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Reserve Polysaccharides; 2.12 Characterization of Fructans; 2.12.1 Isolation and Polymer Characterization
2.12.2 Structural Characterization by Methylation, Acetylation, Controlled Fragmentation and Chromatographic Fragment Analysis2.13 Characterization of Starches; 2.13.1 Characterization of Starch Granules; 2.13.2 Molecular Characterization of Starch Glucans; 2.13.3 Size Exclusion Chromatography of Starch Glucans; 2.14 Characterization of Proteins; 2.14.1 Characterization of Plant Proteins; 2.14.2 Characterization of Animal Proteins; 2.14.3 Characterization of Single Cell Proteins; 2.15 Concluding Remarks; 2.16 List of Abbreviations; References
Chapter 3 Cellulose and Its Derivatives in Medical Use3.1 Introduction; 3.2 Chemistry of Cellulose and Its Derivatives; 3.2.1 Chemical Structure of Cellulose; 3.2.2 Microcrystalline and Regenerated Celluloses; 3.2.3 Cellulose Ethers and Esters; 3.2.4 Other Cellulose Derivatives; 3.3 Cellulosic Membranes; 3.3.1 Outline of Membrane Separation; 3.3.2 Cellulosic Membranes in Hemodialysis and Related Technologies; 3.3.3 History of Hemodialysis; 3.3.4 Cellulosic Hollow Fibers; 3.3.5 Recent Developments in Hemodialysis Membranes; 3.3.6 Recently Developed Cellulosic Hemodialysis Membranes
3.3.7 Removal of Pathogens with Cellulosic Membranes3.4 Cellulosics in Chromatography and Related Technologies; 3.4.1 Cellulose-Based Chromatography Gels to Separate Biomaterial; 3.4.2 Adsorbents for Hemoadsorption; 3.4.3 Chromatographic Chiral Separation; 3.5 Cellulosics in Pharmaceutical Formulations; 3.6 Other Medical Applications of Cellulosics; 3.7 Concluding Remarks; 3.8 List of Abbreviations; References; Chapter 4 Xylan and Xylan Derivatives - Basis of Functional Polymers for the Future; 4.1 Introduction; 4.2 Occurrence and Structural Diversity of Xylans
4.3 Resources and Isolation of Xylans

Sommario/riassunto

Covers polysaccharides and other important biomacromolecules, detailing their source, production, structures, properties, and current and potential application in biotechnology and medicine.