

SUGAR AND ITS VALUE FOR A HUMAN BODY

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We consume sugar every day, but not all of us are aware of the influence, both positive and negative, it has on a human body and health. So, in this report we will shed the light on this and make it clearer.

Sugar is the generalized name for sweet, short-chain, soluble carbohydrates, many of which are used in food. These carbohydrates are composed of carbon, hydrogen, and oxygen. There are various types of sugar derived from different sources. Simple sugars are called monosaccharides and include glucose (also known as dextrose), fructose and galactose. Other disaccharides include maltose and lactose. Longer chains of sugars are called oligosaccharides. Chemically-different substances may also have a sweet taste, but are not classified as sugars. Some are used as lower-calorie food substitutes for sugar described as artificial sweeteners.

Sugars are found in the tissues of most plants, but not all are suitable for consumption. Firstly, sugar was produced exclusively from sugar cane stalks which contain great quantity of sweet juice. Later it was learnt how to extract sugar from sugar beets. Currently 40% of all sugar in the world is produced from beets and 60% is produced from sugarcane.

Sugar cane is grown in many countries, which together produce a harvest of 1.32 billion tons (6 times more than sugar beet). In 2005, the largest producer in the world was certainly Brazil. Thick stalk saves a lot of energy in the form of sucrose in juice, which is quite easy to separate by evaporating water. Cane sugar contains 85-98% sucrose and less calories than sugar beet.

Sugar beet, a cultivated variety of *Beta vulgaris*, is grown as a root crop in cooler climates and became a major source of sugar in the 19th century when methods for extracting the sugar became available. Sugar beet was the result of intensive work of breeders in 1747. Most sugar beet is grown in China, Ukraine, Russia, France, USA.

The average person consumes about 24 kilograms (53 lb) of sugar each year (33.1 kg in industrialized countries), equivalent to over 260 food calories per person, per day.

Since the end of twentieth century, it has been questioned whether a diet enriched with sugars, especially refined sugars, is good for human health. As it is already known, sugar is just highly refined carbohydrate.

Excessive consumption of sugar strongly influences the human health in the number of cardiovascular diseases. Furthermore it is addictive. Also, sugar contributes to the premature aging of the skin and impairs its properties, which leads to loss of elasticity, appearance of acne, facial colour changes, etc. And worst of all, the sugar reduces the strength of the immune system in 17 times!

For a person in order to avoid health problems, it is better to reduce the quantity of sugar in the diet. Consequently, The World Health Organization recommends limiting daily intake of sugar to 5% of the calories consumed (approximately 6 teaspoons of sugar – 30 grams). Removing all 100% of sugar from the diet doesn't work, as sugar in small doses, is needed by the human body to function properly.

To sum up all said above about sugar properties and its importance in a diet, we can conclude that if we consume sugar in reasonable quantities, it won't be harmful but beneficial for our health.

References

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