Fat Facts

How much dietary fat is recommended?

Fat-free, low-fat, light, extra lean ... From ground beef to sweets, products are labeled with an overwhelming amount of claims. But how low should one go? The World Health Organization recommends 15%-30% of total daily calories should come from fat.

**Different Types of Fat**

1. Saturated Fat
   - Typically solid at room temperature and often found in animal products. It is the main culprit in raising blood cholesterol and increasing the risk of coronary artery disease. Saturated fat tends to raise LDL cholesterol.
   - Foods high in saturated fat include red meats and most full fat dairy products, as well as coconut and palm oils.

2. Trans Fat
   - Produced by hydrogenating (whipping) oils into a solid. This is done to stabilize the fat and extend its shelf life. Trans fat appears to increase LDL cholesterol, and decreases HDL cholesterol potentially making it more harmful than saturated fat. This fat is typically found in processed foods, fast foods, and margarines. Trans fat does occur naturally in some foods, but generally in small amounts. Foods containing trans fat can be identified by locating the word “hydrogenated” on the ingredient list. Legislation requires food manufacturers to list trans fatty acids on food labels.

3. Polyunsaturated Fat
   - Usually liquid at room temperature. This type of fat will decrease LDL cholesterol as well as decrease HDL cholesterol. Manufacturers are not required to list polyunsaturated fat on food labels. Found in corn oil, soy beans, and sunflower oil.

4. Monounsaturated Fat
   - Lowers LDL cholesterol. Monounsaturated fats are found in plant foods such as: canola oil, olive oil, sesame seeds, almonds, walnuts, peanuts, pecans, peanut butter, avocados, black olives, and green olives. Manufacturers are not required to list monounsaturated fat on food labels.

**Functions of Fat**

One may be surprised to learn fat isn’t the evil some claim it to be. In fact, humans can’t live without it! It is a necessary nutrient that provides many functions in the body. Some of these functions include:

- Transporting fat soluble vitamins
- Providing essential fatty acids
- Supplying energy
- Protecting body organs
- Providing satiety value (satisfied with no desire to eat)

**Fat dictionary**

There is a myriad of fat-related terms used in the popular media. The following is a partial list of definitions to help sort through these words:

1. Lipid
   - Refers to fat, cholesterol, and other fat-like substances; lipids do not dissolve in water

2. Fat
   - One of the main nutrients in foods that supply energy; can be stored in virtually unlimited amounts in the body

3. Dietary Cholesterol
   - A waxy, fat-like substance found only in foods of animal origin

4. Serum (Blood) Cholesterol
   - Cholesterol that flows in the blood stream; the body manufactures most of its own cholesterol

5. HDL Cholesterol
   - High-density lipoprotein ("good" cholesterol); carries cholesterol away from body tissues for excretion
6. LDL Cholesterol
   • Low-density lipoprotein ("bad" cholesterol); carries cholesterol to body tissues and can form deposits on arterial and blood vessel walls

7. Triglycerides
   • Common form of fat, found in both the body and in foods; most body fat is stored in the form of triglycerides

**Cholesterol Screening**
OU students, faculty, staff, and dependents can have their cholesterol checked at OU Health Services. A health care provider’s order is necessary. It is recommended to observe an 8-12 hour fast (no food or drink other than water) prior to testing. Test results include total cholesterol as well as HDL, LDL, and triglyceride values.

**Desired ranges are:**
- Total Cholesterol <200 mg/dl
- HDL* >35 mg/dl
- LDL <99 mg/dl
- Triglyceride <200 mg/dl
- Ratio: Males~ <5
- Ratio: Females~ <4.4

*HDL levels can be increased by participation in regular exercise, reduction of body fat composition (if above normal for age), and smoking cessation.

**Tips for improving fat intake**
- Identify types and sources of fat in food production
- Limit meat intake to a maximum of 6 ounces per day (loin and round cuts are generally lower in fat than prime and rib cuts). Trim visible fat.
- Eat at least 5 fruits and vegetables daily
- Choose whole grain, low-fat breads and cereals, such as: pasta, crackers, and oatmeal; limit high fat breads such as: muffins, croissants, donuts, and pancakes
- Choose low-fat or fat-free dairy products (calcium content is not decreased in reduced fat dairy products)
- Consume fats and oils sparingly
- Read and understand the Nutrition Facts on food labels

**References**
- American Dietetic Association (ADA)
- World Health Organization