

Carbohydrates are Fuel for Life

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arbohydrates are one of the three nutrients that fuel the body. The other two are fats and protein. Of the three, carbohydrates should be half of the energy we take in each day. Many foods that have carbohydrates, like whole grains, fruits, vegetables, and dairy items, also have vitamins, minerals, and fiber that our bodies need to function.

One of the reasons we need carbohydrates is that some parts of our bodies, such as the brain, choose carbohydrates over other types of fuel. Our bodies can store carbohydrates for later use when we eat more than we need. When we have not eaten carbohydrates in a while, our bodies can use the stored carbohydrates for energy or make them. Although our bodies can make carbohydrates, it is best to get high-quality carbohydrates from our diet each day.

Types of Carbohydrates

Carbohydrates come in three main forms: sugar, starch, and fiber. Our bodies can use all three types of carbohydrates to function the right way.

Sugars are "simple" carbohydrates that are small molecules and give our bodies quick energy. Some



foods that have naturally occurring sugars are fruits and dairy products. Other foods like soft drinks and packaged sweets have sugars added to them.

Starches and fiber are much larger molecules and are considered "complex" carbohydrates because it takes the body longer to break them down. Starches are in certain vegetables, beans, and grains. Fiber is in foods like whole grains, and our bodies cannot digest it. Fiber helps keep things moving smoothly through the digestive system and supports good gut bacteria.

Low-Carbohydrate Diets: Are They Worth the Hype?

Over the past few decades, several different types of low-carbohydrate (low-carb) diets have become popular. This type of diet limits the amount of carbohydrates eaten each day and encourages people



to focus more on protein and fat. Low-carb diets may encourage you to remove high-quality, nutritious foods from your diet, such as whole fruits, vegetables, and whole grains, and it may be hard to eat a balanced diet over time.

People are often interested in low-carb diets for weight loss. While research shows that some people may lose weight quickly if they follow a low-carb diet, most of the initial weight loss is water weight and it is difficult to sustain over a longer period of time.

Higher Quality Carbohydrates

Some carbohydrate choices have more nutrients than others. For example, whole fruits, vegetables, whole grains, dairy products, and beans all contain a variety of carbohydrates. These foods are higher quality sources of carbohydrates because they provide energy plus fiber, vitamins, and minerals. We should try to eat these kinds of carbohydrates most of the time and when possible.

Whole Grains

Whole grains are higher in nutritional quality than refined grains. Whole grains contain the nutritious bran and germ of the grain that refined grains do not. These parts of the grain provide essential nutrients, fiber, and protein. The Dietary Guidelines for Americans recommend that at least half of daily carbohydrate intake come from whole grains, when possible. Common examples of whole grains include brown rice, whole-wheat items, and oats. Those who regularly choose whole grains are less likely to develop certain health conditions such as diabetes and obesity.

Fiber

Fiber is important to include in the diet because it helps keep our digestive system running smoothly. You can find it in many higher quality carbohydrate foods. There are two types of fiber: soluble and insoluble. Both types of fiber help with digestion in different ways.

- Soluble fiber has several important jobs in the body such as regulating blood sugar. Soluble fiber is found in foods like whole grains, whole fruits, berries, oats, beans, and peas.
- Insoluble fiber helps promote regularity and supports colon health. Insoluble fiber is found in the peels and skins of fruit, corn, leafy greens, nuts, and seeds.

Eating more fiber can also reduce your risk for certain cancers and heart conditions. Adults should

aim for 30 grams or more of fiber each day. You can find the number of grams of fiber in a food on the Nutrition Facts label. Many Americans do not get enough fiber, so it is important to plan ways to add more fiber when possible. Remember to increase your fiber intake slowly and drink lots of water to avoid stomach issues and help the fiber do its job.

Examples of fiber-rich foods and meals are listed below. Focus on small ways you can add fiber to your diet over time.

HIGH FIBER FOOD IDEAS

Breakfast

- Bran cereal and other whole-grain cereals topped with fruit
- Whole-wheat toast or bagels topped with mashed berries
- Oatmeal with fruit, nuts, and seeds as toppings
- Breakfast parfait with berries, granola, nuts, and seeds
- Smoothie made with leafy greens, whole fruits, vegetables, and flaxseeds

Lunch

- Leafy green salad with grilled chicken, walnuts, and dried cranberries
- Sandwiches on whole-grain or whole-wheat bread with lettuce and tomato
- Brown rice bowl topped with roasted vegetables and your choice of protein
- Lentil or bean stew with whole-wheat crackers
- Whole-wheat wrap with turkey and cucumber

Dinner

- Pork stir-fry with snap peas, carrots, bell peppers, and brown rice
- Whole-wheat pasta with meat sauce and roasted vegetables
- Black bean tacos or enchiladas with corn on whole-wheat tortillas
- Chickpea or lentil vegetable stew with wholewheat crackers
- Beef and bean chili

Snack

- Whole fruits with the skin (e.g., apples, pears, peaches)
- Popcorn
- Hummus with whole-wheat crackers, raw carrots, and cucumber
- Snack items or bars with 3+ grams of fiber per serving
- Dried fruit and trail mix including a variety of nuts and seeds



Choosing Higher Quality Carbohydrates

You can use the following tips to make choices when shopping for and eating carbohydrates.

Fruits and Vegetables

- Eat the skin of fruits and vegetables, when appropriate. Some examples include apples, zucchini, and potatoes.
- Choose frozen or canned fruits and vegetables to have produce any time of the year. Add frozen vegetables into jarred pasta sauce to increase fiber and nutrients with a simple pasta meal.
- Snack on dried fruits and trail mix, which are high in fiber and available year-round.
- Look for canned vegetables labeled low sodium, no sodium, or no salt added.
- Choose canned fruit with no added sugars and packaged in 100% fruit juice.

- Include fruits and vegetables in your diet by adding them to meals you already eat (yogurt, sandwiches, etc.).
- Pack fruits and vegetables as snacks to eat throughout the day. Bananas, grapes, and carrots are easy to pack and keep without refrigeration.

Milk and Dairy Products

- Look for unsweetened dairy products, such as unflavored milks and plain yogurts. Add fruit to yogurt to boost fiber content.
- Choose dairy products fortified with extra nutrients, like vitamin D or omega fatty acids.
- Add unsweetened dairy items to meals and snacks you already eat. Dip fresh fruit in plain yogurt for breakfast or use milk instead of water to make oatmeal.

Whole Grains and Fiber

- Look for whole grains, when possible. Examples include oatmeal, brown rice, and popcorn.
- Check the ingredients list. If "whole grain" or "whole wheat" is listed first, that means the food is a higher quality carbohydrate food.
- Choose bars and snack foods with at least 3g of fiber per serving. If available, look for options with more fiber than added sugar.

Not All Sugars are Created Equal

Many people see sugar as bad for their health, but our bodies need this type of carbohydrate in appropriate amounts. We also need to remember that some sources of sugar are better for us than others. Foods that are grown and naturally have sugar in them, like whole fruits, are more nutritious because they often contain other important nutrients our bodies need like vitamin C, vitamin A, folate, and



fiber. Fruits should be a part of a balanced diet, even though they have sugar in them.

Added sugar is different because it is added to foods and drinks during manufacturing or preparation. Americans tend to take in more sugar than recommended because so many foods in the marketplace have added sugar in them. What we know is that people who have high amounts of added sugar in their diet are more likely to experience certain health conditions and are less likely to meet daily recommendations for whole grains, fruits, and vegetables. Fortunately, we know what common sources of added sugar are in the diet and we can take steps to slowly reduce the amount we take in over time.

- Sugar-sweetened beverages are one of the most common sources of added sugar in the American diet. Examples of these are regular soft drinks, sports drinks, energy drinks, and many fruit juices. Try swapping these for water or milk most of the time. You can even add fresh fruit to your water to give it a sweeter flavor.
- Coffee drinks, including bottled options and those sold at coffee shops, are often sweetened with sugar. Rather than giving up

- coffee, consider making your own at home. This way, you can control how much sugar or creamer is added. If you do enjoy coffee at a coffee shop, choose a drink that has fewer pumps of sweetener or no sugar added.
- Processed desserts, like ice cream, snack cakes, and cookies, have high amounts of added sugars. If you want to eat a dessert, try pairing it with a source of protein. This will help satisfy your craving while also giving your body extra nutrients. An example would be adding nuts to ice cream as a topping. Another idea is to try a lower sugar option like whipped cream with fresh berries.

Carbohydrates are fuel for life. Incorporate a variety of foods that include carbohydrates, focusing on higher quality carbohydrate choices most of the time. These include whole grains, fruits, and vegetables. Over time, this will increase the amount of fiber and nutrition in your diet each day.

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