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during the -lactose monohydrate manufacturing process; 2.3.3 Crystallization theory and research trends; 2.3.4 Effect of impurities on lactose crystal growth

2.4 Effect of Moisture on Lactose in the Solid State 2.4.1 Moisture-induced crystallization of amorphous lactose; 2.4.2 Effect of moisture on the crystalline forms of lactose; 2.4.3 Effect of moisture and amorphous lactose content in lactose-rich dairy powders; 2.5 Lactose Applications; 2.6 Summary; References;

3: Dairy Ingredients Containing Milk Fat Globule Membrane: Description, Composition, and Industrial Potential; 3.1 Introduction; 3.2 Origin and Function of the MFGM; 3.3 Composition and Structure of the MFGM; 3.3.1 Lipids of the milk fat globule membrane

3.3.2 Milk fat globule membrane proteins 3.4 Health Benefits of the Milk Fat Globule Membrane; 3.4.1 Anticancer properties of MFGM; 3.4.2 Antimicrobial and antiviral properties of the MFGM; 3.4.3 MFGM and lactic acid bacteria binding; 3.5 Technical Aspects and Foods Based on MFGM; 3.5.1 Emulsifying and stabilizing properties of MFGM; 3.5.2 Potential delivery systems derived from MFGM; 3.5.3 MFGM components as part of food systems; 3.5.4 Isolation of the MFGM; 3.6 MFGM: A Novel Product from Dairy Products

3.7 Methodology to Monitor the Biological Activity of the MFGM Before and After Processing 3.7.1 Atomic force microscopy; 3.7.2 Confocal laser scanning microscopy; 3.7.3 Laser tweezers and the MFGM; 3.8 The Future of MFGM and Its Components; Acknowledgments; References;

4: Biofunctional Dairy Protein Fractions; 4.1 Introduction; 4.2 Physiologically Active Peptides from Milk; 4.2.1 Antihypertensive peptides; 4.2.2 Biological role of antithrombotic peptides; 4.2.3 Biological role of immunomodulatory peptides; 4.2.4 Biological role of opioid receptor-binding peptides

4.2.5 Biological role of metal-binding peptides

Sommario/riassunto

Advances in Dairy Ingredients provides an international perspective on recent developments in the area of dairy ingredients and dairy technology. Market and manufacturing trends and opportunities are aligned with the latest science tools that provide the foundation to successfully and rapidly capture these opportunities. Functional foods are emerging as key drivers of the global food economy and dairy ingredients and technology are at the forefront in these developments. Advances in Dairy Ingredients brings together food scientists, industry specialists, and marketers from around
