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ABSTRACT

The composition and physical-chemical properties of the milk fat globule membrane (MFGM) is a subject that has gained increased interest in the field of food colloids, mainly because the nutritional and technological value of the MFGM. In fact, related changes in integrity and structure during milk processing pose a huge challenge as far as efforts directed to isolate the components of the fat globule membrane. MFGM characteristics and potential utilization are areas of contention. Thus, the effects of processing and the colloidal interactions that exist with other milk constituents need to be better understood in order to exploit milk fat and MFGM, their functionality as colloids as well as those of their components. These are the main subjects of this review, which also reports on the results of recent inquiries into MFGM structure and colloidal behavior.

Keywords: Milk fat globule membrane (MFGM); fat colloids; protein-stabilized colloids; adsorption; glycoproteins; colloidal stability