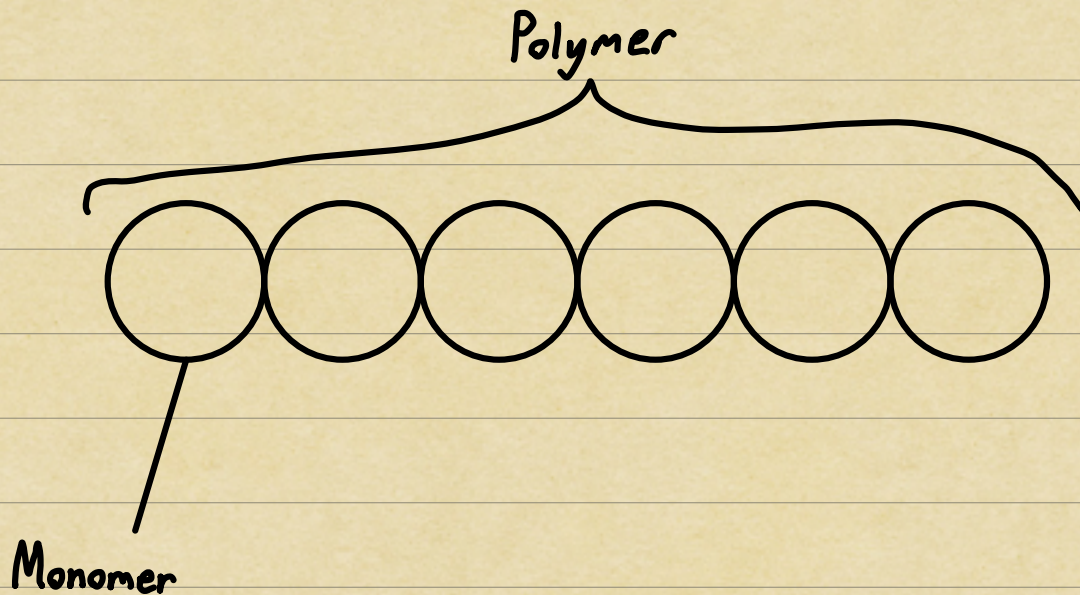


Carbohydrates

(Muhammad Moosa)



- The smallest subunit is called a monomer.
- Several monomers = polymer
- Polymers characterized by a specific structure owing to the chemical bonds formed.
- Structures related to the function of the compound.

Elements in Carbohydrates :

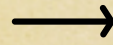
Oxygen

Carbon

Hydrogen

Structural Composition :

Monomer = Monosaccharide



- Simple sugar
- Soluble
- Sweet

Glucose

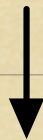
Galactose

Fructose

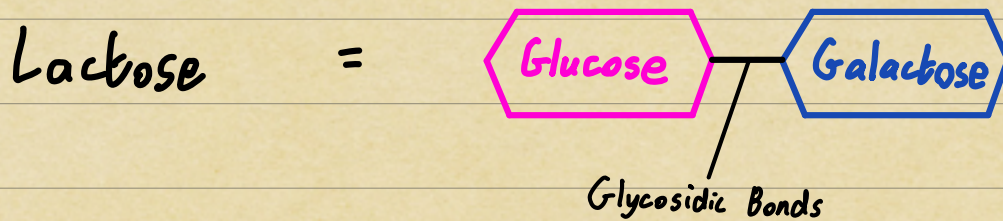
2 Monosaccharides = disaccharide



Lots of Monosaccharides
= Polysaccharide

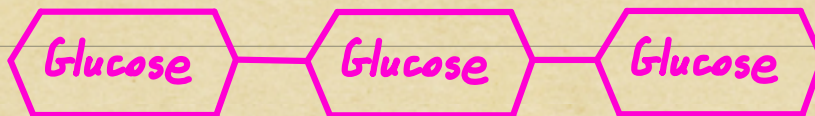


Types of Disaccharides

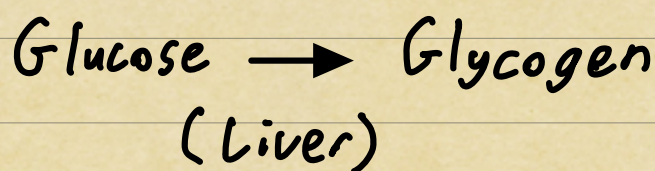


Examples of Polysaccharides

Starch :



Glycogen :



Cellulose :

Found in plants

Role of Carbohydrates :

- Energy storage and substrate for energy production.
 $1\text{ g} = 17\text{ kJ}$
- Main source of fuel for cellular respiration.
- Source of reserve energy.

Carbs in food :

