

## Carbohydrates: The Shunned Nutrient

## What are carbohydrates and why do we need them?

A carbohydrate or "carb" is essentially a chain of glucose (sugar) molecules. These chains are broken down into glucose in the body, which is absorbed into the bloodstream and used by all of your cells to produce energy. Although carbs have gotten a bad reputation through various fad diets, they are absolutely essential for your body to function.

What is the difference between good carbs and bad carbs? There are two basic categories of carbs: simple carbs and complex carbs.

Simple carbs are those that are in their simplest form, either single glucose molecules or very short chains of glucose (think white bread, pastries, white sugar, and candy). Because they are in this basic form, enzymes in your body break them down very quickly into glucose. This leads to a quick rise in blood sugar (which is something you want to avoid). This also means the glucose will be converted into its storage form – fat. This is why these are described as "bad carbs".

Complex carbs on the other hand are longer, branched chains of glucose, making them more resilient to breaking down, and releasing sugars at a slower rate. This is a good thing for overall health (eg. reduces likelihood of getting diabetes) and good for weight management (much less likely to be converted into fat). Complex carbs are found in nutritious foods such as whole grains and vegetables, making them the "good carbs".

## What are refined carbs?

There is a refining process that breaks carbs down into a more "convenient" form for use in the food industry. For example, whole grains such as wheat are ground and pulverized into flours. This is used in pasta, breads and pastries. Unfortunately, when compared to the intact whole grain, flours are very easily digested into sugars. The mechanical processes that broke down the whole grain take the place of the digestive processes in our body that would have normally broken it down slowly – which is what we want.

## How much does a person need daily?

When it comes to counting grams of carbs required in a day, there is not a simple way of determining your requirements. It varies depending on the number of total calories your body needs in a day, and the percentage of carbs recommended in a diet plan. Unfortunately, it is difficult to say how much each person needs in a day. The easiest rule to follow is to remember to restrict your simple carbs intake and have plenty of vegetables and moderate amounts of whole grains. These will give your body the fuel it needs to run, without leading to weight gain and future health problems.