

How probiotics can improve your gut health.

Anil Patel*

Nutrition and Metabolism Unit, Mauritius University, Mauritius

Introduction

Probiotics have gained significant attention in recent years for their potential to enhance gut health and overall well-being. These live microorganisms, often referred to as "good bacteria," can provide various benefits when consumed in adequate amounts. Here's a detailed look at how probiotics work and their impact on improving gut health [1].

Probiotics are live bacteria and yeasts that are beneficial for your digestive system. They are commonly found in certain foods, such as yogurt, kefir, and fermented vegetables, as well as in dietary supplements. These microorganisms work by promoting a healthy balance of gut bacteria, which is crucial for digestion and immune function [2].

The human gut is home to trillions of microorganisms, collectively known as gut microbiota. Maintaining a diverse and balanced microbiota is essential for optimal digestive health. Probiotics help by increasing the number of beneficial bacteria and inhibiting the growth of harmful bacteria, thereby promoting a balanced gut environment [3].

One of the primary benefits of probiotics is their role in improving digestion. They assist in breaking down food and absorbing nutrients more efficiently. This can alleviate symptoms of digestive disorders such as bloating, diarrhea, and irritable bowel syndrome (IBS) [4].

A significant portion of the body's immune system resides in the gut. Probiotics play a crucial role in supporting immune function by enhancing the gut barrier function and promoting the production of antibodies. This helps in defending against pathogens and reducing the risk of infections [5].

Research suggests that probiotics may help manage inflammatory bowel diseases (IBD) such as Crohn's disease and ulcerative colitis. By modulating the inflammatory response in the gut, probiotics can potentially reduce inflammation and alleviate symptoms associated with these chronic conditions [6].

Healthy gut bacteria facilitated by probiotics aid in the absorption of vitamins and minerals from food. This is particularly beneficial for individuals with nutrient deficiencies or malabsorption issues, ensuring better overall nutritional status [7].

Antibiotics, while essential for treating infections, can disrupt the natural balance of gut bacteria. This imbalance often leads

to digestive issues such as diarrhea. Probiotics can help restore this balance and alleviate antibiotic-associated gastrointestinal symptoms [8].

The gut-brain axis is a bidirectional communication system between the gut and the brain. Emerging research suggests that probiotics may influence mood and mental health by regulating neurotransmitter levels and reducing stress and anxiety [9].

Some studies indicate a potential link between gut bacteria and weight regulation. Probiotics may contribute to weight management by influencing the absorption of dietary fats, increasing feelings of fullness, and reducing inflammation associated with obesity [10].

Conclusion

Probiotics offer a natural and effective way to improve gut health by promoting a balanced gut microbiota, enhancing digestion, supporting immune function, and potentially offering benefits beyond the gut. Whether through dietary changes or supplementation, integrating probiotics into your daily routine can contribute to overall wellness and vitality.

References

1. Bryant R, Schultz C. Obesity in inflammatory bowel disease: gains in adiposity despite high prevalence of myopenia and osteopenia. *Nutrients*. 2018; 10:1192.
2. Casanova M, Chaparro M. Prevalence of malnutrition and nutritional characteristics of patients with inflammatory bowel disease. *J Crohns Colitis*. 2017; 11:1430–9.
3. Davis A, Smith T, Talbot J, et al. Predicting patient engagement in IAPT services: a statistical analysis of electronic health records. *Evid Based Ment Health*. 2020; 23:8–14.
4. Yin A, Hachuel D, Pollak J. Digital health apps in the clinical care of inflammatory bowel disease: scoping review. *J Med Internet Res*. 2019; 21:e14630.
5. Taylor L, Eslamparast T. Using patient completed screening tools to predict risk of malnutrition in patients with inflammatory bowel disease. *Crohns Colitis360*. 2021; 3:1–7.
6. Radnitz C, Beezhold B, Investigation of lifestyle choices of individuals following a vegan diet for health and ethical reasons. *Appetite*. 2015;90.

*Correspondence to: Anil Patel, Nutrition and Metabolism Unit, Mauritius University, Mauritius, E-mail: patel.a@uom.ac.mu

Received: 01-Jul-2024, Manuscript No. AAINM-24-140408; Editor assigned: 02-Jul-2024, PreQC No. AAINM-24-140408(PQ); Reviewed: 16-Jul-2024, QC No. AAINM-24-140408;

Revised: 22-Jul-2024, Manuscript No. AAINM-24-140408(R); Published: 29-Jul-2024, DOI: 10.35841/ainm-8.4.218

7. Patrick H, Nicklas TA. A review of family and social determinants of children's eating patterns and diet quality. *J Am Coll Nutr.* 2005;24:83–92.
8. Hollis JL, Collins CE. Defining healthy and sustainable diets for infants, children and adolescents. *Glob.Food Sec.* 2020;27:100401.
9. Naude CE, Visser ME. Effects of total fat intake on bodyweight in children. *Cochrane Database Syst. Rev.* 2018;2.
10. Cena H, Calder PC. Defining a healthy diet: Evidence for the role of contemporary dietary patterns in health and disease. *Nutrients.* 2020;12:334.

Citation: Patel A. How probiotics can improve your gut health. *Insights Nutr Metab.* 2024;8(4):218