Carbohydrates 101
Carbohydrates are macronutrients that provide us with energy, in the form of calories. They are the primary fuel source for cells in the brain and bloodstream, and muscles rely on a steady supply of carbohydrates to support physical activity. Think about trying to run a car without gas, carbohydrates are the body’s fuel source.

Types of Carbohydrates
Carbohydrates can be broken down into two major categories:

1. Sugars or simple carbohydrates:
   Simple carbohydrates are 1 or 2 sugars that are bonded together and easily broken down in digestion. Examples include fructose (fruit sugar), lactose (milk sugar), and sucrose (table sugar). All carbohydrates, except fiber, are converted into glucose, which is a monosaccharide or single sugar, and used as the energy source for all cells in the body. Simple carbohydrates provide a faster release of energy, but it doesn’t last very long so you’ll be hungry sooner.

2. Complex carbohydrates:
   Complex carbohydrates are larger molecules that consist of many hundreds or even thousands of sugars bonded together. They are not digested as quickly as simple carbohydrates, especially when fiber is present. The result is a slower release of sugar into the bloodstream with a less dramatic rise (and then fall) in blood sugar. This provides a slower release of energy that lasts longer, keeping you fuller longer.

Do You Need to Eat Carbohydrates?
The short answer is yes. Carbohydrates are cells’ main source of energy as well as the best source of many nutrients that the body needs, including the majority of the B vitamins, minerals (such as calcium—remember that dairy contains carbohydrates in the form of milk sugar), phytochemicals (disease fighting substances found in fruits and vegetables), and fiber (which helps protect against colon cancer, heart disease, and diabetes).

What Foods and Beverages Contain Carbohydrates?
- Fruits
- Vegetables
- Dairy products
- Grains, grain products, and starches
- Sugars and sweets
- Alcohol

Do Carbohydrates Cause Weight Gain?
Weight gain is caused by any food or food group eaten in excess. Carbohydrates are no exception. However, some of the higher fiber carbohydrate foods can actually assist with reducing caloric intake because they are more filling and therefore you may eat fewer calories. Be careful when increasing the fiber content of your diet, as increasing it too quickly can lead to gastric upset (bloating, gas, diarrhea even constipation). While more processed carbohydrates, such as cakes, cookies, and refined grain products, provide little more than a calorie source and are not very filling.
Does It Matter What Kind of Carbohydrates I Eat?
Yes, not all carbohydrates are created equal. The more heavily processed a carbohydrate, technically the more digested it already is, so it’s easily converted to sugar upon eating. This goes without saying for foods that are sugars such as candy, desserts etc.

Foods that are less processed require more chewing, and so it takes longer to eat those foods and allows for more awareness of fullness, which may help you eat less. Ideally, choose “whole” foods; starches such as barley, whole grains, sweet potatoes and brown rice, more often than the processed ones. Avoid products with too much “added fiber”, like those that contain inulin, a fiber source that is not found naturally in most foods, and often causes gas and discomfort.

Does It Matter When I Eat Carbohydrates?
Timing is everything. Think about the natural flow of your blood sugar – low in the morning upon getting up, then typically higher throughout the day depending on how much carbohydrate we eat. If our sugar is low in the morning it would make the most sense to have more carbohydrates at the earlier meals (breakfast and lunch), thereby supporting our blood sugar needs in the morning and afternoon. Unfortunately, many of us eat the bulk of our carbohydrates later in the day or the evening, when we’re well past the most active part of the day, and don’t need the energy. Excessive carbohydrates in the form of sugars, in particular, may lead to weight/fat gain. Ideally, keep the carbs lower at dinner by eating unlimited vegetables and having a smaller portion of fruit and/or starch, and eat larger amounts of lean protein and healthy fats.