

NUTRITION BASICS: Carbohydrates

Quick facts:

- Carbohydrates are the preferred energy source for the mind and the body.
- Carbohydrates are found in the form of sugar (glucose), starch and fibre.
- One gram of carbohydrates provides four calories and whole grain sources are packed with essential vitamins and minerals.
- The brain functions solely on glucose, the broken-down end product of carbohydrate metabolism. Therefore, it is important to make sure you consume the proper amount of the right kind of carbohydrates.
- The main sources of carbohydrates are grains, starchy vegetables, fruits, dairy, milk alternatives and legumes. A small amount is found in non-starchy vegetables, nuts and seeds.

There are two types of carbohydrates, complex and simple.

1. Complex carbohydrates, found in grains, vegetables and fruits, are made up of long chains of sugar units. Complex carbohydrates take much longer to digest and absorb, provide sustained energy release and have a gradual impact on blood sugar.
2. Simple carbohydrates or sugars, whether natural or processed, are digested and absorbed quickly and have an immediate impact on blood sugar. Sugar occurs naturally in fruits, vegetables, milk and some grains. Processed sugars are also added to foods and beverages. Added sugar provides additional calories but does not enhance the nutrient value of the product. Foods with naturally occurring sugars (e.g., fruits and vegetables) are packed with essential vitamins, minerals and fibre.

Quick facts:

- Whole grains provide many health benefits not achieved by consuming refined grain products.
- Whole grains are foods made from the entire grain kernel, which includes the fibre-rich bran and germ, and the endosperm.
- Refined grains are made mostly with the endosperm.
- Whole grains are an important source of fibre, phytonutrients and other essential vitamins and minerals.
- Aim for at least 50% of your grains to come from whole grains and the other half from enriched or whole grains as well.

Carbohydrate goals for healthy eating

- Carbohydrate intake should come from whole grains, whole fruits and vegetables, beans and low-fat or fat-free milk or milk alternative products.
- Reduce added sugar in your diet; less than 10% of total calories should come from added sugars.
- Aim to consume at least 50% of your grains as whole grains. Whole grains are foods made with the entire grain kernel, including the fibre-rich bran and germ, and endosperm. Refined grains contain mostly the endosperm. (Learn to correctly read food labels to make smart choices.)
- Meet your vitamin and mineral needs by including a variety of colors, textures and tastes. Try whole grains such as quinoa, brown rice, barley, whole grain oats and barley. Reach for nutrient-rich starchy vegetables such as squash, corn, peas, yams and potatoes.