Acids, so they are solid at room temperature. The American Heart Association recently released a report that reinforces what research has told us all along. Saturated fats raise the “bad cholesterol” (LDL, or low-density lipoprotein), which may lead to atherosclerosis (heart attacks and strokes). Replacing saturated fat with unsaturated fat is also the recommendation of the 2015-2020 Dietary Guidelines for Americans. Less than 10 percent of calories should be from saturated fat. The American Heart Association and the American College of Cardiology guidelines go on to state the need to decrease the amount of saturated fat to 5–6 percent of total daily calories for folks with elevated LDL cholesterol.

Companies often promote their products as the end all to all of our aches and pains. Coconut oil still seems to be popular as the next best thing to sliced bread in mainstream media. To understand why long-term scientific studies have not supported the claims, here is a brief overview of the chemical structure of fats and oils. We will include how they increase or decrease our risks of heart disease, and where coconut oil fits in.

Sometimes the physical state of a fat can help you determine the main type of fatty acid contained in it. Most monounsaturated and polyunsaturated fats are generally liquid at room temperature. Hence, vegetable oils are liquids of mostly “unsaturated” fatty acids. Most fats with a large proportion of saturated fatty acids are hard at room temperature. The fat in meats, shortening, butter, and some margarine contains a larger amount of saturated fatty acids, so they are solid at room temperature. The American Heart Association recently released a report that reinforces what research has told us all along. Saturated fats raise the “bad cholesterol” (LDL, or low-density lipoprotein), which may lead to atherosclerosis (heart attacks and strokes). Replacing saturated fat with unsaturated fat is also the recommendation of the 2015-2020 Dietary Guidelines for Americans. Less than 10 percent of calories should be from saturated fat. The American Heart Association and the American College of Cardiology guidelines go on to state the need to decrease the amount of saturated fat to 5–6 percent of total daily calories for folks with elevated LDL cholesterol.

Here is an easy way to monitor the amount of saturated fat you eat in a day. If you eat on average 2,000 calories, and you do not have elevated LDL, you could safely eat 200 calories (22 grams) from saturated fat per day. That

**Fatty Acids**

There are three types of fatty acids found in fats and oils: saturated, monounsaturated, and polyunsaturated. Fats and oils are actually a mixture of these three types. A saturated fat means all of the chemical bonds are holding hydrogen atoms, or saturated. A polyunsaturated fat has many areas where there are no hydrogen atoms; however, there are still some monounsaturated and saturated fatty acids in it as well. Examples of saturated fats are lard, butter, beef fat (like what is in ground beef), chicken fat, hydrogenated shortening, and coconut oil. Fats high in monounsaturated fat are olive, canola, and peanut oils. Fats high in polyunsaturated fat are safflower, sunflower, corn, and soybean oils.

**Tips to Ward Off Heart Disease**

- Read food labels to determine the amount of saturated fat in the foods you eat.
- Find alternate foods to replace saturated fat calories.
- Choose polyunsaturated fats, monounsaturated fats, and whole grains to replace saturated fat calories.
- Foods with polyunsaturated fats include oils like safflower, sunflower seeds, corn, and soybean. They also include walnuts, sunflower seeds, flax seed or oil, salmon, mackerel, herring, albacore tuna, and trout.
- Foods with monounsaturated fats include oils like olive, canola, and peanut. They also include nuts, avocado, and peanut butter, and sesame, sunflower, and safflower oils.

Companies often promote their products as the end all to all of our aches and pains. Coconut oil still seems to be popular as the next best thing to sliced bread in mainstream media.

To understand why long-term scientific studies have not supported the claims, here is a brief overview of the chemical structure of fats and oils. We will include how they increase or decrease our risks of heart disease, and where coconut oil fits in.

Sometimes the physical state of a fat can help you determine the main type of fatty acid contained in it. Most monounsaturated and polyunsaturated fats are generally liquid at room temperature. Hence, vegetable oils are liquids of mostly “unsaturated” fatty acids. Most fats with a large proportion of saturated fatty acids are hard at room temperature. The fat in meats, shortening, butter, and some margarine contains a larger amount of saturated fatty acids, so they are solid at room temperature. The American Heart Association recently released a report that reinforces what research has told us all along. Saturated fats raise the “bad cholesterol” (LDL, or low-density lipoprotein), which may lead to atherosclerosis (heart attacks and strokes). Replacing saturated fat with unsaturated fat is also the recommendation of the 2015-2020 Dietary Guidelines for Americans. Less than 10 percent of calories should be from saturated fat. The American Heart Association and the American College of Cardiology guidelines go on to state the need to decrease the amount of saturated fat to 5–6 percent of total daily calories for folks with elevated LDL cholesterol.

Here is an easy way to monitor the amount of saturated fat you eat in a day. If you eat on average 2,000 calories, and you do not have elevated LDL, you could safely eat 200 calories (22 grams) from saturated fat per day. That
Examine Your Choices

<table>
<thead>
<tr>
<th>Food</th>
<th>Source</th>
<th>What I buy</th>
<th>What I plan to buy/change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coconut oil</td>
<td>Looking for heart-healthy oil</td>
<td>Coconut oil</td>
<td>Olive oil</td>
</tr>
<tr>
<td>Coconut milk</td>
<td>Looking for heart-healthy milk for cooking</td>
<td>Full-fat coconut milk</td>
<td>Low-fat coconut milk or part-skim evaporated milk</td>
</tr>
</tbody>
</table>

My goal: Choose low-saturated-fat products by reading Nutrition Facts labels.

Less than 10% of calories should be from saturated fat.

<table>
<thead>
<tr>
<th>Total Calories</th>
<th>Calories from Saturated Fat</th>
<th>Grams</th>
<th>Teaspoons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,600</td>
<td>160</td>
<td>18</td>
<td>4</td>
</tr>
<tr>
<td>1,800</td>
<td>180</td>
<td>20</td>
<td>4.5</td>
</tr>
<tr>
<td>2,000</td>
<td>200</td>
<td>22</td>
<td>5</td>
</tr>
<tr>
<td>2,200</td>
<td>220</td>
<td>24</td>
<td>6</td>
</tr>
</tbody>
</table>

is 10 percent of 2,000 calories. It is important to use food labels to determine the amount of saturated fat found in the foods you eat. If you have elevated cholesterol, then the amount of calories reduces to 100 calories from saturated fat, or 5 percent of 2,000 calories (11 grams).

One tablespoon of coconut oil has 130 calories, including 117 calories from saturated fat. One tablespoon of extra virgin olive oil has 120 calories, with only 18 calories from saturated fat. By replacing saturated fat with unsaturated fat, the number of calories from saturated fat is greatly reduced.

Coconut milk—a popular ingredient in smoothies, drinks, and juicing—follows suit with coconut oil. All of the fat is saturated. Four and one-half tablespoons (65 ml) contains 130 calories, including 120 calories from saturated fat. Sixteen ounces (480 ml) of coconut water, however, contains no fat and 101 calories.

Be a food label reader. Add up the number of calories or fat grams you eat in one day from saturated fat. See if you can lower that number to reduce your LDL cholesterol and your risk for atherosclerosis. Replace saturated fat calories with calories from polyunsaturated fats, monounsaturated fats, or whole grains.

Sources

Prepared by Mary Ehret, senior extension educator. Reviewed by Lynn James, senior extension educator.

extension.psu.edu

Penn State College of Agricultural Sciences research and extension programs are funded in part by Pennsylvania counties, the Commonwealth of Pennsylvania, and the U.S. Department of Agriculture.

Where trade names appear, no discrimination is intended, and no endorsement by Penn State Extension is implied.

This publication is available in alternative media on request.

Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status.

Produced by Ag Communications and Marketing

© The Pennsylvania State University 2017

Code EE0199 12/17pod