

Proteins, Carbohydrates & Fats: Macronutrients Decoded

Macronutrients are the nutrients that should make up the largest proportion of your diet. This category of nutrients includes: carbohydrates, protein, and fat.

Your body uses macronutrients for energy, growth, and repair. Different kinds of macronutrients do different things for your body, so it is important to get variety in your daily diet.

Carbohydrates

Carbohydrates are broken down by the digestive system into simple sugars. These sugars are taken to the bloodstream and then delivered to cells in your body with the help of a hormone called insulin. In the cells, these sugars provide energy to your body.

Carbohydrates come in two forms: **simple** and **complex**.

Simple carbohydrates are sugars that do not need to be broken down further, so the body can use them for quick boosts of energy. Honey, maple syrup, soda, cookies, candy, table sugar and cakes are all sources of simple sugars, but since they are also high in calories, they should only be eaten occasionally. Instead, it is important to eat healthy sources of simple sugars, like fruit and fat-free or low-fat milk. These alternatives to sugary sweets offer vitamins, minerals and fiber as well.

Complex carbohydrates are larger, are digested more slowly, and provide longer-lasting energy. Foods like bread, pasta, rice, oatmeal, corn, and starchy vegetables (like potatoes and carrots) contain the highest amounts. Sources you should choose most often are vegetables, beans and whole-grain, high-fiber breads and cereals.

Protein

Protein is what makes up bodily tissues, like the muscles, skin, and organs. When you eat food containing protein, your digestive system breaks it down into smaller parts called amino acids. These amino acids are later used by the body to build and repair cells and tissues.

The two main sources of protein are animal products like meat, milk, fish, and eggs and vegetable products like beans, nuts, seeds, and soy. To make sure you get all the essential amino acids, it's important to eat a wide variety of these protein-rich foods such as lean meats, fish, fat-free and low-fat dairy products, eggs, nuts, seed, and beans.

("Fat" on next page)

Fat

Surprise! Some fat is good for you. Your body needs it for proper brain development and to absorb certain vitamins.

There are two main types of fat: **saturated** and **unsaturated**.

Unsaturated fat is found in fish like salmon and tuna, nuts, seeds, avocados, and most vegetable oils. Most of the fat you eat should come from these foods.

Saturated fat may increase your risk of heart disease, so it is important to limit the amount you consume. It is found in foods that come from animals like red meat, butter, cheese, milk (except fat-free), and ice cream. Coconut and palm oils are also high in saturated fat and can be found in many store-bought baked goods.

Trans fat also can raise the risk of heart disease. Trans fat is formed when liquid vegetable oils go through a chemical process called hydrogenation, which makes the oils more solid.¹ Most foods will list the amount of *trans* fat on nutrition labels, so when eating packaged foods, try to pick foods labeled 0g *trans* fat per serving. Eating a diet rich in fruits, vegetables, whole-grain foods and fat-free and low-fat dairy will help limit the amount of saturated and trans fats you eat.

¹ <http://www.americanheart.org/presenter.jhtml?identifier=4776>