



A REVIEW

Synbiotic: The Impact on Health

■ MADHU, ANITA KOCHHAR AND NEETU

See end of the paper for authors' affiliation

Correspondence to :

MADHU
Department of Food and
Nutrition College of Home
Science Punjab Agricultural
University, LUDHIANA
(PUNJAB) INDIA

ABSTRACT : Synbiotics is the term used for a mixture of probiotics (live microbial feed additives that beneficially affects the host animal) and prebiotics (non-digestible food ingredients that beneficially affect the organism). The manipulation of composition of the gut microbiota in infants and adults through dietary supplementation is possible by probiotic/prebiotic/synbiotic therapies. Probiotic products (dietary supplements containing potentially beneficial bacteria or friendly bacteria) and prebiotics (mainly oligosaccharides and disaccharides) make up an important part of maintaining intestinal health. The probiotics use the prebiotics as a food source, which enables them to survive for a longer period of time inside the human digestive system than would otherwise be possible. Synbiotics (probiotics + prebiotics) enable to improve the viability of probiotics and to deliver specific health benefits. Probiotic/prebiotic/synbiotic characteristics include antimicrobial, anticarcinogenic, antidiarrheal and antiallergenic qualities, osteoporosis prevention, ulcerative colitis, reduction in serum fats and blood sugars, regulation of the immune system and treating liver-related brain dysfunction. Age-related changes in gut physiology, microbiota and mucosal immune response are well established. Moreover, exposure to different challenges during life such as early encounter of environmental insults in the newborn, infant formula feeding, antibiotic treatment, gastrointestinal diseases and stress, also interferes with the normal development and balance of the healthy gut microbiota. Therefore, the current short review gives an overview of today's main aspects of the effect of fibres, probiotics and synbiotics on the health and immune system in different life-stages.

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