Abstract

Obtaining new structures and functionalities with micellar casein isolate

Casein micelles have always been associated with high desirable functionality. Their high water holding capacity and viscosity enhancing properties have been extensively used. However, in the last few years, Micellar Casein Isolate, MCI, has been considered as one of the main or most profitable functional ingredients obtained from milk.

It is now becoming clear that MCI has the potential to bring new and exciting possibilities to create novel functionalities in complex food systems. MCI can add value to dairy processing and NDP through exploitation of its already-known and yet-to-be-discovered functionalities. MCI has enormous potential to be applied to several types of products, from liquid-based, to gels, and to powders. Its high nutritional value and slow digestion characteristics, clean label possibilities and potential to act as a carrier makes it an ingredient full of yet undiscovered potential.

This talk will try to highlight what makes MCI unique, along with the challenges but also benefits that MCI can bring to the dairy world.