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Book Review

Industrial Proteins in Perspective—Progress in Biotechnology Vol. 23

W.Y. Aalbersberg, R.J. Hamer, P. Jasperse, H.H.J. de Jong, C.G. de Kruif, P. Walstra, F.A. de Wolf (Eds.); Elsevier Science, Amsterdam, The Netherlands, 2003, 288 pp, ISBN 0-444-51394-9, \$180-00

Proteins have been widely used in industry either in food or non-food applications, for instance casein (e.g. as an adhesive), collagen (e.g. as a tissue replacer), and especially gelatin (e.g. in photographic films). The main source of industrial proteins is agricultural and marine produce, such as wheat, maize, soy, milk, meat, blood and fish. Such proteins are easy to obtain in bulk quantities. Proteins can be broadly classified by their natural functions: chemical activity for example catalysis of reactions (enzymes), building materials for physical structures, which are especially found in the animal kingdom, and storage proteins such as seeds and milk. In industrial applications we are more concerned with the functional properties of proteins, for instance, gelation, foam formation and stabilisation, emulsification, adhesion, film formation, and sensory properties.

Chapters on gluten, gelatin and collagen, casein, and globular proteins, such as whey, egg, soy and potato proteins are provided. A chapter on general aspects of functional properties, such as solubility, texturising, adhesiveness and so on, precedes these more specific chapters. Protein research has resulted in a much better scientific and technological understanding of many phenomena and processes, and will continue to be of great benefit in both food and non-food applications.

This volume focuses on providing examples of industrial applications rather than simply explaining the functions of such proteins, making it of great value to those working in protein research and producers and users of bulk proteins.

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