

Biochem Lect (14)

Polysaccharides

Glycogen branched homopolysaccharide of glucose

- $\alpha 1 \rightarrow 4$
- Branch pts $\alpha 1 \rightarrow 6$
- 8-12 residues (more branched than amylopectin)
- Mol. wt = several millions
- Storage polysaccharide in animals

Starch mixture of 2 homopolysaccharides of glucose

Amylose unbranched $\alpha 1 \rightarrow 4$

Amylopectin ($\alpha 1-6$) branched 94-100 residues

molecular wt = 90 million

- Storage polysaccharide in plants

Metabolism of glycogen & Starch

- Found in cells as granules which contain enzymes that synthesize & degrade these polymers.
- Glycogen & Starch $\rightarrow$ 1 reducing end $\rightarrow$ many nonreducing ends
- Enzymatic processing in many non-reducing ends simultaneously