

CARBOHYDRATES



Why do we need them?

- Carbohydrates are broken down in the digestive system into sugar molecules, which are absorbed and sent to blood stream where they are sent to the cells for energy. They are the most efficient fuel for our cells.
- Not all carbohydrates are created equal. Refined sources of carbohydrates contain no fiber and minimal amounts of vitamins and minerals. That is why it is important to get carbohydrates from plants (fruits and veggies), dairy, whole grains, and beans/lentils.

What foods contain carbohydrates?

Carbohydrates are found in many foods such as grains, vegetables, fruits, milk and yogurt, and beans and lentils.



How much carbohydrate do you need?

Unlike fat and protein, there are no essential carbohydrates. We can survive with minimal carbohydrate intake, but this does not mean that low carbohydrate diets are good in the long run. The amount of carbohydrate intake will depend on age, activity level, health history, and calorie intake. It is recommended that most people get between 40-60% of their calorie intake from carbohydrate foods, specifically the most nutrient dense carbohydrate foods. It is important to remember that many of the vitamins, minerals, and fiber we need in our diet comes from carbohydrate containing foods. People who restrict carbohydrates, such as those following a low carbohydrate diet, risk nutrient deficiencies and inadequate intake of fiber.

Not all carbohydrates are created equal

Although all carbohydrates are broken down into glucose or sugar to provide fuel for the cells of the body, not all carbohydrates are created equal.

Sugar in any form (even honey, maple syrup, agave) all have the same effect on the body and should be limited. Foods made from sugars or other sweeteners such as candy, cookies, and soft drinks should be limited. Foods made with process flours such as white flour or white rice flour should also be limited. These foods provide calories, but lack nutrients such as fiber, vitamins, and minerals.

Whole grains such as brown rice, quinoa, millet, or oats, both starchy and non-starchy carbohydrates, fruits (2-3 servings per day), and milk and no sugar added yogurt, and beans/legumes should all be included in the diet. In fact, most of the carbohydrates in the diet should come from these foods. These sources of carbohydrates are full of nutrients including vitamins, minerals, fiber, antioxidants, and phytochemicals.

Tips for choosing healthy carbohydrates

- 1) Eat a rainbow of fruits and vegetables. Different colored fruits and vegetables give you a variety of vitamins and minerals, as well carbohydrates
- 2) Eat beans and peas often. They are rich in fiber and offer protein, vitamins, and minerals. Try flavoring them with herbs, spices, onions, garlic, and vegetables, instead of salty or fatty meats.
- 3) For at least half of the grain foods you eat, choose whole grains. (Whole grains contain the entire grain seed of a plant and are rich in fiber, vitamins, and minerals.)
 - When choosing bread, read the ingredient list on the food label. The first word should be “whole.” If it isn’t, the bread contains more processed flour than whole grain flour.
 - When baking, replace half of the white flour in recipes with whole wheat flour.
 - Choose brown rice instead of white rice, or try other cooked grains, like barley, bulgur, quinoa, or farro.
 - Have whole wheat pasta instead of types made with processed flour.
 - Snack on air-popped popcorn, whole grain cereal, or baked corn tortilla chips
- 4) Be careful with fruit juices. When choosing beverages, look for labels that say 100% fruit juice. If a fruit-flavored drink does not say 100% fruit juice, it probably doesn’t have much nutritional value. It is a good idea to limit the intake of fruit juice, even 100% fruit juice, because it is high in fructose and does not contain fiber.
- 5) Make milk and dairy choices without added sugar:
 - Choose regular milk instead of chocolate milk
 - Choose plain yogurt or lightly sweetened yogurt over yogurt with added sugar
- 6) Look at the label and make sure that the whole grain bread has at least 3 grams of fiber and the very first ingredient is whole grain and not enriched or white flour.
- 7) Fruit is a great source of nutrients, but it does contain sugar. Have 2-3 fruit servings per day and try not to go overboard with the fruit intake.
- 8) Aim to limit your starchy vegetables such as corn, peas, potatoes, or winter squash and have more of the non-starchy vegetables such as carrots, broccoli, asparagus, spinach, and peppers. The majority of your veggie intake should be from non-starchy veggies and it is important to try to get at least 5 servings per day.

