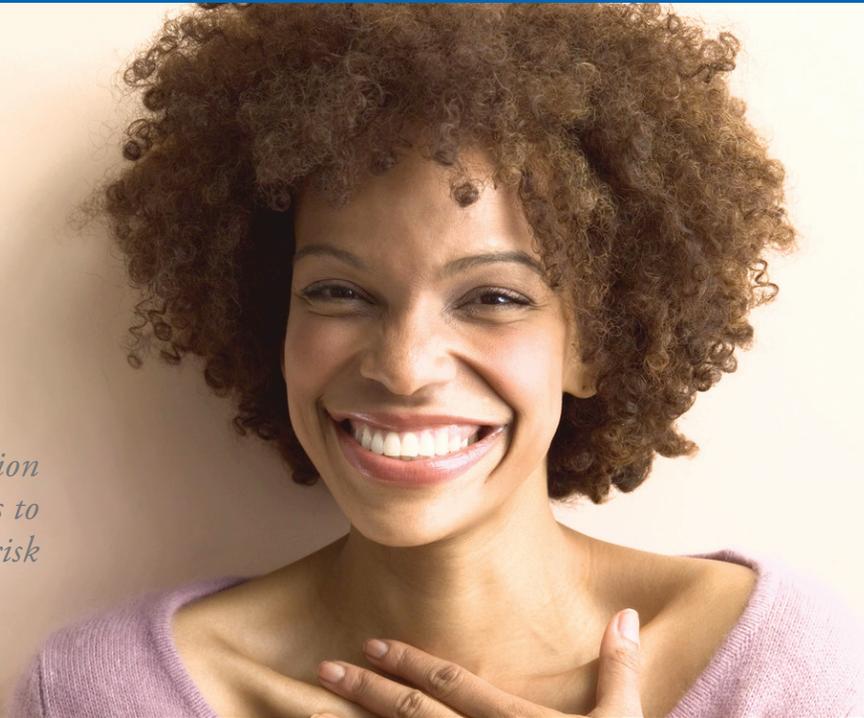


# Your Nutrition Connection

*This publication provides information on dietary fats and their links to health, including breast cancer risk*



## Dietary Fat and Breast Cancer Risk

### *What is dietary fat?*

“Dietary fat” refers to all of the fats and oils found in foods that come from animals and plants. Fats and oils contain fatty acids, of which there are two types—saturated and unsaturated.

### *Sources of dietary fat*

Foods that provide dietary fat contain mixtures of saturated and unsaturated fats. If a food contains more unsaturated than saturated fat, that food is often called a “good source” of unsaturated fat. For example, vegetable oil is a good source of unsaturated fat since it contains mostly unsaturated fats.

Saturated fats come mainly from animal foods, such as meat, fish, poultry, eggs, and dairy products. They are also found in coconut, palm, and palm kernel oils, which are sometimes called tropical oils.

Unsaturated fats are found in higher amounts in plant foods, such as canola (a type of grain), corn, olives, and sunflower seeds. These foods, and the oils made from them, are good sources of unsaturated fat.

### *Types of unsaturated fats*

There are 3 types of unsaturated fats—monounsaturated, polyunsaturated, and trans.

- *Monounsaturated* fats are plentiful in canola, olive, safflower and sunflower oils.
- *Polyunsaturated* fats include omega-3 and omega-6. Omega-3 fats are plentiful in fatty fish (char, herring, mackerel, salmon, sardines, trout) and vegetable oils (soybean, flax). Nuts, seeds, and vegetable oils (corn, safflower, soybean) are good sources of omega-6 fats.
- *Trans* fats are found in foods made with unsaturated oils that have been hydrogenated by food manufacturers. Commercially baked foods, shortening, cookies, crackers, fried foods (donuts, French fries) and snack foods are the main sources of trans fats for Canadians. Small amounts of trans fats are found naturally in meat and dairy products.

### *Dietary fat and your body*

Your body needs both saturated and unsaturated fats for good health. Your body uses fat:

- as a source of energy (1 gram of fat provides 9 kilocalories of energy)
- as a source of essential omega-3 and omega-6 fats needed for heart and reproductive health
- to help form body cells
- to help absorb vitamins A, D, E and K (the fat-soluble vitamins)

### *Health benefits of unsaturated fats*

Choose unsaturated fats such as olive, canola, and sunflower oils when baking, cooking, and preparing foods. These fats provide essential nutrients, help prevent heart disease, support growth and reproductive health.

### *Health risks of eating too much fat*

#### **HEART HEALTH**

Eating too much fat, especially saturated and trans fat, can raise your risk of heart disease. The more saturated and trans fat you eat, the higher the levels of cholesterol and low-density lipoprotein (LDL) in your blood. Higher cholesterol and LDL levels are linked to higher heart disease risk.

### **OBESITY**

While there are many causes of obesity, regularly eating more kilocalories than your body needs may lead to excess weight gain and obesity. Dietary fat contains more kilocalories per gram than carbohydrates, protein, or alcohol. Eating too much dietary fat can promote weight gain.

### **BREAST CANCER RISK**

In 2007, experts at the World Cancer Research Fund and American Institute for Cancer Research reviewed the research on food, nutrition, physical activity, and cancer risk. You can read their detailed report online at [http://www.aicr.org/site/PageServer?pagename=res\\_report\\_second](http://www.aicr.org/site/PageServer?pagename=res_report_second). Here is a summary of their findings for breast cancer:

There is little evidence linking food and nutrition to breast cancer risk. This includes studies that looked for a link between dietary fat and breast cancer risk.

Some research has reported a link between eating foods rich in omega-3 fats and lower breast cancer risk. In the laboratory, scientists have shown that omega-3 fats may boost the immune system and weaken cancer cells. Researchers are trying to find out if these laboratory findings are also true in humans.

Since breast cancer risk is hormone related, the factors that affect it differ among pre-menopausal and post-menopausal women. Currently there is no evidence of a link between breast cancer risk and total fat intake among pre-menopausal women. There is a small amount of evidence suggesting that eating higher amounts of dietary fat may raise breast cancer risk after menopause. Until more research is done, we cannot say for sure whether or not there is a link between dietary fat and breast cancer risk.

### *What does this mean for you?*

While the evidence about dietary fat intake and breast cancer risk is not clear, there is convincing proof of a link between having more body fat and higher breast cancer risk among post-menopausal women. This

means that achieving and maintaining a healthy body weight may lower breast cancer risk among post-menopausal women. Along with regular physical activity and eating lots of vegetables, fruits, legumes, and whole grains, eating less dietary fat can help you achieve your healthy body weight.

Eating foods rich in omega-3 fats may benefit your health. Add a spoonful of fresh flax seed to your breakfast cereal and eat fatty fish (herring, mackerel, salmon) 2 or 3 times a week to boost your omega-3 fat intake.

**Can your fat intake be too low?**

Most of us would not be harmed if we greatly reduced the amount of fat we eat. If you ate less fat than your body needed for a long period of time, you might develop an essential fatty acid or fat soluble vitamin deficiency.

**How much fat does your body need?**

Dietary fat should make up 20-35% of the kilocalories that an adult eats in a day. For a woman, this is about 45-75 grams of fat per day, based on a total daily intake of 2000 kilocalories. Foods that are high in saturated or trans fat should make up no more than 10% of the kilocalories you eat in a day.

**How much fat is in foods?**

- Non-packaged foods (meat, poultry, fish, vegetables): You can look up the fat content of specific foods in the Canadian Nutrient File database, available on the Health Canada website.
- Packaged foods (baked goods, dairy products, and prepared foods): Look for the Nutrition Facts table to find the number of grams of fat in each serving of a food.

Nutrition Facts	
Per 1/2 cup (125 mL)	
Amount	% Daily Value
Calories 97.5	
Fat 1.5 g	3 %
Saturated .5 g + Trans 0 g	1 %
Cholesterol 2 mg	
Sodium 4 mg	2 %
Carbohydrate 18 g	6 %
Fibre 2 g	8 %
Sugars 2 g	
Protein 3 g	
Vitamin A 2 %	Vitamin C 10 %
Calcium 0 %	Iron 2 %

*This food contains 1.5 grams of fat per 1/2 cup (or 125 mL) serving*

**How do you limit saturated fat?**

Since most foods that contain fat contain both kinds, it is hard to target saturated fats alone. Lowering your total fat intake will reduce your saturated and trans fat intakes.

**How can you eat less fat?**

- Fill 3/4 of your plate with vegetables, fruits, and whole grains to leave less room for higher fat foods.
- Replace high fat foods with low or no fat foods:
  - Beans, lentils, and tofu are great lower-fat alternatives to meat.
  - Use dairy products with 1% fat or less.
  - Try low-fat versions of your favourite foods (yogurt, cheese, mayonnaise, salad dressings, margarine, crackers, snacks).
- Try low-fat cooking methods
  - *Broil*: Cook fish, meat and poultry under direct heat. Let fat drain away.
  - *Braise*: Tightly cover and cook meat in a small amount of liquid at low heat.
  - *Grill*: Grill foods on medium heat to avoid charring. Fat will drain away.
  - *Poach*: Simmer fish, eggs or chicken in a flavored liquid or water.
  - *Steam*: Use a small amount of water to steam fish, poultry and vegetables.
  - *Stir-fry*: Cut meat and vegetables into thin strips, lightly oil pan, cook over high heat, stir constantly.
- Read food labels and eat fewer foods made with hydrogenated or partially hydrogenated oils or tropical oils (sources of trans and saturated fats).



## Lower fat choices

Choose more often...	Choose less often...
<ul style="list-style-type: none"> <li>• Unsalted nuts, seeds, soy nuts for snacks</li> <li>• Fatty fish</li> <li>• Walnuts or almonds for salad toppings</li> <li>• Salad dressings with olive or canola oil</li> <li>• Soft, non-hydrogenated low-fat margarine</li> <li>• Olive or canola oil for stir frying and sautéing</li> </ul>	<ul style="list-style-type: none"> <li>• High-fat, salty snack foods</li> <li>• Meat or poultry with skin</li> <li>• Croutons or bacon</li> <li>• Rich, creamy dressings</li> <li>• Butter, shortening, or lard</li> <li>• Butter, lard, or bacon drippings</li> </ul>

## How much fat can you save?

Instead of...	Fat	Try...	Fat	Saved
10% MF cream, half & half (1 tbsp)	1.53 g	2% partly skimmed milk (1 tbsp)	0.3 g	1.23 g
Regular margarine, hydrogenated (1 tbsp)	11.6 g	Calorie-reduced margarine (1 tbsp)	5.6 g	6.0 g
Cooked chicken breast with skin (1 cup)	12.5 g	Cooked chicken breast skinless (1 cup)	3.0 g	9.5 g
Regular salad dressing, French (1 tbsp)	7.1 g	Calorie-reduced French dressing (1 tbsp)	2.2 g	4.9 g
Medium ground beef, cooked (1/2 cup)	9.3 g	Cooked lentils (1/2 cup)	0.4 g	8.9 g
Chocolate ice cream (1/2 cup)	7.7 g	Chocolate frozen yogurt (1/2 cup)	3.2 g	4.5 g
Battered deep fried fish (90 grams)	11.2 g	Baked whitefish, no batter (90 grams)	3.9 g	7.3 g

Source: Canadian Nutrient File, <http://webprod.hc-sc.gc.ca/cnf-fcel/index-eng.jsp>

*To contact a Registered Dietitian, call the Patient & Family Support Program  
Odette Cancer Centre, at 416-480-4623*

## Helpful Resources

- American Institute for Cancer Research. (2005). *The new American plate cookbook: Recipes for a healthy weight and a healthy life*. California: University of California Press.
- Béliveau R, & Gingras D. (2007). *Cooking with foods that fight cancer*. Outremont, Quebec: McClelland & Stuart.
- Béliveau R, & Gingras D. (2006). *Foods that fight cancer: Preventing cancer through diet*. Outremont, Quebec: McClelland & Stuart.
- Canadian Nutrient File: [http://www.hc-sc.gc.ca/fn-an/nutrition/fiche-nutri-data/index\\_e.html](http://www.hc-sc.gc.ca/fn-an/nutrition/fiche-nutri-data/index_e.html).
- For podcasts, videos, and other downloadable nutrition information visit [ync.sunnybrook.ca](http://ync.sunnybrook.ca).

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