Handbook of dietary and nutritional aspects of bottle feeding
Handbook of dietary and nutritional aspects of bottle feeding

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About the editors
Preface

Newborn babies are usually fed via the breast which ensures optimal development and emotional mother-child bonding. Indeed the World Health Organization has characterized features of normative growth in children who are exclusively breast fed. However, in some circumstances breast feeding may be either inadequate or impractical. Breast feeding rates and duration are dependent upon the support of families and communities and there are also socio-geographical variations in breast feeding rates and duration. Historically, deficiencies in the provision of breast milk were addressed by wet-nurse feeding but this was superseded by the introduction of artificial milk feeds, i.e. formula or bottle feeds. Infants may also be fed exclusively on bottle feeds or part breast-part bottle when feeding practices are in transition. The formula of the artificial milk will also vary depending on the stage of development. However, seeking knowledge about the uses, disadvantages, and future of formula feeds has been problematically as there are numerous bibliographic sources each with different focal points. The ‘Handbook of dietary and nutritional aspects of bottle feeding’ addresses these limitations by covering formula feeds in the most comprehensive way. Preclinical studies are also reported to advance the understanding of how the milk formulas work or behave at fundamental levels.

The ‘Handbook of dietary and nutritional aspects of bottle feeding’ is divided in six parts:
1. Introductory text, prevalence and situations.
2. Formulations, composition and features of formula feeding.
3. Microbiological and chemical contaminants in infant formulas.
4. Allergy and immunology.
5. Effects on physical development and metabolic responses.
6. Effects on psychological and neurological development.

It is important to point out that this book is not an endorsement for artificial feeding in place of breast feeding. All authors are required to sign a declaration so that any sources of funding and commercial involvement are fully transparent.

Coverage in Part 1 covers historical and international aspects (South American, African and Chinese perspectives), sensory features, flavour learning and satiation, appetite, effects of caesarean deliveries, emergencies, powdered and liquid formulas and growth curves. In Part 2 there are chapters on composition, soy protein, effect of sterilization, lipid peroxidation, polyamines, vitamin D, parathormone, milk fortifiers, prebiotics, probiotics and symbiotics, thickening agents and meconium. Part 3 includes material on *Staphylococcus aureus, Cronobacter* spp., *Salmonella*, Nosocomial diarrhea, advanced glycation end products, melamine and the characterization of infant formula quality. Part 4 includes chapters on allergic enterocolitis, rotavirus-induced diarrhoea and immunoglobulin A and M antibodies. Part 5 has material on dentition, diabetes risk, mTORC1-programming, intestinal barrier function and necrotizing enterocolitis. Finally, Part 6 has chapters on neurodevelopment and ADHD.
The contributors are authors of international and national standing, leaders in the field and trendsetters. Emerging fields of science and important discoveries relating dietary and nutritional aspects of formula feeding are also incorporated. The ‘Handbook of dietary and nutritional aspects of bottle feeding’ will be essential reading for nutritionists, dieticians, paediatricians, midwives, pharmacologists, health care professionals, general practitioners and those interested in babies health in general.

The editors