## **Dietary Fat**

Fat provides flavor and texture to our food as well as a sense of fullness. It is essential for proper growth, brain function and the absorption of the fat-soluble vitamins A, D, E & K. Too much of the wrong type of fat, however, can lead to high cholesterol and heart disease. Fat contains 9 calories per gram. Therefore, foods high in fat tend to be high in calories which means we may need to pay more attention to the portion sizes of these foods.

#### Types of Fat in Foods

- Saturated
- Unsaturated
  - · Mono-unsaturated
  - · Poly-unsaturated.

#### ·Trans-fat

All foods that contain fat contain a mixture of saturated and unsaturated fats. The type of fat that is highest determines whether a fat is referred to as saturated, monounsaturated, or polyunsaturated.

Type of Fat	Food Sources	Type of Fat	Food Sources
Monounsaturated Fats Generally liquid at room	Olive oil, olives, canola oil, nuts, nut oils, avocado, "high-oleic"	Saturated Fats solid at room temperature (think	Beef, pork, chicken, turkey, milk, cream, cheese, butter, egg yolk, ice cream
temperature (think olive oil)	safflower or sunflower oil	butter) usually from animal sources but can include some plant sources	Palm oil <b>Coconut oil/milk</b> * Shortening
Polyunsaturated Fats	Omega-3 Fish, Shellfish,	Trans Fats (Avoid)	Hydrogenated oils, stick margarines, most
Generally liquid at room temperature	flaxseed, walnuts		commercially baked goods including doughnuts,
**Aim for more omega-3 and less omega-6	Omega -6 corn oil, sunflower oil, cottonseed oil, grapeseed oil		cookies, crackers, french fries etc.

\*Some research suggests virgin coconut oil may be better for you than other saturated fats.

### Fats: Some Common Myths

Fats, perhaps more than any other part of the average diet, cause much interest and confusion. Everyone has an opinion on fats—how much to eat, what kind to eat, etc. Here are some of the most common myths about fats.

#### Myth #1: Eating dietary fat makes you fat.

Dietary fat does contain more calories per gram (9 calories/gram) than either carbohydrate or protein (4 calories/gram). However, excess intake of calories from any food group will lead to weight gain, if more is eaten than is utilized via physical activity. Studies show that eating a higher percentage of calories from fat does not affect weight loss.

#### Myth #2: Limit your fat for optimal health.

Fat is very important to physical health. It is necessary for the absorption of certain vitamins, including vitamins A, D, E, and K. Fatty acid deficiencies result in:

- Growth retardation
- Reproductive failure
- Skin lesions
- Kidney and liver disorders
- Subtle neurological and vision problems
- Chronic intestinal diseases (possibly)

Eating a diet high in healthier fats such as the Mediterranean diet has been shown to have significant health benefits.

#### Myth #3: Choosing a low-fat or fat-free food is always best.

Food manufacturers need to add additional ingredients to a low-fat or fat-free food to make up for the loss of palatability attributable to fat. The added ingredient is usually sugar, a naturally fat-free food. Fat also imparts many sensory qualities to food, such as smoothness, and chemicals or additives often are added to low-fat or fat-free foods to impart similar qualities to the food. Fat has a great deal to do with satiety; so, a person eating a diet that is extremely low in fat is unlikely to feel satisfied for very long after eating.

#### Myth #4: All fats are equal.

Omega-3 fatty acids definitely reduce the risk of death from sudden heart attack. Other research has shown that omega-3 fatty acids possibly may lead to prevention and/or improvement of chronic diseases. Omega-3 fatty acids also are required for normal conception, growth, and development of an embryo.

Omega-3 fatty acids are found in:

Salmon	Herring
Anchovies	Tuna
Flaxseed	Canola oil
Hemp oil	Avocado
Walnuts	

#### Myth #5: Any food that is high in fat is also high in cholesterol.

Many high-fat foods are sometimes still low in cholesterol. Cholesterol is a waxy, fatlike substance that is only found in animal foods. For instance, vegetable oil contains fat, but not cholesterol. It is important to remember that cholesterol from food does not increase blood cholesterol as much as saturated fat does.

Adapted from Harvard Nutrition Source <u>http://www.hsph.harvard.edu/nutritionsource/fats-full-</u> story/#references

### It's Time to End the Low-Fat Myth

"Eat a low-fat, low-cholesterol diet" was the mantra for healthful eating for decades. Touted as a way to lose weight and prevent or control heart disease and other chronic conditions, millions of people have followed (or, more likely, tried to follow) this advice. Seeing a tremendous marketing opportunity, food companies re-engineered thousands of foods to be lower in fat or fat free, often increasing the salt, sugar, or refined grains in these foods to make up for lost flavor and texture.

Well it's time to end the low-fat myth. The low-fat approach to eating may have made a difference for the occasional individual, but as a nation it hasn't helped us control weight or become healthier. In the 1960s, fats and oils supplied Americans with about 45 percent of calories; (1) about 13 percent of adults were obese and under 1 percent had type 2 diabetes, a serious weight-related condition. (2,3) Today, Americans take in less fat, getting about 33 percent of calories from fats and oils; (4) yet 34 percent of adults are obese and 11 percent have diabetes, most with type 2 diabetes. (5,6)

Why hasn't cutting fat from the diet paid off as expected? Detailed research—much of it done at Harvard—shows that the total amount of fat in the diet isn't really linked with weight or disease. What really matters is the type of fat and the total calories in the diet. (7-15) Bad fats, meaning trans and saturated fats, increase the risk for certain diseases. Good fats, meaning monounsaturated and polyunsaturated fats, do just the opposite. They are good for the heart and most other parts of the body.

One problem with a generic lower fat diet is that it prompts most people to stop eating fats that are good for the heart along with those that are bad for it. Another problem is that when people cut back on fat, they often switch to foods full of easily digested carbohydrates—white bread, white rice, potatoes, sugary drinks, and the like—or to fat-free products that replace healthful fats with sugar and refined carbohydrates. The body digests these carbohydrates very quickly, causing blood sugar and insulin levels to spike. Over time, eating lots of "fast carbs" can raise the risk of heart disease and diabetes as much as—or more than—eating too much saturated fat. (16-18) That's why it's important to replace foods high in bad fats with foods high in good fats—not with refined carbohydrates.

What about cholesterol in food? For most people, the mix of fats in the diet influences cholesterol in the bloodstream far more than cholesterol in food does.

#### Dietary Fats and Heart Disease: Healthy Fats in Healthy Diets, Not Low Fat



For years, the party line from the American Heart Association, National Institutes of Health, World Health Organization, and others was to reduce dietary fat. They generally called for

limiting fat intake to under 30 percent of daily calories. There wasn't much evidence to support the notion of low-fat diets in the beginning. (38) There is even less now. Numerous reports over the years have questioned the wisdom of recommending low-fat diets for preventing or retarding heart disease. A big nail in the coffin came from the Women's Health Initiative Dietary Modification Trial, published in the February 8, 2006, *Journal of the American Medical Association*. (9) This eight-year trial, which included almost 49,000 women, found virtually identical rates of heart attack, stroke, and other forms of cardiovascular disease in women who followed a low-fat diet and in those women who didn't. What's more, women on the low-fat diet didn't lose—or gain—any more weight than women who followed their usual diets. (8)

This randomized trial supports prior findings from the Nurses' Health Study (<u>36</u>) and the Health Professionals Follow-up Study. (<u>39</u>) In both of these, no link was seen between the overall percentage of calories from fat and any important health outcome, including cancer, heart disease, and weight gain. What was important in these studies was the type of fat in the diet. (<u>40</u>)

As research grows on diet and heart disease, it's becoming clearer that looking at a single nutrient in isolation cannot tell us the whole story about a person's heart disease risk. People eat foods, not nutrients, and they eat them in an overall dietary pattern. The so-called "Western" diet pattern—high in red meat and processed meat, refined grains, potatoes, and sugary drinks, and low in fruits, vegetables, whole grains, and healthy fats—is associated with higher risk of heart disease. The traditional Mediterranean Diet pattern, in contrast, appears to lower the risk of heart disease, stroke, and metabolic syndrome, a constellation of factors that increases the chances of developing heart disease and diabetes. (<u>11,41,42</u>)

The Mediterranean-style diet is high in fat, but most of that fat comes from olive oil or plant sources, such as nuts and seeds, and saturated fat intakes are low. Mediterranean-style diets are also characterized by bountiful intakes of vegetables, fruits, beans, nuts, and whole grains, as well as some cheese and yogurt. So if you are concerned about heart health, pay attention to your overall diet, not just to the type of fat. (Check out two clear guides to choosing a healthy diet, from the Dept. of Nutrition at Harvard School of Public Health: the <u>Healthy Eating Pyramid</u> and the <u>Healthy Eating Plate</u>.)

#### **Dietary Fats and Cancer**

Researchers once suspected an association between dietary fat and certain cancers. Here again, in adults, the percentage of calories from total fat consumed appears to have no important relation to cancer risk, and no clear evidence has linked any specific type of fat with cancer incidence.

#### **Dietary Fats and Obesity**

It is a common belief that the more fat you eat, the more weight and body fat you gain. This belief has been bolstered by much of the nutrition advice given to people over the past few decades, which has focused on lowering total fat intake while increasing carbohydrate intake. But the notion that food fat equals body fat isn't completely true, and the advice has been misguided. For example, while Americans have gradually decreased the proportion of calories they get from fat over the past few decades, rates of obesity have increased steeply.

Over the short term, following a low-fat diet can lead to a small weight loss. But so does following a high-fat, low-carbohydrate diet. Or a high-protein, low-carbohydrate diet. Actually, almost any diet that helps you take in fewer calories works over the short term. In other words, for most people low-fat diets offer no apparent advantages over diets with fat levels close to the national average. This was demonstrated in the Women's Health Initiative Dietary Modification Trial. Women in this trial who were assigned to a low-fat diet in the long run did not lose, or gain, more weight than women eating a "usual" diet. ( $\underline{8}$ ) More recently, a two-year head-to-head trial comparing different weight loss strategies found that low-carb, low-fat, and Mediterranean-style diets worked equally well, and that there was no speed

advantage for one diet over another. (<u>12</u>) In another trial, a Mediterranean diet was superior to a low-fat diet. (<u>62</u>)

Just as overall diet quality is important for preventing heart disease, diet quality seems to be an important factor in weight gain. A recent study from the Harvard School of Public Health tracked the diet and lifestyle habits of 120,000 men and women for up to 20 years, looking at how small changes contributed to weight gain over time. (14) People who ate more nuts, a high-fat food that was traditionally taboo for dieters, gained less weight over the course of the study—about a half pound less every four years. People who ate more vegetables, whole grains, and fruits also gained less weight. In contrast, people who ate more red and processed meat over the course of the study gained more weight—about a pound extra every four years. So did people who ate more French fries, potatoes and potato chips, sugary drinks, and refined grains—gaining an extra 3.4, 1.3, 1.0, and 0.6 pounds every four years, respectively. Of course, the calories from nuts, whole grains, fruits, and vegetables don't disappear. What's likely happening is that when people increase their intake of these foods, they cut back on calories from other foods.

Although more research is needed, a prudent recommendation for losing weight or maintaining a healthy weight is to choose an overall healthy diet, such as one described by the <u>Healthy Eating</u> <u>Pyramid</u> and the <u>Healthy Eating Plate</u>, and be mindful of the amount of food you eat in relation to the amount of calories you burn in a day. A moderate intake of fats, with an emphasis on healthful unsaturated fats, fits in fine with a weight-loss or weight-maintaining diet.

### The Bottom Line: Recommendations for Fat Intake

Although the different types of fat have a varied—and admittedly confusing—effect on health and disease, the basic message is simple: Out with the bad, in with the good. You can do this by choosing foods with healthy fats, limiting foods that are high in saturated fat, and avoiding trans fat. Here's how to make it happen:

- Eliminate trans fats from partially hydrogenated oils. Food labels should say "0" (zero) on the line for trans fat; also scan the ingredient list to make sure it does not contain partially hydrogenated oils (food labeling laws allow food makers to have up to 0.5 grams of trans fat in a product but still list "0" on the line for trans fats). Fortunately, most food manufacturers have removed trans fats from their products. In restaurants, steer clear of fried foods, biscuits, and other baked goods, unless you know that the restaurant has eliminated trans fat (many already have).
- Limit your intake of saturated fats by cutting back on red meat and full-fat dairy foods. Try replacing red meat with beans, nuts, poultry, and fish whenever possible, consider eating smaller amounts of full-fat dairy products, such as cheese and whole milk. Don't replace red meat with refined carbohydrates (white bread, white rice, potatoes, and the like).
- In place of butter, use liquid vegetable oils rich in monounsaturated fats or omega-3 fat, in cooking and at the table. Olive oil, canola oil, hemp oil and avocado oil are sources of healthy fats.
- Eat one or more good sources of omega-3 fats every day. Fish, walnuts, canola oil, ground flax seeds or flaxseed oil, chia seeds are excellent sources of omega-3 fats.



Avocado is a great source of healthy mono-unsaturated fats

## <u>Homework</u>

## <u>Tracking</u>

□ Meditation practice days this week
□ Journal 3 pages mornings this week
□ Specific action related to support system:
<u> </u>
□ Relaxation practice days this week
□
□

## <u>Notes</u>

# Progress Reflection: Live-It Week 12

- 1) New healthy behaviors or insights (Aha! moments) over last 3 months:
  - a.
  - b.
  - c.
  - d.
- 2) Healthy habits to keep up:
  - a.
  - b.
  - \_
  - C.
  - d.
  - e.
- 3) Current challenges:
  - a.
  - b.
  - C.
  - d.
  - e.
- 4) Where do I want to focus right now?
  - a.
  - b.
  - C.
  - d.
  - e.

# Homework: Daily Stressors

Each day we experience many different situations that we perceive as stressful. Examples may include traffic, social commitments, or work load. Sometimes we are not be aware of just how many things we are reacting to each day.

Pick a typical day and keep track of all of your stressors.

7am and earlier
8am
Asm
9am
10am
11am
Noon
1pm
2pm
0.000
3pm
4pm
5pm
Evening