Carbohydrate 101

What is a carbohydrate?

Carbohydrates are one of three macronutrients: carbohydrate, protein and fat. They contain carbon, hydrogen and oxygen atoms. Carbohydrates provide most of the energy needed in our daily lives, both for normal body functions such as heartbeat, breathing and digestion and for physical activity and exercise.

Which foods contain carbohyrates?

• Grains and grain products
• Fruits
• Vegetables
• Beans and legumes
• Dairy products
• Sugars

Do I need carbs?

High-carbohydrate foods are the best and sometimes only food sources of many essential nutrients, including:
• Fiber
• Vitamins C & E
• The majority of B vitamins
• Carotenoids and other beneficial phytochemicals
• Potassium
• The majority of trace minerals
A diet that is low in or deficient in any of these nutrients leads to many health problems, including increased risk for osteoporosis, high blood pressure and heart disease.

Are high-carbohydrate diets fattening?

Not necessarily. Obesity is uncommon in Asia where most people eat a very-high-carbohydrate diet. But not all high-carbohydrate foods are created equal. Some, such as whole grains, potatoes, fruits and vegetables, actually help you eat fewer calories without hunger.

What should I eat if I want to lose weight?

You should eat more fruits and vegetables, especially nonstarchy vegetables like lettuce, broccoli, tomatoes and spinach. You should also try to eat grains that are in a more whole, unprocessed state like the ones listed in the "skinny" carb list. Get 2-3 servings of nonfat milk or yogurt for calcium. Choose high-protein foods that are good for your heart, like beans, nuts, fish and white poultry without the skin. If you eat meat, choose lean cuts and limit portions to 3 ounces or less. Cook and eat with minimal fat.

Not All Carbs Are Equal

Take a look at our lists below. The numbers show how many calories each food contains per pound so you can compare them for calorie density. Nonstarchy vegetables, such as lettuce, tomatoes and carrots, are the lowest in calories while foods that contain fat are the highest.

"Skinny" Carbohydrates:

Vegetables, nonstarchy	195
Fruits	135-425
Skim milk	158
Hot cereals, cooked	242-281
Brown rice, cooked	488
Potatoes, yams	494
Barley, cooked	557
Whole-wheat spaghetti	562
Beans, boiled	576

Calorie-Dense Foods:

These include foods that are high in sugar, refined grains and/or fat.

Ice cream	1,283
French fries	1,400
Cake with frosting	1,544
Pretzels	1,700
Sweetened dry cereal	1,701
Cheesecake	1,733
Baked potato chips	1,760
Doughnut	1,800
Brownies, cookies	2,000
Chocolate candy bar	2,163
Chips, crackers	2,450