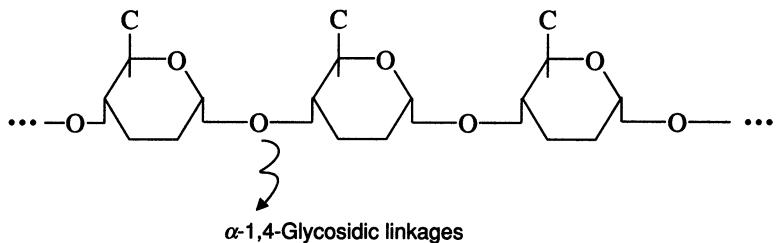


Lactose is found in milk and whey, while sucrose is the major sugar in photosynthetic plants. Whey utilization remains an important biotechnological challenge, and sucrose is often a major component in artificial growth media.

Polysaccharides are formed by the condensation of more than two monosaccharides by glycosidic bonds. The polysaccharide processing industry makes extensive use of enzymatic processing and biochemical engineering.

Amylose is a straight chain of glucose molecules linked by α -1,4 glycosidic linkages. The molecular weight (MW) of amylose is between several thousand and one-half million daltons.



Amylose is water insoluble and constitutes about 20% of starch.

Amylopectin is a branched chain of D-glucose molecules. Branching occurs between the glycosidic—OH of one chain and the —6 carbon of another glucose, which is called α -1,6 glycosidic linkage.