

CONTENTS

STARCH

Starch Granule Structure	1
Extrusion Processing of Starch	37
Starch Hydrolyzing Enzymes	65

METHODOLOGY

Characterization of Starch Networks by Small Strain Dynamic Rheometry	87
Thermal Analysis of Carbohydrates as Illustrated by Aqueous Starch Systems	137
Nuclear Magnetic Resonance Analysis of Cereal Carbohydrates	163
Chromatographic Technologies for Macromolecular	193
High-Performance Liquid Chromatography of Cereal-Derived Carbohydrates	239

NON-STARCH POLYSACCHARIDES

Structure, Biosynthesis and Uses of Non-Starch Polysaccharides: Dextran, Alternan, Pullulan, and Algin	261
Aspects of the Chemistry and Nutritional Effects of Non-Starch Polysaccharides of Cereal	293

APPLICATIONS

Structure and Functionality of Carbohydrate Hydrocolloids in Food Systems	315
Carbohydrates Used as Fat Replacers	343
Non-Food Uses of Starch	371