

Healthy Diet and Association with an Increasing Trend towards Foods with Probiotics

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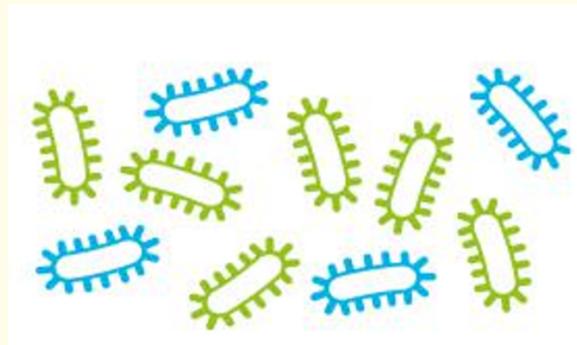
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Received: November 21, 2018; **Published:** April 29, 2019

Abstract

Probiotics have been shown that promotes health functions. In this mini review, we can see how probiotics affect the human organism and also how we can find them in the market. Numerous clinical studies have proven the significant benefits of the appropriate probiotic formulations. Moreover, the awareness of healthy diet and wellbeing is the main cause of the probiotics increase. In conclusion, the probiotic products must be used wisely in order to reduce the risk of various diseases.

Keywords: Probiotics; Health Benefits; Mechanisms of Probiotics



Figure

Numerous clinical studies have proven the significant benefits of the appropriate probiotic formulations. One of the most well-researched benefits of probiotics is that of reducing the incidence of diarrhea from antibiotics. The World Health Organization defines probiotics as live microorganisms which, when administered in adequate amounts, confer a health benefit on the host [1].

A significant meta-analysis [2] concluded that the simultaneous intake of appropriate probiotics with antibiotics reduces the risk of infection by *Clostridium difficile* (for which various antibiotics are implicated) in more than 50% in hospital patients.

Many probiotics come from bacteria traditionally used for fermenting food. At the present time, a large number of relevant (well-designed) clinical trials with probiotics have been performed and the most common probiotics studied belong to two genera, *Lactobacillus* and *Bifidobacterium* [2]. Among others, *Enterococcus* and *Streptococcus*, have been also studied.

It's obvious that there is an increasing trend toward foods with probiotics. Probably the awareness of healthy diet and wellbeing is the main cause of this increase. The increased incidence of Inflammatory bowel diseases (IBD) including ulcerative colitis (UC) and Crohn's disease (CD) [3] have led to a renewed interest in probiotic carriers. These live microbes can be formulated into many different types of products, including food, drugs, and dietary supplements.

Studies have shown that probiotics help maintain digestive health (through different mechanisms) [4]. Other beneficial effects of probiotic consumption can be characterized by improving the health of the gastrointestinal tract, boost immune system function, soothe symptoms of irritable bowel syndrome, eradicate ulcers, promote healthy cholesterol, and reduced cancer incidence, for example, the colorectal cancer [5].

Probiotics can also help balance the gut microbiota when it has been affected by poor diet, infections, some antibiotics treatments or other external factors such as stress [6]. Some of these bacterial species can also be found in a range of foods (such as yogurts and fermented milks) or supplements.

Lactic acid bacteria (LAB), which have been used for preservation of food by fermentation, can serve a dual function by acting as agents of food fermentation and, in addition, potentially imparting health benefits [7]. According to European Society of Neurogastroenterology and Motility, fermentation of food provides characteristic taste profiles and lowers the pH, which prevents contamination by potential pathogens. Fermentation is globally applied in the preservation of a range of raw agricultural materials such as cereals, roots, tubers, fruit and vegetables, milk, meat and fish [8].

Conclusion

In conclusion, the probiotic products must be used wisely in order to reduce the risk of various diseases. Also, the patients should follow a healthy lifestyle and a balanced nutrition and not to over consume probiotics. Furthermore, the food products must be labelled with their detailed information in order to indicate the types of bacteria they contain. Also, it is obvious that any reference to beneficial effects on the health of the consumer should be related to the particular micro-organism or colony species used in the product and not to the general characteristics of probiotics.

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Volume 14 Issue 5 May 2019

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