Historically, as scientists learned about fats, low-fat and fat-free diets were popular, but this is contrary to what is now known about the role of fat in the body. It is now understood that the type of fat eaten from various food sources has more of an impact on health; that is, the difference in health effects between “good,” beneficial fats and “bad,” harmful fats (Harvard T.H. Chan School of Public Health 2019). Rather than reducing overall fat intake to a low-fat diet, one should instead focus on choosing more of the beneficial unsaturated fats and limiting the harmful saturated fat.

**SATURATED FAT**

Saturated fat is an unhealthy dietary fat because it has been linked to heart disease and other health problems. Too much saturated fat in the diet raises LDL cholesterol, which can lead to a buildup of cholesterol in arteries, increasing the risk for heart disease and stroke (American Heart Association n.d.). It is most often solid at room temperature and found in higher amounts in animal products, tropical oils, and fully hydrogenated oils.

Fully hydrogenated oils (FHOs) are created from vegetable oils that have been chemically modified to make them a solid fat. The process, called hydrogenation, adds hydrogen and changes the oil from an unsaturated fat to a saturated fat. Food products with FHOs are more shelf stable; however, in excess, this type of fat is detrimental to the health of the consumer (Center for Food Safety and Applied Nutrition [CFSAN] 2018a).

**FOOD SOURCES**

Fully hydrogenated oils; fatty beef, lamb, and pork; poultry with skin; lard, shortening, and margarine; whole or
roasted, or broiled. Opt for a few meatless meals each week.

- In baking, substitute applesauce, prune puree, or pureed beans for the fat. Substitute half or all the fat, but note the texture of the baked product will be different. Consider experimenting with different ratios of substitutions.

- Read nutrition labels to determine how much and what kind of fats are in food products. Also look for added ingredients in lower-fat products. Food manufacturers often add sugar and sodium when reducing fat in products.

OTHER THINGS TO KNOW ABOUT HYDROGENATED OILS

Trans fats, found in human-made partially hydrogenated oils (PHOs), are known to increase the risk of heart disease by increasing LDL cholesterol and decreasing HDL cholesterol levels; therefore, the goal is to consume as little trans fat as possible (CFSAN 2018a). As a result, food manufacturers are no longer permitted to add PHOs to food, preventing thousands of heart attacks and deaths each year (CFSAN 2018b). While there are some naturally occurring trans fats, though very minimal in the diet, PHOs had been the main source of trans fats in the diet for many years.

Since FHOs are saturated fats and do not supply trans fats like PHOs do, their use is permitted; however, they are harmful to heart health in excess. While making the switch from PHOs to FHOs in our food supply is safer, limiting saturated fats and instead choosing unsaturated fats is still the best option.

THE HEART-HEALTHY FATS

There are two types of heart-healthy fats: monounsaturated fats and polyunsaturated fats. These two unsaturated fats can improve cholesterol, decrease inflammation, stabilize heart rhythms, and play a role in other body functions. Unsaturated fats are liquid at room temperature and primarily found in plant foods, including nuts, seeds, avocados, olives, and oils (Harvard T.H. Chan School of Public Health 2018). Fish are also a source of unsaturated fats. Most foods contain a combination of different types of fats.

Even though the unsaturated fats are heart-healthy fats, they still contain 9 calories per gram, so serving sizes of healthy fats must be considered to stay within the daily recommended intake and not exceed daily calorie needs.
**MONOUNSATURATED FAT**

Monounsaturated fats can lower the risk of heart disease and stroke by reducing LDL cholesterol levels. It is recommended that, while still staying within the recommended intake range, more mono- and polyunsaturated fats are consumed in place of saturated fats (U.S. National Library of Medicine 2020a).

**FOOD SOURCES**

Monounsaturated fat sources include nontropical-plant-based oils, such as olive, canola, peanut, safflower, and sesame oils, as well as avocados, nuts, and seeds. These oils are usually liquid at room temperature but will start to solidify in cooler, refrigerated temperatures.

**DIETARY CHANGES**

- Eat nuts instead of cookies or chips for a snack. Be aware of portion size, as nuts are high in calories. The recommended serving size of nuts is 1 ounce. For example, an ounce of almonds is about 23 almonds.
- Use canola or olive oil instead of butter and other solid fats. See the figure on the following page for oils high in monounsaturated fat.
- To substitute a heart-healthier oil for shortening or butter in recipes, use the following conversion:

<table>
<thead>
<tr>
<th>BUTTER/MARGARINE/SHORTENING</th>
<th>OIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 teaspoon</td>
<td>3/4 teaspoon</td>
</tr>
<tr>
<td>1 Tablespoon</td>
<td>2 1/4 teaspoons</td>
</tr>
<tr>
<td>1/4 cup</td>
<td>3 Tablespoons</td>
</tr>
<tr>
<td>1/3 cup</td>
<td>1/4 cup</td>
</tr>
<tr>
<td>1/2 cup</td>
<td>1/4 cup + 2 Tablespoons</td>
</tr>
<tr>
<td>2/3 cup</td>
<td>1/2 cup</td>
</tr>
<tr>
<td>3/4 cup</td>
<td>1/2 cup + 1 Tablespoon</td>
</tr>
<tr>
<td>1 cup</td>
<td>3/4 cup</td>
</tr>
</tbody>
</table>

**POLYUNSATURATED FAT**

Polyunsaturated fats can help reduce LDL cholesterol levels, which in turn can lower the risk of heart disease and stroke. They provide important nutrients that allow the body to run efficiently and properly. Oils rich in polyunsaturated fats also contribute vitamin E to the diet, which acts as an antioxidant, helps with blood flow, and repairs body tissues.

Polyunsaturated fats include omega-3 and omega-6 fats. These essential fatty acids are needed for brain function and cell growth. The body does not make essential fatty acids, so they can only come from food or supplements. Omega-3 fatty acids are good for the heart by reducing triglycerides, regulating heart rhythm, slowing the buildup of plaque in arteries, and slightly lowering blood pressure. Omega-6 fatty acids help control blood sugar, reduce the risk of diabetes, and lower blood pressure (U.S. National Library of Medicine 2020b).

**FOOD SOURCES**

Vegetable oils, such as safflower, corn, soybean, and sunflower oils; nuts, seeds, tofu, and soybeans; and fish, including salmon, mackerel, herring, albacore tuna, and trout, are good sources of polyunsaturated fats, as is canola oil, though it is higher in monounsaturated fat.

**DIETARY CHANGES**

- Eat fish at least twice a week in place of red meat.
- Incorporate nuts and seeds in meals and snacks.
- Use oils high in polyunsaturated fats instead of butter or margarine. See the figure on the next page for a breakdown of oils high in polyunsaturated fats.
**Zesty Mixed Nuts**

**8 SERVINGS | SERVING SIZE: \(\frac{1}{4}\) CUP**

**PREP TIME: 10 MINUTES**

**COOK TIME: 20 MINUTES**

**INGREDIENTS**

- Nonstick cooking spray
- \(\frac{1}{2}\) cup walnuts
- \(\frac{1}{4}\) cup pepitas (pumpkin seeds), unsalted
- \(\frac{1}{4}\) cup sunflower kernels, unsalted
- \(\frac{1}{2}\) cup cashews, unsalted
- \(\frac{1}{2}\) cup almonds (whole or slivered), unsalted
- 2 Tablespoons maple syrup
- \(\frac{1}{4}\) teaspoon cayenne pepper
- \(\frac{1}{4}\) teaspoon ground ginger

**DIRECTIONS**

When preparing this recipe, start with clean countertops and utensils. Wash hands with soap and water. Preheat oven to 325°F. Cover a rimmed baking pan with parchment paper and spread with a small amount of nonstick cooking spray. Mix the walnuts, pepitas, sunflower kernels, cashews, and almonds in a medium bowl. Add the maple syrup, cayenne, and ginger, tossing with the mixed nuts and seeds to combine. Transfer the coated nuts and seeds to the prepared baking pan and spread evenly in a single layer. Bake, stirring once, until lightly toasted, about 15–20 minutes. Remove from the oven and cool.

**NUTRIENT INFORMATION**

Per \(\frac{1}{4}\) cup serving: 210 calories, 17g total fat, 2g saturated fat, 0mg cholesterol, 0mg sodium, 10g carbohydrates, 3g added sugars, 3g dietary fiber, 6g protein.

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**REFERENCES**


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