addition to collagen-based polymers, other natural, absorbable polymers have been used for many pharmaceutical and biomedical applications for several decades. Of these polymers, the application of chitosan- and hyaluronic acid-based polymers has received a great deal of attention in the past 15 years for use in controlled drug delivery systems, tissue repair, tissue engineering, and controlling certain biological events.

Interest in synthetic absorbable polymers has grown considerably over the last three decades, principally because of their transient nature when used as biochemical implants or drug carriers. Recently, however, investigators have revived interest in naturally derived polymers. The genesis of absorbable polymers was driven by the need to replace the highly tissue-reactive, absorbable, collagen-based sutures with synthetic polymers, which elicit milder tissue response.

Technology of absorbable/biodegradable polymers (A/BP) has evolved in two independent areas. The evolution of natural polymers took place through chain modification of existing materials using chemical means or modulating the biosynthetic functional properties. On the other hand, the evolution of synthetic A/BP has been achieved through modulating their chemical composition using several polymerisation techniques and, to a lesser extent, chemical modification of presynthesized polymers.

Absorbable and Biodegradable Polymers integrates recent developments in both areas of research to form a coherent source of diverse but interrelated information. After an introduction, the book describes evolutionary materials development, processing methods, characterization and evaluation techniques and applications.

In concert with this theme, the book begins with an introduction (Section A). The Section B deals with the development and application of new systems. Section C pertains to development in preparative, processing, and evaluation methods. The last section addresses growing and newly sought applications.

The comprehensive nature of the chapters and their extensive biographies will make this volume a valuable source well suited for use by students, industrialists, and educators with interest in development and/or investigation of A/BP for use in pharmaceutical and biomedical applications.

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Richard Owusu-apenten, editor. Introduction to Food Chemistry (2005, CRC Press, Florida, USA) (249 pp., $24.99, ISBN 0-8493-1724-X)

Chemistry is the study of the composition, structure, and properties of materials and the changes that these undergo. Inserting the word food before materials leads to a reasonable definition for food chemistry. In other words, food chemistry is the study of composition, structure, and properties of food materials and the changes that these undergo. In this way, food chemistry is the application of chemistry principles to the food system, including agricultural production, storage, transportation, processing, distribution, retail, and consumption.

Food chemistry emerged as a discipline after World War II. The mission statement for food chemistry is to ensure a supply of food, which is nutritious, safe, and affordable, with due regard for the environment. This mission is shared by the other food sciences including food microbiology, food processing, food engineering, and food law. There is an emphasis on the chemistry of food components, including macro constituents (water, carbohydrates, lipids and proteins), micro constituents (for example, flavours, vitamins, minerals, sweeteners, general additives), and their interactions.

It is only through the proper use of statistical methods that we obtain reliable data and make substantive progress. Thus Chapters 2 and 3 are devoted to food analysis and statistical analysis. Chapters 4–6 cover most of the conventional topics in food chemistry (e.g. carbohydrates, lipids, proteins, enzymes). The seventh and eighth chapter present material science and rheology, concepts that are being applied increasingly to foods. Chapters 9 and 10 consider chemical processes leading to food spoilage. Finally, chapters 11 and 12 deal with enzyme and biological chemistry of deteriorative processes, such as ripening and senescence.

After completing this book the reader will have learned a great many new facts intended to increase their knowledge of food chemistry. By emphasizing general principles, this book will facilitate an understanding of concepts. Though not adopting a commodities approach, it provides pertinent examples of areas of application for the concepts discussed. The book will be suitable as a basis for courses in food science with emphasis on food chemistry. Material from some parts of the book could be useful for nutrition majors. Another aim of this book is to help the reader proceed to more specialist monographs and research articles. Members of the food professions will also benefit from reading this book.

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