

Navigating Carbohydrates

What are Carbs?

- Carbs are made up of Sugars, Starches and Fibre
- Fibre is not digested so does not directly affect blood sugars, but it is important for bowel health, heart health and helps to stabilize insulin and hunger levels
- Carbs are broken down into glucose to be used by the body and the brain
- Like gas for your car, the body and the brain use Carbohydrates as their primary fuel source. This is important for carrying out all daily activities, and especially for exercise performance
- Carbs are a source of calories but also provide other important vitamins and minerals
- Whole grains and starchy vegetables are more complex and handled better by the body than white or refined carbohydrates. They are richer in nutrients, fibre, and are higher in protein

Where are Carbs found?

Carbs are found in a variety of foods and are part of a healthy diet. The key is portion control, timing and selecting higher **quality** Carbohydrates most often. This includes high fibre starches, **100% whole grains**, unsweetened dairy products, legumes, and **whole** fruits and vegetables.

Carbs are found in:

- Breads, grains and cereals including pasta, rice, barley, farro, couscous, bulgar, and quinoa
- Milk and dairy products like yogurt, and cottage cheese
- Fruits and vegetables, especially starchy vegetables like squash, carrots, potatoes and peas
- Lentils, legumes and bean soups
- Juices, sodas, sports drinks and other sweetened beverages
- Baked goods, candy, chocolate, condiments and snack foods

A Bit on Sugar

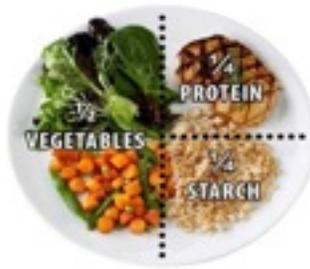
- Sugar is just another word for Carbohydrate, since sugar is a type of Carb.
- All Carbs, including fruits and vegetables contain sugars
- While all Carbohydrates are broken down to glucose eventually, the body processes the different sugars and starches differently
- “Added sugars” are not necessarily bad. However, they add needless calories without the benefit of fibre and other nutrients so try to limit them
- Higher intakes of simple or “added sugars” can cause blood sugars spikes, lead to cravings, and weight gain, especially if not utilized for fuel by way of higher levels of physical activity.
- Simple sugars and “added sugars” are better tolerated by active individuals and those requiring fast sources of fuel for exercise performance and weight gain

How Much Should I Eat?

Athletes and those participating in performance activities often require higher amounts of carbohydrate to fuel their exercise, help in recovery, and keep muscle stores full.

For most, a moderate portion of complex carbohydrate spread throughout the day at meals and snacks is ideal. This means 15g for a snack and 30g - 60g per meal (depending on your size and activity level). Here are some easy strategies to properly portion your carbs.

A weight scale	Measuring cups	Plate Method	Reading Labels	Use your fist
This is the most accurate way of measuring foods. Measure in grams and cooked	1/2 - 1 cup of starchy foods is an appropriate serving at meals/ snacks for most	Just use your plate! 1/4 of your plate in grains/ starchy foods is an appropriate serving	Look at the serving size, and the grams of Total carb then minus the fibre. The more fibre the better	Your hands are proportional in size to your body and a good estimate of your relative needs. A fist is a good portion of carbs for a meal



Final Tips and Tricks

1. Look for 100% WHOLE GRAIN on the label for breads, pasta and crackers. When in doubt pick brown over white, look for higher fibre items and experiment with new grains.
2. Choose a variety of brightly coloured **whole** fruits and veg and introduce starchy vegetables and beans. Limit juices when possible and eat the skins when edible for added fibre and nutrients. An orange has two times as much fibre and half as much sugar as a 12-ounce glass of orange juice!
3. Exercise portion control following the strategies above. Spread carbs throughout the day rather than eating large portions at one sitting. Make them a side dish rather than a main
4. Time your carbs around physical activity and intensive exercise bouts when possible to minimize fat storage and optimize utilization.
5. Pair Carbs with lean protein and healthy fats to slow absorption and mediate hunger levels