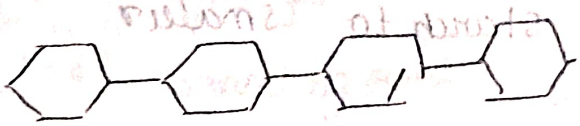
Starch.

→ reserve Carbohydrate of plant kingdom.

→ 2. parts.

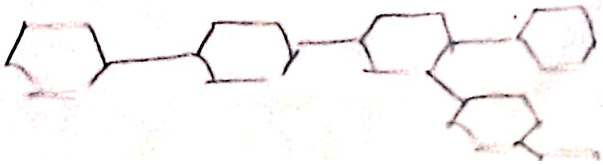
(1) Amylose.

- soluble part of starch
- linear polymers of glucose residues linked by α (1-4) linkage.



(2) Amylopectine.

- Insoluble part.
- highly branched.
- linear chain is linked by α (1-4) with glucose residues.
- The branching points are made by α (1-6). linkages with glucose residues.



Homoglycans.

Name.	Monomer	linkages.
glycogen	D-glucose	α 1-4 α 1-6 branc
starch.		
amylopectin	D-glucose.	α 1-4 α 1-6 branche
amylose.	D-glucose.	α 1-4.
cellulose	D-glucose.	β (1-4)
Chitin.	N-acetyl-D-glucosamine	β (1-4)
Inulin	D-fructose	β (1-2)
Dextrans.		1-4 1-6 1-3.

hydrolysis of starch.

- Starch + Iodine → Blue complex.
- colour disappears on heating and reappears on cooling
- Sensitive test for starch.
- Starch is non reducing.

Mild acid hydrolyses starch to smaller fragments.

Amylodextrin
↓
Erythrodextrin.
↓
achrodextrins.
↓
Maltose (No colour with Iodine, reducing)

20/9/23.

⇒ Salivary and pancreatic amylases are alpha amylases.

⇒ they split starch into dextrins and finally into α-maltose.

→ polysaccharides?