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Effects of Probiotics on Maintaining Human Health

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Abstract

The purpose of this publication is to review the beneficial impact of probiotics and their role in humans' diet. Besides, introducing the dietary sources and the role of prebiotics is included in this manuscript, as well. Pro- and prebiotics are significant also in health maintenance, they have a good influence on immunity, they decrease the occurrence of several chronic diseases, accordingly, applying them in healthy diet is not negligible either. Hopefully, my manuscript contributes to popularizing functional foods, mainly fermented products. It also meant the motivation to create this review.

Keywords: Probiotics; Prebiotics; Healthy diet; Fermentation; Functional foods

Introduction

Fermented dairy products their benefits can be found in several literature. Their beneficial impact for the organism is due to mainly the useful bacteria. Probiotics can restore the composition of gut microbiota [1], thus they help preserve the activity of the immune system [2]. Also, they serve in preventing several chronic diseases, and in supplementing the treatment. For instance, they are applied in cosmetics industry, pharmaceutical industry, feed industry and food industry; their outstanding representatives are *Lactobacilli* and *Bifidobacteria.* In my manuscript their effect on human organism are reviewed, and those possibilities are revealed which may be the part of everyday diet. I believe it is essential to highlight the role of both pre- and probiotics in humans' diet, how they contribute to maintaining healthy lifestyle.

Role of prebiotics in humans' diet

Prebiotics are non-digestible oligosaccharides (e.g. inulin, fructo oligosaccharides), which help the probiotics with colonization, prevent the establishment of pathogens, and help the production of short-chain fatty acid. Besides, they are also the nutrition of probiotics. In some cases, they are complemented by means of food supplement, so they appear as symbiotic, where there are pre- and probiotics together [3]. Their primary dietary sources are the nutrition with high fibre contents, mainly vegetables and fruit (e.g. oat flakes, apples, plain chocolate, walnut), that also induce increase in beneficial intestinal bacteria [4].

Beneficial effects and dietary sources of probiotics

It is worth to get to know the proper diet, namely those of consuming probiotics, in childhood. Then, as part of getting to know the healthy diet, foods containing probiotics [5], mainly fermented dairy products are also promoted. Beneficial bacteria have a role principally in establishing gut microbiota. They prevent the colonization of pathogens, ensure the integrity of permeability, control bowel motility [6], and help the immune system with normal function, and thus with maintaining the intact gut microbiota, as well. Beside aiding the digestion, several literatures is about probiotics used in cosmetics industry, which have a role in protecting the skin and maintaining its health [7]. Moreover, they produce antimicrobial agents and influence metabolic pathways, also they reduce the risk of cancer [8]. Among dietary sources fermented foods (yoghurt, kephir, leavened bread) outstand [9]. Probiotic content of functional foods can be increased with enrichment, as well.

Conclusion

The most important purpose of my manuscript is to review the beneficial impacts of probiotics, their role in human organism, and to give dietary advice, that can help to consume more in everyday diet. I believe it is essential to highlight the importance of prebiotics and their dietary adaptability that also contributes to maintain the gut microbiota. I am convinced and several literatures proves that dietary adaptation of pre- and probiotics has a

significant role in preventing and treating digestive disorders. I hope, my manuscript contributes to popularizing agents used also as part of healthy diet.

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