

SUGAR

What is sugar?

Sugar is the generalized name for sweet, short-chain, soluble carbohydrates, many of which are used in food.

What is a carbohydrate?

Carbohydrates are the sugars, starches and fibers found in fruits, grains, vegetables and milk products.

What is starch?

It is the most common carbohydrate in human diets and is contained in large amounts in staple foods such as potatoes, wheat, maize (corn), rice, and cassava.

What is cellulose?

Cellulose is a long chain of linked sugar molecules that gives fibre its remarkable strength. It is very difficult for most mammals to digest.

Why are they important?

They are a source of energy for your cells. Glucose is the basic fuel for cellular respiration. Sugar is not the only source of glucose.

What are the advantages?

They are a guick supply of energy for the normal function of a cell. They are inexpensive. They taste good.

What are the disadvantages?

If they are the primary source of energy, the duration of energy they supply is shorter than for proteins or fats. There is no such thing as an essential carbohydrate.

4 March 2015 | Geneva - A new WHO guideline recommends adults and children reduce their daily intake of free sugars to less than 10% of their total energy intake. A further reduction to below 5% or roughly 25 grams (6 teaspoons) per day would provide additional health benefits. There are 16 calories in a teaspoon of sugar.

The amount of calories men require each day varies based on their age and activity level. Calorie recommendations decrease with age. The U.S. Department of Agriculture recommends men consume 2,000 to 2,600 calories if they're sedentary, 2,200 to 2,800 calories if they're moderately active and 2,400 to 3,000 calories per day if they are active.

What is the link to Type II diabetes?

The intake of simple sugars causes a rise in blood glucose levels. The body secretes insulin to lower glucose levels and convert the sugar to fat. Very often there is a sugar 'low' about 60-90 minutes following a sugar intake as levels dip below normal. In a normal situation the body would then maintain normal blood glucose levels by converting fat to glucose in a process called 'gluconeogenesis'. However, as intake of sugars becomes more consistent, The body must secrete higher and higher levels of insulin to lower the blood glucose. Then as blood glucose levels drop and the body needs energy, it attempts to recover fat. The insulin is wanting the body to make fat. So, with blood glucose levels dropping, the brain tells you to eat something. Something for fast energy. And so the cycle begins again. Eventually, the pancreas cannot keep up with running constantly and so begins to fail. Blood sugars remain high and people are diagnosed with diabetes.

What other health issues?

Heart disease. Kidney disease. Macular degeneration. Cancer.