

Nutrition for Your Health

Your guide to better living

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Fried Foods

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Fried foods are a popular part of the American diet. Americans lead very fast paced lives and tend to sacrifice health for convenience and time. While these foods are simply irresistible for many, scientists consider them to be high-risk foods that can be detrimental to one's health, especially when they are not eaten in moderation as part of a well-balanced diet.

French fries are among the most commonly consumed fried food products. When potatoes are cooked in trans fat at high temperatures, all sorts of interesting and very unpleasant things occur.

Foods that are fried in vegetable oils like [canola](#), soybean, safflower, corn, and other seed and nut oils are particularly problematic. These products contain polyunsaturated fats that easily become rancid when exposed to oxygen and produce large amounts of damaging free radicals in the body. They are also very susceptible to heat-induced damage due to cooking. What is not commonly known is that these oils can cause aging, clotting, inflammation, cancer and weight gain. If you just can't ignore the hankering for some French fries, it is theoretically possible to create a more "healthy" french fry if you cook it in a healthy fat like virgin coconut oil. Coconut oil is extremely stable due to its high saturated fat content and is not damaged by the high temperatures of cooking.

Acrylamide

Fried foods contain a toxic and potentially cancer-causing chemical, **acrylamide**. Acrylamide, a chemical that is used in plastics, pesticides and sewage treatment among other things, was placed on the Proposition 65 toxic chemical list in 1990. In April 2002, the Swedish National Food Administration and researchers from Stockholm University discovered it is created in far smaller amounts when starchy foods like potatoes and bread are baked, roasted, fried or toasted. Acrylamide is present in foods that make up about

40 percent of the calories consumed in the average American diet. A high level of the chemical has been reported in deep fried foods, processed poultry products, instant malt drinks, chocolate powder and roasted coffee powder processed at temperatures 120 degree Celsius or more.

- Kazmi, A, Scientists Warn Against Fried Food, United Arab Emirates University, August 13, 2005.

Fried Food Content

Fried foods carry dangers other than those from acrylamide. These foods are often high in fat and salt content and low in fiber and calcium content. These unhealthy, processed foods contribute to the increased prevalence of obesity and chronic disease among Americans.

The frequency of consuming these products also decreases the frequency with which Americans consume whole grains, fruits and vegetables, causing a deficiency in fiber intake. High fat diets also tend to lack complex carbohydrates that are typically high in fiber. Fiber is associated with lower cholesterol levels, improved digestive function, and decreased risk of cardiovascular disease and some forms of cancer.

The high salt content in fried foods contributes to high blood pressure, strokes and kidney function problems. Additionally, some studies have shown that sodium competes with calcium. Therefore, as sodium intake increases, the urinary excretion of calcium also increases. This can contribute to an increased risk for osteoporosis and bone fractures.

Eating fried food away from home is associated with dietary patterns leading to excessive weight gain and chronic diseases. For example, drinking sugar-sweetened beverages is associated with weight gain; high consumption of trans fat is linked to heart disease; low consumption of fruits and vegetables is linked to cancer; and a high glycemic load is associated with type 2 diabetes.

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Cholesterol

For the past several decades we have been bombarded with saturated fat and cholesterol scares and claims that animal products are bad for us. Along with these scares has come the notion that a low saturated fat/low cholesterol diet and/or vegetarianism is a healthier dietary option for all people.

Before 1920 coronary heart disease was rare in America. Today heart disease causes at least 40% of all US deaths. From 1910 to 1970, animal fat in the American diet has declined from 83% to 62%, and butter consumption from 18 pounds per person per year to 4. Interestingly, dietary cholesterol intake has increased only 1%. During the same period the percentage of dietary vegetable oils in the form of margarine, shortening and refined oils increased about 400% while the consumption of sugar and processed foods increased about 60%. If, as we have been told, heart disease results from the consumption of saturated fats, one would expect to find a corresponding increase in animal fat in the American diet. Obviously, the reverse is true.¹⁰

A consideration to take in is that heart and kidney disease, cancer, obesity and osteoporosis are primarily 20th century occurrences, yet people have been eating meat and animal fat for thousands of years. The studies used to promote low saturated fat/low cholesterol diets or vegetarianism do not take into consideration other factors besides the animal foods that are at work in these diseases. These studies neglect to take into account other dietary factors such as the harmful effects of eating refined sugar, nutrient-poor "foods", trans-fats [hydrogenated fats], fried food [which causes the fat to become rancid] and vegetable oils. These are all 20th century foods and tend to get mixed in with animal fat consumption in studies promoting low saturated fat/low cholesterol and/or vegetarianism. It is also commonly believed that saturated fats and cholesterol "clog arteries". On the contrary, studies have shown that arterial plaque is primarily composed of unsaturated fats, particularly polyunsaturated ones, and not the saturated fats of animals, palm and coconut.¹ Trans-fatty acids, as opposed to saturated fats, have been shown by researchers to be causative factors in atherosclerosis, coronary heart disease, cancer and other assorted diseases.² Are these studies that

promote low saturated fats and low cholesterol diets taking into consideration these trans fats?

It is usually claimed that vegetarians [by nature the vegetarian diet can be lower in sat fat and cholesterol dependant on the type of vegetarianism] have lower cancer rates, but a 1994 study of California Seventh Day Adventists [who are largely vegetarian] showed that, while they did have lower rates of some cancers [e.g. breast], they had significantly higher rates of several others [brain, skin, uterine, and ovarian].³ The *US Multiple Risk Factor Intervention Trial*, sponsored by the National Heart and Lung Institute, compared mortality rates and eating habits of 12,000+ men. Those who at less saturated fat and cholesterol showed a slightly reduced rate of coronary heart disease [CHD], but had an overall mortality rate much higher than the other men in the study.⁴ The few studies that indicate a correlation between saturated fat reduction and a lower CHD rate also clearly document a sizeable increase in deaths from cancer, suicide, violence and brain hemorrhage.⁴ Low fat/cholesterol diets, therefore, are decidedly not healthier for people. Studies have proven over and over that such diets are associated with depression, cancer, psychological problems, fatigue, violence, and suicide.⁵

Remember about a decade ago when eggs were greatly discouraged because of their cholesterol content? This has since been detracted. Dr. Clare Hasler, Ph.D. notes that "eggs have not traditionally been regarded as a functional food, primarily due to *concerns* about their adverse effects on serum cholesterol levels." However, "it is now known that *there is little if any connection* between dietary cholesterol and blood cholesterol levels ... " she states. In addition, Dr. Hasler notes that " ... eggs are an excellent dietary source of many essential (e.g., protein, choline) and non-essential (e.g., lutein/zeaxanthin) components which may promote optimal health." Researchers also note that dietary cholesterol was not related to serum cholesterol concentration. People who reported eating 4 eggs a week had a significantly *lower* mean serum cholesterol concentration than those who reported eating 1 egg a week. The authors conclude that eggs make " ... important nutritional contributions to the American diet." ¹²

What about low cholesterol? In an upper level athlete who came into our office with complaints of chronic knee pain/injuries, and amenorrhea among other symptoms. Amenorrhea in female athletes is commonly considered "normal". Don't get us started on that! This athlete's body was just not healing and repairing after workouts even though she was taking in massive amounts of protein in the form of

protein shakes, bars and low fat meats to build muscle and get a leaner appearance. She had also greatly reduced her fat intake. The logic seems right according to popular nutritional theories but 'why' wasn't her body healing and repairing? She was doing what many athletes do and some take it to extremes.

We did bloodwork and found she had some significant gastrointestinal issues. In the case of this athlete no matter how much protein she was taking in, she was not getting the full benefits because she wasn't digesting properly. It's not only that she wasn't digesting the protein; she also wasn't getting adequate amounts of vitamins, minerals and essential fats. Low calorie diets typically aren't nutritionally sound diets. She also had a **LOW cholesterol [119 mg/dl]**, mildly low thyroid, and mild anemia. This is bad...especially for an athlete who needs optimal health for optimal performance. Cholesterol is vitally important in nerve function, healing and repair of bodily cells and hormone synthesis and regulation, which were this athlete's primary presenting symptoms.

We put her on a supplement program and dietary guidelines based upon her objective test results. Within a few months, she was healing much more quickly after workouts [decrease muscle aches and pains] and was less injury prone. Her cholesterol was up to 135 and within a year menstruation returned. There are many other factors in this case, but the point is that cholesterol is very important and was the missing link in this athlete's optimal health. Many female athletes have eating disorders. In fact, this athlete later admitted to having food issues. With the testing, we were able to show this athlete what she was doing to her body and that all fat was not bad.

In conclusion, our purpose in this newsletter is to dispel the notion that low saturated fat/cholesterol diets aren't for everyone and aren't the saviors they have been portrayed to be. Low cholesterol can even be worse than high cholesterol. Cholesterol is necessary for many bodily functions as described previously. Meat-eaters tend to have certain disease that vegetarians don't have. On the contrary, vegetarians have certain diseases that meat-eaters don't have. What we do encourage is to have balance on both sides. For the meat-eaters, encourage the incorporation of cleaner versions of the animal products consumed [i.e. organic, free-range, no animal by-products in the feed, no antibiotics, hormones, steroids, etc]. Also [highly] encouraged is to eat more vegetables/fruits and increase the variety of vegetables consumed and of course, decrease fried food consumption. Our observation is that many of the anti-

cholesterol/saturated fat studies are skewed because the participants just don't eat enough vegetables and fruits. For the vegetarians, it would be prudent to consume some animal products such as eggs and fish [again in their purest forms].

Neither side can claim to be "healthier" than the other. Both have benefits and limitations. The main thing is balance between the two and getting back to eating foods in their most natural state.

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