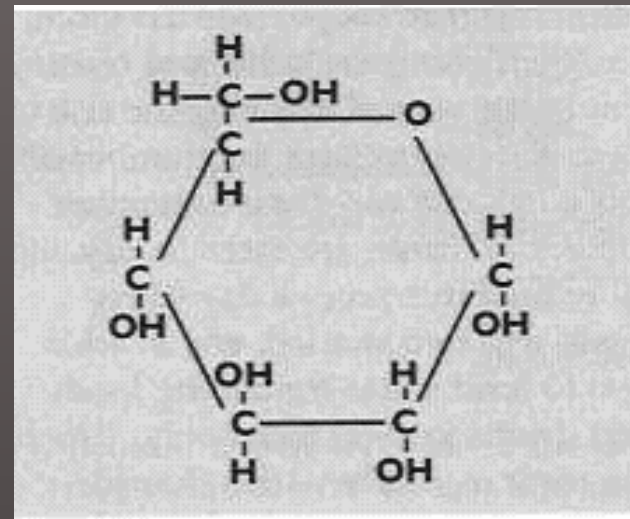


# Carbohydrates



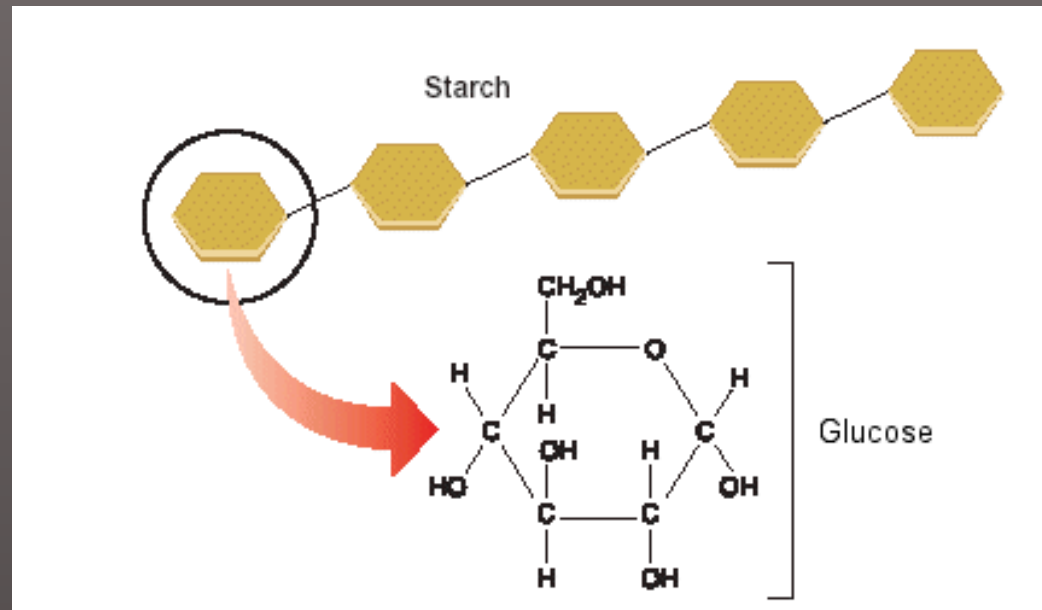
# Biological Molecules

- Carbohydrates
  - also know as:  
SUGAR and STARCH
- A) Structure:
  - 1) made of
    - Carbon
    - Hydrogen
    - Oxygen

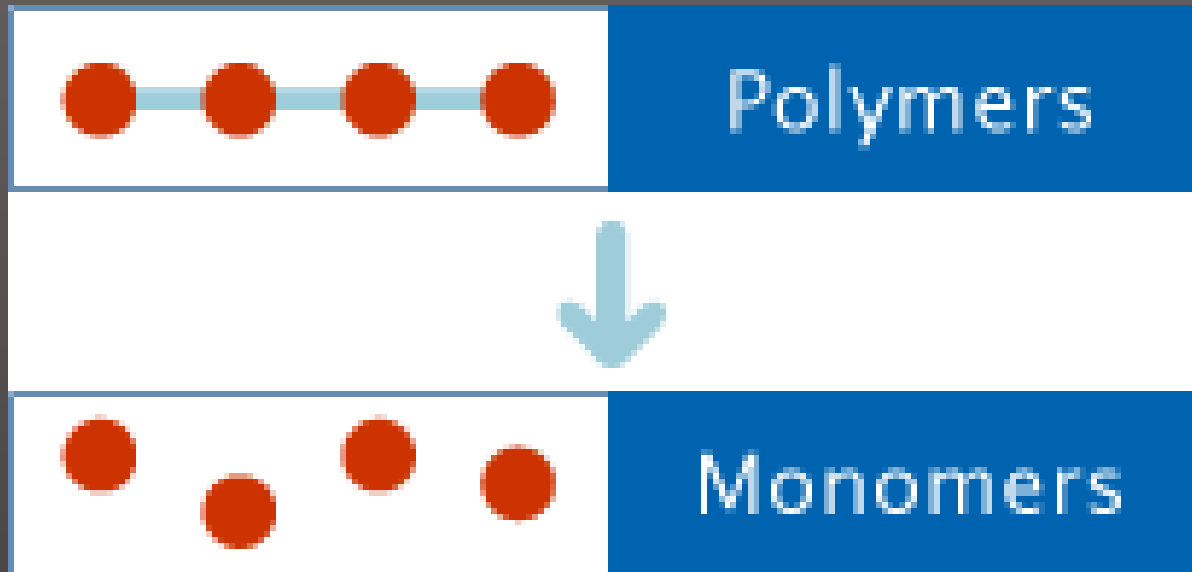


# Biological Molecules

- 2) Monomers are **MONOSACCHARIDES**
  - example: Glucose, fructose
- 3) polymers are **POLYSACCHARIDES**
  - example: Starch, Cellulose



- **Polymers:** Large compounds made up of identical or nearly identical repeating subunits
- **Monomers:** the subunits of a polymer

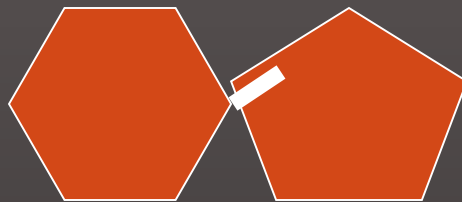


# Disaccharides

two

sugar

- Two monosaccharides joined together by dehydration synthesis ( $H_2O$  is pulled out)
- Glucose + Fructose = Sucrose (table sugar)
- Glucose + Galactose = lactose (milk sugar)
- Glucose + Glucose = maltose (malt sugar)

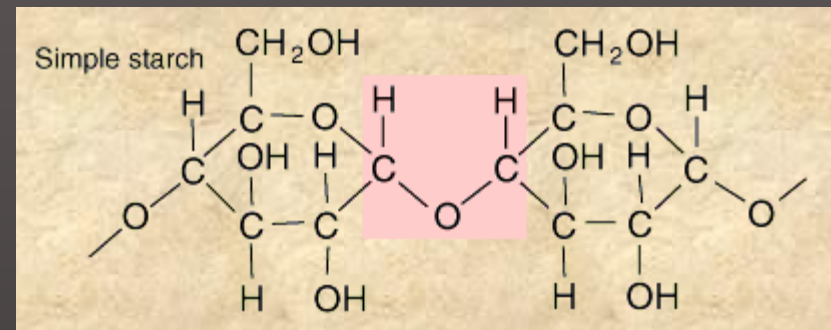
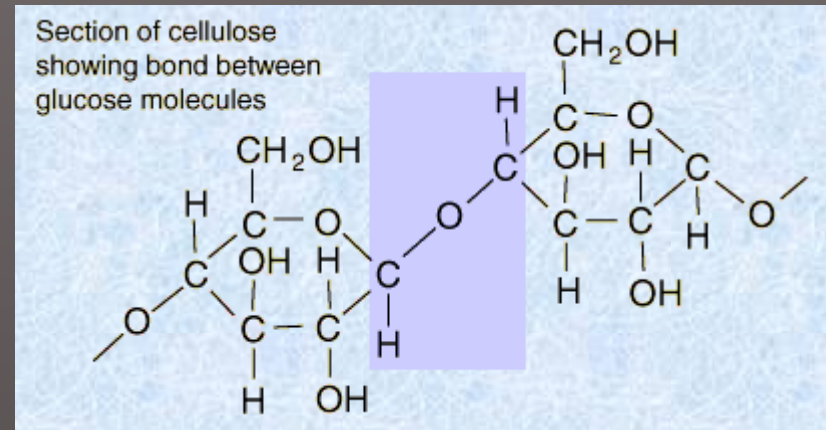


# Biological Molecules

- B) Functions:

- 1) Quick energy.

- (this is why you get hyper after eating a candy bar)
    - a) plants store a polysaccharide called **CELLULOSE**
    - b) animals store a polysaccharide called **GLYCOGEN**





# Biological Molecules

- B) Functions:
  - 2) used for structure
    - Cellulose is used to give plants their shape
    - Human's can't digest cellulose
      - That's why a lot of plants look the same coming out as they did going in...gross

# Biological Molecules

- C) Sources:
  - When you eat too much sugar from any source it gets changed by the body into FAT

