Hypolipidemic effect of different probiotic bacterial strains

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Statement of the Problem: Probiotics are dietary supplements that contain various bacterial strains and have numerous benefits, including lowering lipid levels. The main question is whether all probiotic bacterial strains have this effect and, if so, to what extent. Therefore, the purpose of this review is to summarize some of the studies that address the ability of bacterial strains, used singly or in combination, to affect cholesterol and triglyceride levels in an animal model of hyperlipidemia. Methodology & Theoretical Orientation: Searches were conducted in the PubMed and Scopus databases with publication dates limited to 2012 to 2022. Findings: Probiotic mixture (Lactobacillus acidophilus and Bifidobacterium animalis) and Lactobacillus casei YBJ02 decreased cholesterol and triglycerides, as did Lactobacillus reuteri 263 but to a much greater extent triglycerides, while probiotic mixture (Lactobacillus rhamnosus Rosell-11 and Lactobacillus helveticus Rosell-52) and Lactobacillus plantarum CAI6/Lactobacillus plantarum SC4 decreased only triglycerides without effect on cholesterol in hyperlipidemic animals. Conclusion & Significance: These findings suggest that probiotic supplementation could be used as an adjunctive treatment for dyslipidemia. Since this effect is highly dependent on the probiotic bacterial strain(s), it is important to determine whether hypercholesterolemia, hypertriglyceridemia, or mixed hyperlipidemia is present before selecting and using a probiotic product.

Biography

Branka Petković , she is working as a professor at University of Belgrade, Serbia

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