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Sommario/riassunto	Natural gums are polysaccharides consisting of multiple sugar units linked together via glycosidic linkages. Most natural gums reveal appropriate safety for oral consumption in the form of food additives or

drug carriers. Challenges related to the utilization of natural polysaccharides, however, include uncontrolled rates of hydration, pH dependent solubility, viscosity reduction during storage, and weak interfacial properties. Modification provides an efficient route for not only removing such drawbacks but also improving physicochemical properties, such as solubility, viscosity and swelling index, and introducing new properties for varied applications. This book provides a comprehensive review of the various modifications on gums to make them suitable for food, cosmetic and pharmaceutical industries. The book is divided in four parts: an introduction to natural gums followed by in-depth coverage of chemical modification, physical modification, and enzymatic modification of gums. Each chapter includes reaction mechanisms, physicochemical properties, rheological properties, interfacial properties, applications and future perspectives. Presenting a succinct account on gum modification from a practical point of view, this book is a helpful reference for academic and industrial scientists and engineers in food technology, materials chemistry, pharmaceuticals, chemical, industrial, and applied engineering, biochemistry, and biopolymers.

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