

vide/freezing technology for ready meals, advances in ohmic heating and moderate electric field processing, radio-frequency heating, supercritical extraction, microwave applications in food processing are discussed in individual chapters.

Mathematical models have become a very useful tool for all branches of science and technology. The issues of modelling systems and impact on food microbiology, predictive microbiology, experimental protocols for modelling the response of microbial populations, and application of artificial intelligence to predictive microbiology are also discussed in the book. The concluding chapter of the book is focussed on the important issue of safety and quality in the food industry.

In conclusion, this volume explores the recent technological innovations and future directions for food processing. This can be excellent source of information to all the persons involved in the development and processing of different food products with increased shelf life. It will not only support research and development but also suitable for teaching.

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J. Bhatia (Ed.), Perinatal Nutrition: Optimizing Infant Health and Development, Marcel Dekker, New York, USA, 2005 (x + 379 pp., £99.00, ISBN 0-8247-5474-3)

Nutrition which includes carbohydrates plays an important role in the health of every human being and is a globally recognised phenomenon. Its importance is much more during pregnancy as it can prevent certain congenital anomalies. Nutrient intake of the mother profoundly affects her child and this effect extends even to the period before conception.

Endocrine changes affect nutrient need and use for the lactating mother. Likewise, the endocrine system which includes the operation of glycoproteins, affects the growth of the infant. Nutrition also plays a vital role in improving survival of low birth weight and extremely premature infants. The improper nutrition negatively effects the fetal development and increases the health risk of infants.

Perinatal Nutrition addresses the important issue of nutrient needs of pregnancy and the early stages of infant growth. The different aspects of periconceptional nutrition, importance of placenta as an organ in nutrition, aberrations in utero-placental function, the role of macro- and micronutrients in the prevention of congenital anomalies are discussed in the book. The topics of nutritional influences on infant development, feeding the preterm infant, and post-hospital-discharge nutrition for premature infant, are described in individual chapters. The information on breast feeding, introducing solid foods to infants, and growth during the first year of life is also included in the book.

The volume also provides the information on the current understanding of the pathogenesis of type 1 diabetes and the contribution of infant nutrition to the initiation of progression of autoimmunity - here again carbohydrates play a part in the immunological macromolecules. The penultimate chapter of the book is focussed on adolescent nutrition and preconception during pregnancy. The ethical issues of neonatal hydration/nutrition are summarized in the last chapter.

In conclusion, this volume provides detailed scientific information on the role of nutrition in perinatal development. This will be highly useful not only to healthcare professionals, but also to nutritionists and nutritional scientists whose work involves perinatal growth and development.

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