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# Good Fat and Bad Fat for Healthy Body

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**Abstract**

Fats are the important constituent of our diet. Along with carbohydrates and proteins fats also contribute to a significant amount for proper functioning of body. When it comes to dietary fat, what matters most is the type of fat you eat. Contrary to past dietary advice promoting low-fat diets, newer research shows that healthy fats are necessary and beneficial for health. Decades of dietary recommendations have focused on balancing calorie intake and energy expenditure and decreasing fat. Reducing saturated fat has been a cornerstone of dietary recommendations for cardiovascular disease (CVD) risk reduction. However, evidence from observational studies and randomized clinical trials demonstrates that replacing saturated fat with carbohydrates, specifically refined, has no benefit on CVD risk, while substituting polyunsaturated fats for either saturated fat or carbohydrate reduces risk. A significant body of research supports the unique health benefits of dietary patterns and foods that contain plant and marine sources of unsaturated fats. Yet, after decades of focus on low-fat diets, many consumers, food manufacturers, and restaurateurs remain confused about the role of dietary fats on disease risk and sources of healthy fats. Shifting dietary recommendations to focus on food-based dietary patterns would facilitate translation to the public and potentially remedy widespread misperceptions about what constitutes a healthful dietary pattern.

**Introduction**

Fat is an essential part of our diet and is important for good health. There are different types of fats, with some fats being healthier than others. To help make sure you stay healthy, it is important to eat unsaturated fats in small amounts as part of a balanced diet. When eaten in large amounts, all fats, including healthy fats, can contribute to weight gain. Fat is higher in energy (kilojoules) than any other nutrient and so eating less fat overall is likely to help with weight loss. Eating less saturated and trans fats may help lower your risk of heart

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disease. When buying products check the labels and choose the varieties that are lower in saturated and trans fats and higher in poly and monounsaturated fats.

Fats are classified in a range of ways, depending on their attributes:

1. Fats or fatty acids: These terms can refer to any type of fat, but "fats" usually describes those that are solid at room temperature.
2. Lipids: This can refer to any type, regardless of whether it is liquid or solid.
3. Oils: This can describe any fat that is liquid at room temperature.
4. Animal fats: Among these are butter, cream, and fats in meats, such as lard.
5. Vegetable fats: Among these are the fats in olives and avocados, as well as olive, peanut, flaxseed, and corn oils.

When food manufacturers reduce fat, they often replace it with carbohydrates from sugar, refined grains, or other starches. Our bodies digest these refined carbohydrates and starches very quickly, affecting blood sugar and insulin levels and possibly resulting in weight gain and disease. Rather than adopting a low-fat diet, it's more important to focus on eating beneficial "good" fats and avoiding harmful "bad" fats. Fat is an important part of a healthy diet. We should choose foods with "good" unsaturated fats, limit foods high in saturated fat, and avoid "bad" trans-fat.


"Good" unsaturated fats — Monounsaturated and polyunsaturated fats — lower disease risk. Foods high in good fats include vegetable oils (such as olive, canola, sunflower, soy, and corn), nuts, seeds, and fish.

"Bad" fats — trans fats — increase disease risk, even when eaten in small quantities. Foods containing trans fats are primarily in processed foods made with trans-fat from partially hydrogenated oil. Fortunately, trans fats have been eliminated from many of these foods.

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Saturated fats, while not as harmful as trans fats, by comparison with unsaturated fats negatively impact health and are best consumed in moderation. Foods containing large amounts of saturated fat include red meat, butter, cheese, and ice cream. Some plant-based fats like coconut oil and palm oil are also rich in saturated fat.So, a diet that is low in saturated fats and trans fats, but that also includes moderate amounts of unsaturated fats will help you stay healthy.

**Unsaturated fats**

Unsaturated fats are an important part of a healthy diet. These fats help reduce the risk of heart disease and lower cholesterol levels (among other health benefits) when they replace saturated fats in the diet. There are two main types of unsaturated fats:

1. Polyunsaturated fats: The two types are Omega-3 fats and Omega 6 fats. Omega-3 fats which are found in fish, especially oily fish while omega-6 fats which are found in some oils such as safflower and soybean oil, along with some nuts, including Brazil nuts.
2. Monounsaturated fats:These are found in olive and canola oil, avocados and some nuts, such as cashews and almonds.

**Trans fats**

Trans fats are unsaturated fats that have been processed and as a result, behave like saturated fats. Eating trans fats increases the levels of 'bad' cholesterol and decreases the levels of 'good' cholesterol in the body which is a major risk factor for heart disease. It is important to lower the amounts of trans fats you eat to help you stay healthy. Trans fats are found in many packaged foods and also in butter and some margarines. Use food labels to compare foods and choose those with fewer trans fats.It is great for health to replace saturated and trans fats with mono and polyunsaturated fats.

**Cholesterol:**

Cholesterol is a type of fat found in food, but also in our blood. Cholesterol has many important functions in the body but having high levels of the wrong type of cholesterol in the blood increases heart disease risk. It was once thought that eating too many cholesterol-containing foods (such as eggs) was the major dietary cause of high blood cholesterol level. But we now know that eating too many foods containing higher amounts of saturated and trans fats is a bigger problem and has a much greater influence on blood cholesterol levels.

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**Health implication of healthy fat Inclusion**

Synergism and interactions between different components of foods together with the degree of processing and preparation or cooking methods lead to a "food matrix" effect which is not captured by considering single nutrients. Different types of food that are high in saturated fats are likely to have different effects on health. For example, dairy products and processed meats, both high in saturated fats, are differentially associated with many health outcomes in prospective epidemiological studies, often in opposite directions. One explanation for this divergence is that despite their similar fat content, other components of these two food groups are associated with different health effects. For example, dairy products contain minerals such as calcium and magnesium and have probiotic features if fermented, whereas processed red meat has a high salt and preservative content.


Higher intakes of total fat and saturated, monounsaturated, and polyunsaturated fatty acids individually were associated with lower totalmortality but not with cardiovascular disease mortality or incidence, except for inverse associations of saturated fatty acids with the incidence of stroke.

**Role of omega 6 and omega 3 polyunsaturated fatty acids in health**

Both omega 6 and omega 3 are essential fatty acids and are intrinsic to cell membranes and the structure of the central nervous system. They are precursors of eicosanoids, which are involved in inflammation, cardiac rhythm, thrombosis, vascular function, and many other processes. Evidence suggests, but is inconsistent, that adequate intake of omega 3 fatty acids reduces cardiac arrhythmias and sudden cardiac death. Concerns have been raised that omega 6 polyunsaturated fats are pro-inflammatory but this is not supported by controlled feeding studies and large cross-sectional observations.In a follow-up study of over 128 000 men and women for up to 32 years, higher intake of linoleic

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acid (the most abundant omega 6 fatty acid) was associated with lower risks of coronary heart disease, cancer, and total mortality. The inverse association between linoleic acid intake and risk of cardiovascular disease and overall death is approximately linear. Notably, linoleic acid levels in blood, a direct marker of dietary intake, were inversely associated, with the incidence of type 2 diabetes in prospective studies but arachidonic acid was not. In contrast, blood omega 3 polyunsaturated fatty acids were modestly inversely associated with coronary heart disease but the association with type 2 diabetes varied by subtype: plant origin omega 3 fatty acid (alpha linolenic acid) was inversely associated while marine origin omega 3 fatty acids were not.

**Use of plant oils to replace saturated fatty acids**

With the exception of the cardiovascular benefit of extra virgin olive oil (comprised predominantly of oleic acid, a monounsaturated fat), which has been used for thousands of years in Mediterranean countries, most of the literature on the effects of plant oils on the risk of cardiovascular disease and other outcomes has examined intakes of specific fatty acids. These oils contain a combination of saturated, monounsaturated, and omega 6 and omega 3 fatty acids but the proportions vary greatly. Plant oils also contain other minor constituents, including polyphenols and antioxidants, which may influence the effect of oil consumption on disease risk. A reduction in cardiovascular mortality was observed in the older randomized trials that used plant oils containing both omega 6 and omega 3 fatty acids to replace saturated fat. Recent publications from the Sydney Diet Heart Study and the Minnesota Coronary Trial raise questions about very high intakes of plant oils containing only omega 6 fatty acids Evidence also exists that rapeseed (canola) oil reduces the risk of coronary heart disease: most notably, rapeseed oil was the primary intervention in the Lyon Heart Study of secondary prevention of coronary heart disease, which reduced recurrent cardiovascular disease or death by about 70%.Other specific types of oil, including corn, sunflower, coconut oil, and palm oils, have not been well studied. Although a recent report suggests that coconut oil compared with butter results in a more favorable lipid profile (lower LDL, higher HDL cholesterol), and compared with olive oil was equivalent in lipid effects, further research is needed in large long-term trials and current recommendations on caution about use should be upheld. Some plant oils, including corn and sunflower oil, have little omega 3 content. If these are the primary oils consumed and intake of omega 3 fatty acids from fish and other

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sources is low, this could result in inadequate intake of these essential fatty acids with possible adverse effects on cardiovascular disease and other outcomes. In summary, evidence exists of the long-term safety and benefit of many of the commonly consumed unsaturated plant oils. Further research is needed to define more precisely the long-term effects and optimal intakes of specific fatty acids and plant oils, and their interactions with genetic and other dietary factors, including the amount and type of carbohydrate intake.

**Conclusion**

Since due to change in dietary eating practices, the onset of diseases among population is increasing day by day. It becomes very important to look for what to eat, how to eat and what quantity should be consumed. Fats are a major constituent of human diet and are consumed without checking the empty calories it is providing. Eating good quantity fat is therefore very important to balance the health and the ageing process of the human body. Carefully selecting what fat should be included in diet is highly recommended as it also affect other functions of the body.