



Carbohydrates, Health and Weight Loss

Are you thinking about cutting back on carbohydrates (carbs) to lose weight? You may have heard that too much carbohydrate is not good for you and can cause weight gain.

This fact sheet provides information about carbohydrates and low carbohydrate diets and their role in weight loss and health. See Additional Resources at the end of this fact sheet for information on healthy weight management.

About Carbohydrates

There are three major types of carbohydrates found in food, with some foods containing more than one type of carbohydrate:

Sugar – is a 'simple' carbohydrate and provides a quick source of energy for your body. It is found naturally in some foods but can also be added in different amounts during processing or preparation.

- Foods with naturally occurring sugar include:
 - Fruit and 100% fruit juices
 - ¡ Plain milk, yogurt and kefir
 - White and brown sugar, honey, corn and maple syrup and nectars.
- Foods with added sugar include:
 - , Sweetened ready-to-eat cereals
 - Flavoured yogurts and milks
 - ; Sweetened coffees and soy beverages
 - ¡ Cakes, cookies, pies and other baked goods
 - , Jams, jellies and candy.

Starch – is a 'complex' carbohydrate that comes from plants and provides a slower release of energy to your body than sugars do. Food sources include:

Whole grains such as quinoa, oats, brown rice and bread, including wheat, barley and rye varieties

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- Legumes such as peas, beans and lentils
- Starchy vegetables like corn, parsnip, yam and sweet potato.

Fibre – is found in plant-based foods and doesn't provide energy as it is not absorbed by your body. Fibre can help to lower blood cholesterol, control blood glucose (sugar) levels and keep your bowels regular. Food sources include:

- Vegetables and fruit, especially potatoes, broccoli, peas, spinach, apples, pears and berries
- Grains, especially whole grains such as oats, barley, bulgur (also called cracked wheat), brown rice and quinoa
- Legumes including kidney beans, chickpeas and lentils.

About Low Carbohydrate Diets

Low carbohydrate diets often restrict the amount of carbohydrate by limiting some, or many of the foods listed above.

Not all low carbohydrate diets are created equal. These diets may differ in:

- The levels or amounts of carbohydrate, protein and fat. Some diets may be very low in carbohydrate and higher in fat or protein than others.
- The type of foods permitted. Diets may focus on the quality of foods, not just the carbohydrate content.
 - Some diets may emphasize healthier options such as lean meat, fish, nuts, seeds, legumes, canola and olive oil, a variety of vegetables and fruits, and whole grains (when permitted).
 - Other diets may focus on less healthy choices such as fatty meats, saturated fats such as butter and allow only specific types of vegetables or fruits.

To date, there is no agreement on how to define a "low carbohydrate diet." The recommended <u>minimum</u> amount of carbohydrate for adults is 130 g per day. Most of this carbohydrate is used to fuel the brain. Speak with your health care provider if you are pregnant, thinking about becoming pregnant, or you are breastfeeding and are thinking about following a low carbohydrate diet. Your requirements may be different.

Health Canada suggests a range of 45-65% of calories from carbohydrate





to help you meet your energy and nutrient needs. This is equal to 225-325 g of carbohydrate per day if eating a 2000 calorie diet. It allows for a variety of nutritious carbohydrate-rich foods in the diet, including vegetables, fruits, milk and milk products, legumes and grains.

Some researchers use the following definitions to describe different levels of carbohydrate restriction based on a 2000 calorie diet:

Very low carbohydrate or ketogenic diet

- Contains 20-50 g of carbohydrate per day, or less than 10% of calories from carbohydrates.
- Focuses on leafy vegetables as the carbohydrate source, avoiding most other foods that contain carbohydrate such as milk and milk products, grain products, legumes and other vegetables and fruit.
- Includes larger amounts of fat or protein and may focus on foods high in saturated (unhealthy) fats like butter, marbled meats and bacon.
- An example of a very low carbohydrate diet is the Atkins® diet which has less than 50 g of carbohydrate in some of its phases.

Low carbohydrate diet

- Contains less than 130 g of carbohydrate per day, or less than 26% of calories from carbohydrates.
- This slightly higher level of carbohydrate allows for a greater variety of foods with carbohydrate to be included in the diet from vegetables, fruits, legumes, and milk and milk products.

Moderate carbohydrate diet

- Contains at least 130 g of carbohydrate per day, or more than 26% of calories from carbohydrates.
- This allows for a greater variety of foods that contain carbohydrate from vegetables, fruits, milk and milk products, legumes and grain products.
- An example of a moderate carbohydrate diet is the Zone® which provides about 200 g of carbohydrate per day, or 40% of calories from carbohydrate.

Low Carbohydrate Diets and Weight Loss





Carbohydrate restricted diets are usually calorie restricted diets as well, which may help with weight loss in the short-term. This is often because you're eating fewer calories since you are reducing serving sizes and eliminating carbohydrate-rich desserts, sweet snacks, pop and fruit or sports drinks. Regardless of your health goal, everyone can benefit from restricting these foods which are high in added sugars and low in essential nutrients.

The long-term health effects of low carbohydrate diets are not known. When following a low, especially a very low carbohydrate diet, you may miss out on the health benefits of legumes, vegetables, fruits and whole grains. These foods provide vitamins, minerals, dietary fibre and antioxidants and help to prevent chronic diseases such as type 2 diabetes, heart disease and bowel cancer.

Research shows that over the long-term, people have the same weight loss on a calorie reduced diet whether it is a low or moderate carbohydrate diet. What is important is to choose a dietary pattern you can stick to. Lifelong changes in eating and physical activity are needed to reach and maintain a healthy weight.

Talk to a registered dietitian if you are thinking of following a low, or very low carbohydrate diet. A dietitian can help you build an eating plan that will meet your goals and nutrient needs while lowering your long-term health risk.



Additional Resources

- Eat Well Plate http://www.healthycanadians.gc.ca/alt/pdf/eating-nutrition/healthy-eating-saine-alimentation/tips-conseils/interactive-tools-outils-interactifs/eat-well-bien-manger-eng.pdf
- Physical Activity Guidelines for Adults
 http://www.csep.ca/CMFiles/Guidelines/CSEP PAGuidelines adults en .pdf
- Lifestyle Steps for Healthy Weight Loss: Getting Started http://www.pennutrition.com/viewhandout.aspx?
 Portal=UbY=&id=JMfrXwQ=&PreviewHandout=bA==
- Setting SMART Goals

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This information is not meant to replace advice from your medical doctor or individual counseling with a registered dietitian. It is intended for educational and informational purposes only.

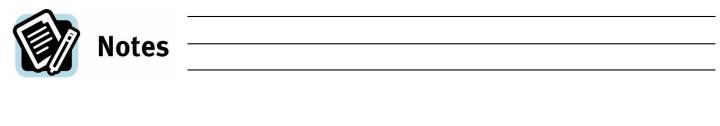




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