil  
Seaweed and shellfish (small amounts)  
Rainbow trout  
Kale, collards, spinach

**EPA and DHA** (Eicosapentaenoic and Docosahexaenoic acid)  
**AA** (Arachidonic acid)  
Organ meats  
Egg yolks from properly fed chickens*  
Egg yolks from properly fed chickens*  
Fish eggs  
Fish oils (cod liver oil)  
Salmon (wild, not farm raised)  

**CLA** (Conjugated linoleic acid)  
**Palmitoleic acid**  
Butter from pasture-fed cows. CLA disappears when cows are fed even small amounts of grain or processed feed  
Lamb and beef fat  

* Free-range eggs from hens allowed to feed on insects and green plants can contain omega-6 and omega-3 fatty acids in the beneficial ratio of approximately one-to-one, but commercial supermarket eggs from hens fed mostly grain can contain as much as 19 times more omega-6 than omega-3!  

**Can a vegetarian diet provide enough essential fatty acids?**

It takes effort, as many foods that vegetarians eat are rich in omega-6 fatty acids and low in the valuable omega-3s. We were devoted vegetarians up until a few years ago - when we realized that our “healthy” diet was very deficient in essential fatty acids! That said, everyone, but especially vegetarians, should avoid corn, peanut, canola, safflower, sesame, soy and
sunflower oils. Extra virgin olive oil and coconut oil are the best oils for vegetarians, but neither are high in omega-3 fatty acids. Coconut oil is only 2% essential fatty acids. However, the medium chain fatty acids in coconut oil work synergistically with the essential fatty acids in your diet and enhance the efficiency of those essential fatty acids by 100%! If you eat dairy products, be sure they are “whole”, not skim or low fat, and eat organic butter from pasture-cows - your best source of essential fatty acids. (You can get Strauss Dairy products at natural food stores - organic milk and butter from pasture fed cows.) If you eat eggs, look for eggs from free-range hens that have been fed flax seed - this boosts the omega-3s in the eggs!

Most nuts have high omega-6 to omega-3 ratios. (Remember, optimal is a high omega-3 to omega-6 ratio). Peanuts and almonds have no detectable omega-3s at all. Walnuts and macadamias have the highest omega-3s and the best essential fatty acid ratios. Pecans, pine nuts and cashews are your next best bet. Eat all nuts and seeds raw - roasting destroys their essential fats. Whole grains and legumes (beans), while excellent foods, have poor essential fatty acid ratios. Eat dark green, leafy vegetables, such as kale, collards or spinach, at least once a day, as they contain omega-3s. Flaxseed oil contains omega-3s. It must be kept refrigerated and should NEVER be heated. Add flax oil to your salad dressing or food, as it is best assimilated when taken with food. Freshly grind flax seed and chia seed (I use a little electric coffee mill and grind a tablespoon at a time) and add it to your food. It adds fiber and you know the oil is fresh if you grind the seed right before eating it. Supplement with borage oil, black currant oil and/or evening primrose oil. If you’re willing, fish oil supplements, especially cod liver oil, are a really good idea!
Flax seed is 58% alpha-linoleic acid (omega-3)
Chia seed is 30%
Hemp seed is 20%
Walnuts are 5%

**Doesn’t eating a lot of cholesterol cause atherosclerosis?**

“The current medical theory is that a high-cholesterol diet causes high serum cholesterol which causes the atherosclerotic process. Although this theory appears to be correct, it isn’t….In the 1970’s I started looking at patients’ cholesterol levels and saw many which didn’t fit the theory. Many who were big cholesterol eaters and had a good lipid profile and many who were not cholesterol eaters who had a poor lipid profile. I knew then that something
was wrong with the dietary cholesterol theory….I knew the real answer to the atherosclerotic process would be found by finding the cause of the initial injury to the intimal cells. I knew that all the theories of that injury had no scientific bases. In the early 1980’s I suspected the oxidant free radical was the culprit. Finally in early 1987 I found the proof in the study of the exposure of guinea pigs to kerosene fumes. The liver increases the production of cholesterol in response to the injury to the intimal cells by oxidant free radicals. The cholesterol goes to the site of injury and itself becomes oxidized in an attempt to protect the cells.” Roy W. Dowdell, MD, Health Freedom News (Nourishing Traditions, p.296)

**What causes my body to overproduce cholesterol?**

“When you do not eat cholesterol, your body sees this deprivation as a time of ‘crisis’ or ‘famine’. During this ‘famine’, insulin activates an enzyme in your liver called HMG Co-A Reductase that begins to overproduce cholesterol from the carbohydrates you eat. This internal overproduction of cholesterol contributes to the formation of the damaging artery plaque that leads to diseases such as heart attacks and stroke. This is why people on low-fat, low-cholesterol, high-carbohydrate diets with high insulin levels, eventually end up with abnormal cholesterol numbers, blocked arteries and bypass surgery.

**Consuming excess carbohydrates, while decreasing cholesterol intake, guarantees a steady overproduction of cholesterol within the body.**

On the contrary, dietary cholesterol does not play a role in over-producing cholesterol in the liver. **In fact, the only ‘low-cholesterol’ diet you can go on is a diet rich in cholesterol**…………Dietary cholesterol blocks HMG Co-A Reductase. When HMG Co-A Reductase is blocked, cholesterol cannot be formed from sugar. In other words, the intake of dietary cholesterol stops the internal production of cholesterol.” (The Schwarzbein Principle)

**So it’s high insulin levels, not cholesterol in my diet, that causes high cholesterol levels?**

“It is important to emphasize that insulin is the major hormone directing the overproduction of cholesterol in the body. Regardless of what causes insulin to rise, the body responds to elevated insulin levels by overproducing cholesterol. High insulin levels are caused by stress, dieting, caffeine, alcohol, aspartame, tobacco, steroids, lack of exercise, stimulant and other
recreational drugs, excessive and/or unnecessary thyroid replacement therapy, all over-the-counter and prescription drugs, and eating a diet insufficient in proteins and fats while eating excess carbohydrates.” (The Schwarzbein Principle, p.69)

**Is there an alternative to taking drugs that reduce cholesterol?**

“Drug companies are well aware of the function of the enzyme HMG Co-A Reductase. This knowledge has led to the invention of drugs that switch off production of cholesterol in the body by blocking HMG Co-A Reductase. These are the so-called “Statin” drugs. Drug companies continue to market these drugs while researching new drugs to switch off cholesterol production in the body, instead of simply telling people to eat cholesterol and decrease sugar and stimulant consumption. Eating cholesterol is the only healthy way to block cholesterol production in the body. **Eating cholesterol is one of the best things you can do for your body.**” The Schwarzbein Principle p.69-71

**Cholesterol - Essential for good health and happiness!**

Cholesterol has been villainized, but it is essential to good health!

- Essential for brain function
- Keeps moods level by stabilizing neurotransmitters, especially serotonin
- Maintains healthy immune system
- Maintains the health of the intestinal wall, prevents leaky gut syndrome
- Essential building material for the production of important hormones
- Forms insulation around nerves to maintain a healthy nervous system
- An important structure in cell membranes (prevents cancer)
- An antioxidant and free radical scavenger
- Assists in the production of Vitamin D

See The Schwarzbein Principle p.63

“Like cholesterol deprivation, fat deprivation disrupts all the biochemical processes of your metabolism, which means that you are on the accelerated metabolic aging track.” (The Schwarzbein Principle, p.64)

“Cholesterol is needed for proper function of serotonin receptors in the brain. Serotonin is the body’s natural ‘feel-good’ chemical. This explains why low cholesterol levels have been linked to aggressive and violent behavior,
depression and suicidal tendencies.” (The Oiling of America, p.15)

Think of all the women in America who eat low or no-fat diets and consume coffee and lots of carbohydrates. These women may think that they are health conscious, or are trying to keep their weight down. The lack of fat and cholesterol in their diet disrupts their hormonal balance, so they are put on hormone replacement therapy and/or a drug to “prevent” osteoporosis. The lack of fat and cholesterol in their diet also disrupts their serotonin levels, so they become depressed and start taking Prozac. Meanwhile, their low-fat diet and their excess consumption of carbohydrates, stimulants and now drugs, may make their cholesterol levels increase, so they might be put on a cholesterol lowering drug. They will be in a state of biochemical imbalance for the rest of their lives, as long as they continue to abstain from fats and cholesterol and take drugs to try to correct the imbalances created by their diets.

“Your diet should be rich in fat and cholesterol, which should come from a variety of foods such as avocados, butter, eggs, red meat, chicken, shellfish, fish, olives, nuts and seeds.” (The Schwarzbein Principle, p.65)

**Are you really recommending that I eat butter??!!!**

“Butter has been part of man’s diet since cows were domesticated thousands of years ago. Degenerative diseases on a large scale are more recent in origin, having risen from rarity to epidemic proportions in the last 100 years, while butter consumption has decreased. It is unlikely that butter, the cholesterol it contains, or the cows that provide us with both are to blame for the meteoric rise of degenerative disease.” Fats that Heal, Fats that Kill, p.245

“In a study announced in July, Dutch researchers discovered that trans fat, found in abundance in margarine and vegetable oils, reduces the function of the blood vessels and drives down levels of good cholesterol more than saturated fats such as those found in butter and meat.” (de Roos, N.M., et al., “Replacement of dietary saturated fatty acids by trans fatty acids lowers serum hdl cholesterol and impairs endothelial function in healthy men and women,” Arterioscler Thromb Vasc Biol 2001 July;21(7):1233-7)  

“In 1956 the American Heart Association began the low-cholesterol campaign
with a special program that was aired on all three television networks. The ‘Prudent Diet’ was launched where corn oil, margarine, chicken and cold cereal replaced butter, lard, beef and eggs. One of the panelists disagreed with his colleagues at the American Heart Association. He told them that heart disease in the form of myocardial infarction (MI) was non-existent in 1900 when egg consumption was three times what it was in 1956 and when corn oil was not available. When they asked him to support the ‘Prudent Diet’, Dr. Dudley White said, ‘See here, I began my practice as a cardiologist in 1921 and I never saw an MI patient until 1928. Back in the MI-free days before 1920 the fats were butter and lard, and I think that we would all benefit from the kind of diet that we had at a time when no one had ever heard the world ‘corn’ oil.” (Mary G. Enig, Ph.D., The Oiling of America, extracted from Nexus Magazine, Vol. 6, Number 1 (Dec.1998-January 1999)

“At the turn of the century, most of the fatty acids in the diet were either saturated or monounsaturated, primarily from butter, lard, tallows, coconut oil and small amounts of olive oil. Today most of the fats in the diet are polyunsaturated, primarily from vegetable oils derived from soy, as well as from corn, safflower and canola.” (Nourishing Traditions, p.10)

A modern American often consumes 30 percent of his or her calories as polyunsaturated oils, but scientific research indicates that this amount is far too high. Our intake of polyunsaturates should not be much greater than 4 percent of our total calories, and should not come from refined oils!

“...” (www.dairycorp.com.au/butter  7/15/02)

“Milkfat, as with other fats, is an essential macro nutrient. It provides a concentrated source of energy, is a highly filling food able to readily satisfy hunger, it supplies essential fatty acids and components for structural fats. Milkfat provides, carries and promotes the absorption of fat soluble vitamins A,D,C,E and beta-carotene.” Ibid

“A Medical Research Council survey showed that men eating butter ran half the risk of developing heart disease compared to those using margarine.” (Nourishing Traditions, p.6)

“Many studies have shown the importance of butterfat for reproduction; its
absence results in ‘nutritional castration’, the failure to bring out male and female sexual characteristics. As butter consumption in American has declined, sterility rates and problems with sexual development have increased.”  (Nourishing Traditions, p.16)

**How do I use flax seed and oil?**

For starters, only buy flax oil that is refrigerated and check the date on the bottle! Be sure that the flax oil has been mechanically, not chemically, extracted. Keep it in your refrigerator (or freezer, if you can’t use it right away) and make sure that you use it within 3-6 weeks after opening it. (Frozen will keep for 1 year.)

Flax oil should never be heated - don’t cook with it. You can put it in yogurt; mix it into homemade salad dressings; put it on hot or cold cereal; mix it into potato salad and so on. It can be added to any food, as long as it is added after the food has been cooked.

Udo Erasmus recommends 1 tsp. to 2 T. a day for healthy people. For people with degenerative conditions, he recommends 3 - 5 T. a day! He then recommends that, after 6 months of taking flax oil, you switch to hemp oil, which has a balanced ratio of Omega 3 and 6 oils.

Johanna Budwig made a “spread” by mixing 8 ounces of coconut oil with 3 ounces of flax oil. I haven’t tried this yet, but it would be very healthy! You have to be creative! If you want to disguise the taste of the flax oil, you can mix it into almond butter, or, even better, blend a little into butter.

Flax seed contains substances called lignans. Lignans are anti-viral, anti-fungal, anti-bacterial and anti-cancer! Flax oil has only 2% of the lignans found in flax seed, so eating freshly ground flax seed has some advantages over the oil, providing the freshest possible oil, as well as fiber, mucilage, other nutrients and lignans.

Udo Erasmus recommends 6-8 T. of ground flax seed as a daily maximum. I think 3 T. a day would be adequate. Flax seeds absorb about 5 times their volume of water, so it’s essential that you drink adequate water when eating flax seed! Udo says oil that is labeled “lignan flax oil” is a marketing gimmick. You can only get lignans from ground flax seed.

Flax seed is used for digestive and eliminative problems. Flax is guaranteed to cure constipation within 3 days! The fiber in flax seed feeds friendly bacteria in our intestinal tract. Flax increases metabolic rate.

Flax oil reverses conditions caused by deficiencies in Omega-3 essential
fatty acids. It helps to heal all degenerative conditions - cancer, cardiovascular disease, diabetes, MS, arthritis, PMS and overweight. Flax oil has been used to lower blood pressure. Flax oil lowers the amounts of insulin required by diabetics. Flax oil helps relieve some cases of asthma and allergies. It often improves liver function and metabolism of calcium and other minerals. The oil shortens the time necessary for fatigued muscles to recover after exertion, and shortens healing time for bruises, sprains and other injuries. It increases energy, stamina, and the feeling of vitality, and makes skin soft, hair shiny, and nails strong. (Fats that Heal, Fats that Kill, p.286)

The Omega 3’s in flax boost serotonin levels in the brain! As a result, you won’t feel depressed and you won’t feel the need to eat to release anxiety and stress. Flax oil is definitely a “good“ fat!

What the heck is chia seed?

Chia is a member of the mint family - it’s botanical name is Salvia hispanica. Chia seed has been eaten by southwestern Native Americans and South Americans for centuries. The word “chia" is Mayan for “strength”. Chia seeds contain high amounts of Omega 3 essential fatty acids and soluble fiber. One ounce of chia has 4.7 grams of protein. Two ounces of chia seeds supply 30% of the recommended daily amounts of iron and calcium. Chia is also rich in boron, which helps the body absorb and utilize calcium. Unlike flax, chia is digestible without grinding. You can sprinkle chia seeds on your food or add them to sauces or soup. You can make a gel out of chia seed by combining 1/3 cup of chia seed with 2 cups of water and let it sit for 30 minutes. This gel can be added to homemade salad dressing, dips, soups etc.

Is lard good, bad or deadly?

Lard is a soft white solid or semisolid fat obtained by melting down the fatty tissue of a pig. In the old days, when pigs were raised on small farms, lard (and tallow, which is the rendered fat of cattle and sheep) were saturated fats containing nutritional value! These days, unless you know the farmer and the diet of the pig, cow or sheep who provided the lard/tallow, lard/tallow should be avoided. “...polyunsaturated fatty acids, which are now fed to pigs to fatten them, in the form of corn and soy beans, cause the animals’ fat to be
chemically equivalent to vegetable oil. In the late 1940s, chemical toxins were used to suppress the thyroid function of pigs, to make them get fatter while consuming less food. When that was found to be carcinogenic, it was then found that corn and soy beans had the same antithyroid effect, causing the animals to be fattened at low cost. The animals’ fat becomes chemically similar to the fats in their food, causing it to be equally toxic, and equally fattening.”

Fry and you die…….

“In frying, our usual custom is to pour oil into an empty frying pan, and to let it heat, shimmy, and smoke before adding foods we want to fry. During this time, the oil is being destroyed. …Oil kept at 215 degrees C (419 degrees F) for 15 minutes or more consistently produces atherosclerosis when fed to experimental animals. In commercial deep-frying operations, the same batch of oil is often kept at a high temperature constantly for days.” (Fats That Heal, Fats That Kill, p.128)

“Frying and deep-frying destroys all oils and cannot be recommended for health.” (Ibid, p.129)

“Frying once or twice won’t kill us, but after 10, 20 or 30 years of eating fried foods, our cells accumulate altered and toxic products for which they have no evolved efficient detoxifying mechanisms.” (Ibid)

Oils least damaged by high temperatures and oxygen are butter and coconut oil. Use these to sauté foods over low heat. You can also water sauté foods. Instead of oil, use 1 -2 T. water or chicken broth and stir “fry” the food over low to medium heat. You can also steam foods in a steamer basket placed over boiling water. All meats should be cooked at low temperatures to avoid damaging their fats. In the most authoritative study, how the meat was cooked made a more important contribution to higher rates of cancer than the amount eaten or how often. Grilling, searing and browning damages fats.

Isn’t taking cod liver oil a bit old fashioned?

“Cod liver oil is an excellent source of vitamins A and D. Cod liver oil also contains DHA, a fatty acid essential to the development of the brain and nervous system.” “Saturated fats help the body put the DHA in the tissues where it belongs. This explains why Weston Price got such miraculous results when he gave high-vitamin butter and cod liver oil together for the treatment of caries and many other diseases.” Nourishing Traditions, p.237
The vitamin D in cod liver oil is “the perfect synergist for upregulating calcium”.

“Cod liver oil is also rich in eicosapentaenoic acid (EPA). The body makes this fatty acid from omega-3 linolenic acid as an important link in the chain of fatty acids that ultimately results in prostaglandins (localized tissue hormones). It is very important for the proper function of the brain and nervous system, and for visual acuity. Those individuals who have consumed large amounts of polyunsaturated oils, especially hydrogenated oils, or who have impaired pancreatic function, such as diabetics, may not be able to produce EPA and will therefore lack important prostaglandins unless they consume large amounts of oily fish or take a cod liver oil supplement.

Studies indicate that the unsaturated fatty acids in cod liver oil may be toxic in large amounts so don’t overdo - 2 teaspoons a day is a good rule for adults, 3 teaspoons for pregnant and nursing mothers and 1 teaspoon for babies and children. It’s easy to take when stirred into a small amount of fresh orange juice or water. (Use an eye dropper to give it to infants.) Dr. Price always gave cod liver oil together with high-vitamin butter, extracted by centrifuge from good quality spring or fall butter. He found that cod liver oil on its own was relatively ineffective but combined with high-vitamin butter or butter oil produced excellent results. Your diet should include both cod liver oil and good quality butter from grass-fed cows.”

(Nourishing Traditions, p.618-619)

We recommend “Premier Norwegian Cod Liver Oil” from Premier Research Labs, as we believe it is the freshest cod liver oil available. It comes in an 8 ounce bottle and must be refrigerated (keeps 4-5 months once opened.) The label recommends that adults take ½ teaspoon daily - so your daily dose can be from ½ a teaspoon to 2 teaspoons. We believe that it is best to take cod liver oil in whole milk or whole yogurt - but everyone needs to figure out the best way to get it down! (Premier Research Labs also sells cod liver oil in capsules.)

“IF YOU DO NOT EAT REAL FOOD, YOU ARE NOT GOING TO BE HEALTHY. Your cells rely on proteins and fats in real food to replenish tissues within your body. Without real food you will damage your cells, accelerating the metabolic aging process that leads first to insulin resistance, then to disease and premature death.” (Ibid)

What is “real food”? Any food that is unprocessed or minimally processed. Any food which is produced by nature - for example, fruits, vegetables, whole grains; whole, not skim, dairy products; eggs, poultry, seafood and meat are
“real food”. The least tampered with food is the most “real”, i.e. raw milk, organically grown fruits and vegetables, raw honey, eggs from free range chickens, pasture-fed beef, stone pressed extra virgin olive oil, virgin coconut oil, raw nuts and seeds and so on.

SUMMARY

- “Bad” fats are man-made and damaged (oxidized) fats (trans fats)
- Avoid heat processed oils or foods made with heat processed oils
- Polyunsaturated fats in processed oils are not healthy
- Avoid all hydrogenated and partially hydrogenated oils (Crisco, margarine, so called “tub spreads”) and foods containing them
- Avoid deep-fried foods
- Heat, light and air alter the nutritional value of all oils
- Saturated fats (coconut oil and butter) are the most stable fats to use for cooking
- Keep good fats and oils refrigerated to prevent rancidity (with the exception of coconut oil and olive oil, which can be stored at room temperature, away from sunlight and artificial light)
- Cook fatty meats and fish at low, even temperatures to avoid damaging their fat (charbroiling meat damages the fat in the meat)
- Eat raw nuts and seeds and freshly ground flax and chia seed
- Eat “good” fats - virgin coconut oil, organic butter, extra virgin olive oil, cod liver oil, borage oil, black currant oil, evening primrose oil, flaxseed oil, hemp oil; the fats in wild fish; the fats in whole milk, whole yogurt, and cream from grass-fed cows; the fats in meat of grass-fed animals; the fats in leafy greens; the fat in eggs from free-range chickens, especially chickens fed flax seed!

MUST READS AND SOURCES

Books:
2) Nourishing Traditions - The Cookbook that Challenges Politically Correct Nutrition and the Diet Dictocrats, Revised second edition, Sally Fallon with
4) Eat Fat, Look Thin, Bruce Fife, N.D., Healthwise, Colorado Springs, 2002
6) The Cholesterol Myths: Exposing the Fallacy that Saturated Fats and Cholesterol Cause Heart Disease, by Uffe Ravnskov

Must See Web Sites:
www.wildernessfamilynaturals.com - coconut oil, chia seed, great products and information  Phone: (toll free) 866-936-6457
www.westonaprice.org - tons of information on diet and health
www.realmilk.com - great information on the health benefits of raw milk
www.4radiantlife.com - cod liver oil, butter oil, great products and info Phone: 888-593-8333
www.HealthEquations.com - Lynne August’s web-site
www.efn.org/~raypeat/nutri.html - well written nutritional information

Excellent newsletter:
“A Grain of Salt” - News about Good Salt, Natural Food and Other Health Related Issues” - always has cutting edge information on nutrition. Published by Happiness Press. Email - topsalt@aol.com, phone 1-800-867-7258

“Almost 10 pounds of altered fat substances are consumed each year by each person, more than twice the amount of all other food additives combined.”
Fats that Heal, Fats that Kill, p.244
How could there be toxic oils in bottled juice?
“Fresh juices have a natural, cloudy appearance. The solids in these natural juices settle out with time, and also dry on the bottle necks, forming (gasp! unsightly) rings. Brominated oils give a fresh look to old juices. They have been added to commercial fruit drinks for more than 50 years.
Brominated oils cause changes in heart tissue, thyroid enlargement, fatty liver, kidney damage, and withered testicles……..They accumulate toxic bromine in the tissues of children.” (Fats that Heal, Fats that Kill, p.114)

“Essential fatty acids are needed by each animal, humans included, for proper nutrition and health. However, the essential fatty-acid status of individuals cannot always be predicted with ease, in part because the range of levels of transfatty acids in people’s diets has complicated the situation….the minimum amount of the essential fatty acid linoleic acid thought to be required in the diet is 2-3% of calories; the minimum amount of the essential fatty acid alpha-linoleic acid currently thought to be required in the diet is approximately 0.5 - 1.5% of calories. Balance between the two fatty acids is important. Unfortunately, currently some Americans are getting up to 20% of calories as linoleic acid and almost none as alpha-linoleic acid. (“Know Your

GLOSSARY

Lipid- a general term for fat
Fat - solid at room temperature (for example, lard)
Oil - liquid at room temperature (for example, corn oil)

Structural fats - fats used as building materials within your body for structures such as cells, hormones and brain components
Body fat - the reservoir of fat found in fat cells in the form of triglycerides, to be used as insulation and energy

Dietary fats - come from animal and plant sources  (Schwarzbein p.63)

**What is a triglyceride?**
A triglyceride is composed of individual fat molecules known as fatty acids; three fatty acid molecules hooked together by a glycerol molecule form one triglyceride molecule. All dietary oils are composed of triglycerides. Our body fat is composed of triglycerides.

“The enzymes which break down proteins are inhibited by unsaturated fats, and these enzymes are needed, not only for digestion, but also for production of thyroid hormones, clot removal, immunity, and the general adaptability of cells. The risks of abnormal blood clotting, inflammation, immune deficiency, shock, aging, obesity and cancer are increased. Thyroid and progesterone are decreased. Since the unsaturated oils block protein digestion in the stomach, we can be malnourished even while ‘eating well’”.
(“Unsaturated Vegetable Oils: Toxic”, Raymond Peat, Ph.D., p.3).

Unsaturated fats block thyroid hormone secretion, its movement in the circulatory system, and the response of tissues to the hormone. When the thyroid hormone is deficient, the body is generally exposed to increased levels of estrogen. The thyroid hormone is essential for making the ‘protective hormones’ progesterone and pregnenolone, so these hormones are lowered when anything interferes with the function of the thyroid.”  (Ibid)

**Can eating refined oils harm my immune system?**
“Vegetable oil is recognized as a drug for knocking out the immune system. Vegetable oil emulsions were used to nourish cancer patients, but it was discovered that the unsaturated oils were suppressing their immune systems. The same products, in which vegetable oil is emulsified with water for intravenous injection, are now marketed specifically for the purpose of suppressing immunity in patients who have had organ transplants. Using the oils in foods has the same harmful effect on the immune system.”  Ray Peat, “Unsaturated Vegetable Oils: Toxic”

Omega 3 is highly reactive with heat and should never be heated over 120 degrees Fahrenheit!
The best way to benefit from the oil in walnuts (and all nuts and seeds) is to eat them freshly shelled and raw (roasting nuts and seeds damages their essential fatty acids).

Unhulled nuts and seeds have a long shelf life if they are kept in a cool dry place in a tightly covered glass container. Hulled nuts and seeds should be refrigerated immediately, or stored in the freezer, and used promptly, because oxidation of their fats may make them rancid.

**BRAIN**

“ It contains omega 3 and omega 6, the two essential fatty acids, in larger amounts than any other tissue in the body and contains 5 times more omega 3s than red blood cells.”