

ENRICHMENT OF FUNCTIONAL FOOD: BACTERIA ADDITIVES AND BY-PRODUCTS OF BACTERIA

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Defined as therapeutic foods, medical foods, bio food, pharmaceutical foods, and super-foods, functional foods contain beneficial of some components for human health. Foods may be functionalized with addition of phytochemicals, bioactive peptides, ω -3 (omega 3) polyunsaturated fatty acids, probiotics, and / or prebiotics. Some materials are added to food for making them functional. Some of these are probiotics and prebiotics. Probiotics found in the digestive system, is identified as microbial food additive that is known with beneficial effects on health. Probiotic bacteria are often used in combination with yoghurt bacteria in the production of fermented products. Lactic acid bacteria have the property of probiotic known as *Lactobacillus casei*, *L.acidophilus* and *Bifidobacteria*. Prebiotics, which is limiting the number of pathogenic bacteria in the colon and supporting the development of probiotic bacteria, are defined as non-digestible food. Probiotic bacteria found in the intestinal microflora are protecting the body from various diseases. Probiotic bacteria produce lactic and acetic acid, organic acids, hydrogen peroxide, and bacteriocin. The bactericidal or bacteriostatic effect on pathogenic bacteria and the pH drop are made due to acetic and lactic acids, produced by the probiotic bacteria. Bacteriocins produced by probiotic bacteria are more effective than other bacteriocins. Although the use of probiotics and prebiotics as functional food additives is very common in the world, it is not common in our country. Many positive functional effects of these known products should be expanded for use in fermented products in accordance to the taste of our people.

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