## Carbohydrates (sugars)

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## What are sugars?

 Regular sugar (the one commonly added to food) is called sucrose. Fructose is the sugar that is in fruits. As chemicals, sucrose and fructose are both made by two smaller sugars (they are disaccharides). Glucose is the more common of these smaller sugars (monosaccharides). The human body changes regular sugar into the smaller sugars.



- Glucose is a simple carbohydrate, or sugar. It is one of several kinds of sugars. It is important because <u>cells</u> in an <u>organism</u> use it as a source of the cellular respiration, which is done inside the cells of a living organism.
- Glucose is made by <u>plants</u> in a process called <u>photosynthesis</u>. It can also be made by animals in their liver or kidneys.
- People that do not have enough glucose have low blood sugar levels. This is a health condition called <u>hypoglycemia</u>People that do not have enough glucose have low blood sugar levels. This is a health condition called hypoglycemia. People with too much glucose have <u>hyperglycemia</u>People that do not have enough glucose have low blood sugar levels. This is a health condition called



#### Lactose

Lactose is a disaccharide that consists of galactose and glucose molecules. Lactose makes up around 2-8% of the solids in milk. The name comes from the Latin word for milk, plus the -ose ending used to name sugars. Lactose is found in milk products. Infant mammals mammals are fed on by milk from their mothers. To digest it an <u>enzyme</u>mammals are fed on by milk from their mothers. To digest it an enzyme called actasemammals are fed on by milk

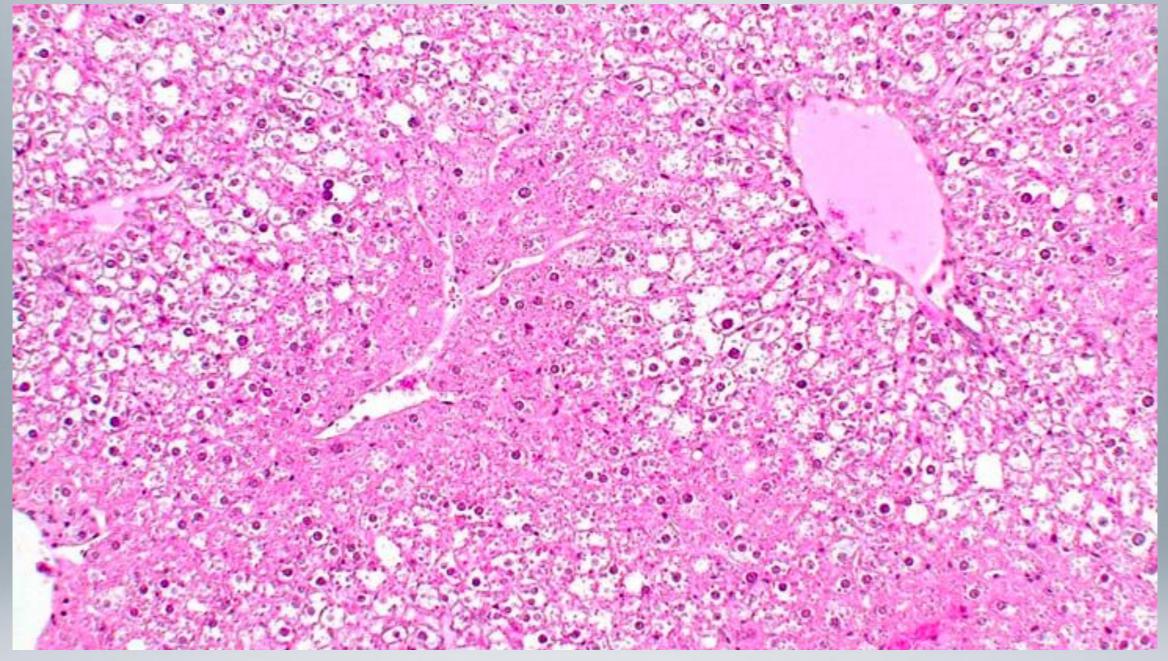


## Cellulose

Cellulose is made from a form of glucose and makes up most of the <u>cell wall</u> of plant cells. It is not <u>digestible</u> by humans.

## Starch





**Glycogen** It is a polysaccharide that is the principal storage form of <u>glucose</u> in animal <u>cells</u>. Glycogen is found in the form of granules in the cytosol in many cell types, and plays an important role in the glucose cycle. Glycogen forms an energy reserve that can be quickly mobilized to meet a sudden need for glucose, but one that is less compact than the energy reserves of triglycerides.

# Thanks for your attention!