

Probiotic agents and infectious diseases: A modern perspective on a traditional therapy

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From National Conference on Natural Products as therapeutics, Medical Microbiology, Nanobiology and System biology: Current Scenario & Emerging Trends, 'NATCON-2014'.

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18-19 September 2014.

American J of Bio-pharm Biochem and Life Sci 2014 September, Vol. 4 (Suppl 1): P 76

ABSTRACT

Probiotics are defined as viable microorganism that have a beneficial effect in the prevention and treatment of specific pathological condition when they are ingested, as a live microbial feed supplement which beneficially affect the host animal by improving its intestinal microbial balance. The microorganism most frequently used as a probiotic agents are Lactic acid bacteria particularly Lactobacillus species including Lactobacillus rhamnosus, Lactobacillus reuteri, Saccharomyces boulardii, seems to be promising agents for the amelioration of the course of acute diarrhea in children when used therapeutically. Evidence is emerging for the use of probiotics in other gastrointestinal infections, prevention of postoperative bacterial translocation, irritable bowel syndrome and in both ulcerative colitis and crohn's disease. The use of other agents particularly Bifidobacteria, supplementing the regular feed of infants may have an effect as prophylactic agents against acute diarrheal diseases. The effect of probiotic agents appears to be most significant against viral diarrhea (rotavirus) suggests that an immunological mechanism is responsible for the beneficial effects. New research suggests potential applications in vaccine development and prevention of sexually transmitted disease. Probiotic agents are becoming an important part of the armamentarium against gastrointestinal problem in infants and children, as increase in scientific and commercial interest in the use of beneficial microorganisms or probiotics for the prevention and treatment of diseases. Our present study deals with the usage of probiotics in the prevention and treatment of gastrointestinal diseases.