Record Nr. UNINA9910784570803321 Titolo Handbook of milk composition / / editor, Robert G. Jensen San Diego:,: Academic Press,, 1995 Pubbl/distr/stampa **ISBN** 1-281-11913-X 9786611119133 0-08-053311-6 Descrizione fisica 1 online resource (947 pages): illustrations Food science and technology international series Collana Altri autori (Persone) JensenRobert G Disciplina 613.2/6 20 613.26 641.1 Soggetti Milk - Composition Breast milk - Composition Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Front Cover: Handbook of Milk Composition: Copyright Page: Contents: Contributors; Foreword; Preface; Chapter I. Introduction; I. Purpose; II. General Description of Milks; References; Chapter 2. The Structure of Milk: Implications for Sampling and Storage; A. The Milk Lipid Globule Membrane; I. Intracellular Origin and Growth of Milk Lipid Globules; II. Role of Intracellular Lipid Droplet Coat Material: III. Milk Lipid Globule Secretion; IV. Nature and Frequency of Cytoplasmic Crescents; V. Size and Membrane Area Distribution of Milk Lipid Globules VI. Nature of Milk Llipid Globule Membranes VII. Reorganization of the Membrane during Storage and Processing; References; B. Particulate Constituents in Human and Bovine Milks; I. Introduction; II. Cells and Membrane Fragments; III. Emulsion Parameters; IV. Casein Micelles; V. Summary; References; C. Sampling and Storage of Human Milk; I. Introduction; II. Mechanisms of Milk Secretion and Ejection; III. Methods for Obtaining a Representative Milk Sample; IV. Sources of Change in Milk Composition during Storage; V. Recommendations for Storage of

Milk Samples; VI. Summary; References

D. Sampling and Storage of Bovine Milk 1. Introduction; II. Sampling; III. Storage; References; E. The Physical Properties of Human and Bovine

Milks; I. Introduction; II. Electrical Conductivity; III. Freezing Point; IV. Boiling Point; V. Osmolality or Osmotic Pressure; VI. pH; VII. Specific Gravity; VIII. Surface Tension; IX. Titratable Acidity; X. Specific Heat; XI. Coefficient of Expansion; XII. Viscosity; References; Chapter 3. Determinants of Milk Volume and Composition; A. Lactogenesis in Women: A Cascade of Events Revealed by Milk Composition; I. Introduction

II. The Physiological Basis of Lactogenesis; III. The Composition of the Preparation Mammary Secretion; IV. Implications of Changes in Milk Composition during Lactogenesis; V. Summary and Conclusions; References; B. Volume and Caloric Density of Human Milk; 1. Introduction; II. Methods for Measurement of Milk Volume; III. Milk Volumes in Exclusively Breast-Feeding Women; IV. Breast Milk Volumes Transferred to Partially Breast-Fed Infants; V. Caloric Density of Human Milk; VI. Conclusions; References; C. Volume and Caloric Density of Bovine Milk; I. Volume; II. Calorie Density; References D. Regional Variations in the Composition of Human Milk. Summary; References: E. Effects of Gestational Stage at Delivery on Human Milk Components; I. Introduction; II. Nitrogen Composition of Preterm Milk; III. Acid-Soluble Nitrogen Fraction of Preterm Milk; IV. Macrominerals and Electrolytes: V. Trace Elements: VI. Vitamins: VII. Physiological Basis of Preterm Milk Composition; VIII. Summary; References; F. Miscellaneous Factors Affecting Composition and Volume of Human and Bovine Milks; I. Introduction; II. Human Milk; III. Bovine Milk; References; Chapter 4. Carbohydrates in Milks: Analysis, Quantities, and Significance

Sommario/riassunto

This informative treatise offers a concise collection of existing, expert data summarizing the composition of milk. The Handbook of Milk Composition summarizes current information on all aspects of human and bovine milk, including: sampling, storage, composition, as well as specific chapters on major and minor components such as protein, carbohydrates, lipids, electrolytes, minerals, vitamins and hormones. The book also features comprehensive coverage of compartmentation, host-defense components, factors affecting composition, composition of commercial formulas, and contaminants.\* Rel