

Structure, Terminology, Role and Key Functions of Carbohydrates

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INTRODUCTION

Carbohydrates are found in a variety of healthy and unhealthy foods: bread, beans, milk, popcorn, potatoes, cookies, spaghetti, soft pasta, beverages, Corn Cake and Cherries. They are also available in different shapes. The most common and most abundant forms are sugar, fibre and starch. Foods rich in carbohydrates are an important part of a healthy body Food. More importantly, they provide energy for most obvious functions of our body, like movement or thinking, but also "behind the scenes" functions that most of the time we don't even notice. During digestion, carbohydrates that consist of more than one sugar are broken down into monosaccharides by digestive enzymes and then absorbed directly, causes a blood sugar reaction.

DESCRIPTION

The body uses glucose directly as a source of energy in muscles, brain and other cells. Some carbohydrates cannot be broken down and are fermented or transferred by our gut bacteria Intestine unchanged. Carbohydrates provide the energy needed to carry out important bodily functions and stay active. Only some carbohydrate sources are nutritious, as refined carbohydrates lack important health elements such as vitamins, fibre and minerals. These nutrients are essential for proper functioning the function of our body because they contain hydrogen, carbon and oxygen that make up our body. During digestion, glucose is released from carbohydrates and transported to various organs *via* the blood. Organ cells turn carbohydrates into energy. For your daily energy intake, eat foods like vegetables, pasta, bread, and whole grains. This essential nutrient comes in two forms: complex carbohydrates and simple carbohydrates. Consuming carbohydrates with a low glycaemic index is important to prevent heart disease and stay healthy. Our bodies require approximately 225-325 grams of carbohydrates to function optimally, and this can be achieved through a 2,000 calorie diet. Carbohydrates, also called carbohydrates, are indispensable in every phase of life. They are the main source of energy for the body and the preferred source of energy for the brain. Carbohydrates are broken down by the body into glucose, a type of sugar. Glucose is used as fuel by the body's cells, tissues and organs. When the body is not getting enough carbohydrates, it looks for another

source of energy, breaking down proteins in muscle and fat tissue to use as energy. Glucose is important for the brain, which cannot easily utilize other fuels Energy sources such as fat or protein. Although carbohydrates are best known for providing energy, some carbohydrates may also support digestive health. The micro biome is the vast collection of microorganisms that live on and in it your body, primarily in the digestive tract or intestines. Many microbes in the gut are healthy bacteria that support immune and digestive health. The term is most commonly used in biochemistry as a synonym for saccharide (from Ancient Greek ο (sákkharon)'sugar, a group that includes sugars, starch, and cellulose. Monosaccharides, disaccharides, oligosaccharides, and polysaccharides are the four chemical groups of saccharides. The smallest (lower molecular weight) carbohydrates, monosaccharides and disaccharides, are usually referred to as sugars. While carbohydrate nomenclature is complicated, the names of monosaccharides and disaccharides frequently end in the suffix -ose, which was derived from the word carbohydrates (from Ancient Greek (gleûkos) 'wine, must') and is now used for almost all sugars, including fructose (fruit sugar), sucrose (cane or beet sugar), ribose, and lactose (milk sugar) [14].

CONCLUSION

Carbohydrates play a variety of roles in living organisms. Polysaccharides are both energy stores (such as starch and glycogen) and structural components (e.g. cellulose in plants and chitin in arthropods). The 5-carbon monosaccharide ribose is an aspect of coenzymes (such as ATP, FAD, and NAD) as well as the backbone of the genetic molecule RNA.

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CONFLICT OF INTEREST

The authors declare that they have no competing interests.

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