

provide a wealth of information on dehydration of specific foodstuffs, in particular vegetables and fruits. It is likely to find its way into libraries in institutions where food science and technology, postharvest technology, agriculture and horticulture are taught. It should be of

interest to agricultural and food research organisations throughout the world. This updated edition is a very useful contribution to the literature on the important subject of food dehydration.

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***Food Chemistry*; 2nd ed.; H.-D. Belitz and W. Grosch; Springer-Verlag, 1999. 992+ xlviii pages, ISBN 3-540-64704-X (hardcover) £76; 3-540-64692-2 (softcover) £37.50**

This textbook is the English translation of the fourth German edition published in 1992. Since the publication of the first English edition in 1987, this book has become widely used and highly respected. It is, therefore, very pleasing to see this second, and significantly revised, edition.

This is a substantial, detailed and comprehensive volume with a style which makes it easy to use as a reference book. It provides substantially more detail on the chemistry and biochemistry of food constituents and their interactions than currently available in other food science and food chemistry textbooks. However, its content is not confined to the chemical and biochemical components of foods, and the application of these sciences in the production, processing and storage of all the main food commodities is also discussed in detail.

The book contains 24 chapters, including one additional, short chapter on drinking water that did not appear in the first English edition. The first 10 chapters, comprising more than half the pages, deal with the chemistry and biochemistry of food constituents under the following headings: Water (7 pages), Amino Acids, Peptides, Proteins (84), Enzymes (60), Lipids (85), Carbohydrates (82), Aroma Substances (59), Vitamins (17), Minerals (7), Food Additives (38), Food Contamination (30). The remaining chapters are concerned with food commodities: Milk and Dairy Products (43 pages), Eggs (14), Meat (54), Fish, Crustaceans, Molluscs (21), Edible Fats and Oils (29), Cereals and Cereal Products (62), Legumes (23), Fruits and Fruit Products (53), Sugars, Sugar Alcohols, Honey (28), Alcoholic Beverages (45), Coffee, Tea, Cocoa (31), Spices, Salt and Vinegar (12), Drinking Water, Mineral and Table Water (3). There are approximately 450 tables, 340 figures and 1000 chemical formulae and equations. The book has a comprehensive

index (71 pages) and a substantial table of contents (31 pages). Each chapter is very well referenced and a significant number of new references have been added since the previous edition. Each of the chapters dealing with commodities has one or more tables giving statistics of world production for that group of commodities in 1996. These data are more up-to-date than that provided in the most recent German edition of the text.

The style, layout and logical presentation are similar to the previous edition. However, this new edition contains over 200 more pages than the first English edition. While all chapters have been revised and updated to some extent, new sections have been added to some chapters. Examples of these additions include: phase transitions in foods containing water, the properties of proteins associated with the formation of gels, foams and emulsions, a more extensive coverage of the Maillard reaction, extended discussion on aroma compounds in foods, more coverage of food analysis, extended sections on baking and on micelle formation in milk. Overall the translator has done an excellent job in making the English text both accurate and easily understood. In such a substantial work there will be some errors but these are relatively few. Chemical formulae are presented in two ways, either in figures with headings, or as numbered formulae within the text, and one small criticism relates to the confusion this can cause. Some of the numbered formulae involve quite substantial reaction pathways covering up to half a page which would have been easier to follow if they had been presented as figures.

This is an excellent book from authors with high international recognition. It is a fitting tribute to Professor H.-D. Belitz who died soon after the publication of the latest German edition on which this translation is based. This book is strongly recommended as a valuable textbook and reference source for advanced students as well as for established food scientists in both industry and academia.

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