Probiotics: Current applications and future prospective

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Probiotics are defined as live microorganisms that are added to foodstuffs in order to enhance the health of their host. Traditionally they have been used in dairy products such as milk, cheese, and yogurt. The improvement of technology has allowed advanced exploration of their use. One commonly reported feature is the antibacterial activity which consists of the inhibition of pathogens due to the secretion of bacteriocins. For this reason, some studies have suggested the use of probiotics as a potential alternative to the usual antibiotics which have been linked with the advent of resistant genes. Further studies have reported probiotics to have the ability to reduce lactose in dairy products, improve digestion as well as growth promoters in animals. Other reported beneficial aspects of probiotics include lowering cholesterol and the stimulation of the immune system by boosting the production of cytokine and increasing the IgA concentrations. In this paper we evaluate the relationship between the findings of different in vitro and in vivo research studies on probiotics, the current technological applications as well as prospective development on the use of probiotics.

Key words: Probiotics, Antibacterial activity, Lactose intolerance, Immune system, cholesterol reduction, Probiotics applications.

Biography

Steven Manzi obtained a BSc Honors from the National University of Rwanda (NUR) in 2011 and has recently completed his Master’s degree in the field of Molecular biology and Microbiology at the Vaal University of Technology, South Africa. He is interested in applied research with potential positive impact on people and the environment.

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