Synbiotics: Health benefits and dairy products

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Synbiotics have been defined as ‘a mixture of probiotics and prebiotics that beneficially affects the host by improving the survival and implantation of live microbial dietary supplements in the gastrointestinal tract, by selectively stimulating the growth and/or activating the metabolism of one or a limited number of health promoting bacteria, and thus improving host welfare’. Synbiotics are, however, much more than just a mixture of pre- and probiotics. As the name suggests, a synergy must exist between the two components and hence not just any mixture will be a synbiotic. The development of new synbiotics typically requires a long-term screening process. During the screening, combinations of selected prebiotic substances and probiotic strains are tested both in vitro and in vivo in order to find the most active and synergistic pairs. In the end, both animal and, especially, human tests are needed to substantiate efficacy. Combining probiotics with established health benefits with prebiotics that enhance ecological performance and activity of the specific strained could be a promising strategy to improve health outcomes. Improving gastrointestinal health is a natural health focus area for the use of synbiotics in foods. Especially fermented dairy products are an ideal matrix for fortification with functional ingredients. For this reason; probiotics, prebiotics and their combinations are added in dairy products generally.

Biography

Aysun Orac began her career with BS in Food Engineering from the Agricultural Faculty of Selcuk University, Turkey, in 2003. She has completed her Master in the Department of Dairy Science and Technology in 2010 from Selcuk University and started PhD in the same field at the same University, in 2012. She is a Lecturer in Karapinar Aydoganlar Vocational School in Turkey. She has published 10 papers in various journals.

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