

DOCUMENTATION

Review of books

(In this section we publish reviews of the books from which we receive a copy in our library)

Fennemas's Food Chemistry. Fifth Edition.– S. Damodaran and K. L. Parkin.– CRC Press, Taylor & Francis Group, Boca Raton, FL, USA, 2017.– XVI + 1107 pages.– ISBN 978-1-4822-4361-1.

The new edition of this popular textbook appears eleven years after the fourth edition and five years after the death of Prof. Owen R. Fennema. The book maintains the same format that previous editions, and each subject is treated with the same detail as before. The different chapters have been updated and some of them have been written by new authors. Two chapters of the previous edition have been omitted: "Physical and chemical interactions of components in food systems" and "Impact of biotechnology on food supply and quality". Each chapter continues containing numerous tables and figures that help with the study, and includes a list of references and recommended readings.

The book starts with a chapter entitled "Introduction to food chemistry" by O. R. Fennema, S. Damodaran and K. L. Parkin (16 pages, 31 references). The other chapters have been grouped into three sections. The first section, entitled "Major food components" contains the following six chapters: "Water and ice relations in foods" by S. Damodaran (72 pages, 66 references); "Carbohydrates" by K. C. Huber and J. N. BeMiller (79 pages, 95 references); "Lipids" by D. J. McClements and E. A. Decker (63 pages, 95 references); "Amino acids, peptides, and proteins" by S. Damodaran (122 pages, 137 references); "Enzymes" by K. L. Parkin (109 pages, 174 references); and "Dispersed systems. Basic considerations" by T. Van Vliet and P. Walstra (73 pages, 108 references). Section II, entitled "Minor food components" includes the following six chapters: "Vitamins" by J. F. Gregory III (84 pages, 172 references); "Minerals" by D. D. Miller (53 pages, 148 references); "Colorants" by S. J. Schwartz, J. L. Cooperstone, M. J. Cichon, J. H. von Elbe and M. M. Giusti (72 pages, 254 references); "Flavors" by R. C. Lindsay (50 pages, 102 references); "Food additives" by R. C. Lindsay (62 pages, 77 references); and "Bioactive food components. Nutraceuticals and toxicants" by H. Xiao and C.-T. Ho (39 pages, 115 references). Finally, section III is entitled "Food systems" and contains the following three chapters: "Characteristics of milk" by D. S. Home (47 pages, 138 references); "Physiology and chemistry of edible muscle tissues" by G. M. Strasburg and Y. L. Xiong (61 pages, 147 references); and "Postharvest physiology of edible plant tissues" by C. B. Watkins (69 pages, 121 references).

In summary, an updated version of this classic textbook in Food Chemistry that has been employed by numerous students and researchers. This new edition maintains the same spirit that previous editions and will continue being as useful as before for both Food Chemistry courses and those wanting to have a deep introduction to some unknown aspects in Food Chemistry.

F. J. Hidalgo