

# Probiotics And Children

Beneficial bacteria play a key role in the nutrition and health of the human body. Researchers have long known that probiotics are necessary for many of the body's processes, ranging from cancer prevention to immune function (1). Many studies have also shown the importance of probiotics in the health of children. Radboud University Nijmegen Medical Center in the Netherlands, found lactobacilli bacteria to prevent food allergies and atopic eczema in children (2). Another study, by Johns Hopkins University, showed probiotic supplementation to decrease illnesses and the prevalence of ear infections, and to improve iron status (3).

Unfortunately, poor diets and lifestyle choices destroy our body's beneficial bacteria, decreasing the body's immune function and leaving the body open to more harmful microorganisms, such as salmonella and E. coli.

**Fit4Kids™ Whole Food Nutrition Program** contains 10 different strains of beneficial bacteria including **DDS1 *Lactobacillus acidophilus*** and ***Bacillus sporogenes***, both known for their superior stability and numerous beneficial properties (4). It also contains amino acid chelated minerals and fructooligosaccharides (FOS) necessary for promoting optimum bacteria growth.

**DDS1 *L. acidophilus*** – produces enzymes necessary for the digestion of proteins, fats, and lactose (milk sugar); synthesizes vitamin K and specifically inhibits E.coli; reduces diarrhea, urinary, and vaginal infections; enhances calcium metabolism; and reduces cholesterol levels.

***B. bifidum*** – produces vitamins B1, B6, B12 and folic acid and amino acids; inhibits pathogens such as salmonella, shigella, clostridium difficile, staphylococcus aureus, and campylobacteri jejuni.

***B. infantis* and *E. faecium*** – help the body resist infection and clostridium difficile, which causes pseudomembranous colitis and diarrhea.

***S. thermophilus*** – produces beta-galactosidase, the enzyme needed to digest lactose (milk sugar) and has many anti-tumor properties; protects the body against salmonella and E. coli.

***L. bugarius*** – produces beta-galactosidase, the enzyme needed to digest lactose (milk sugar); prevents the growth of salmonella and E. coli; has anticarcinogenic and antitumor characteristics; and produces lactic acid, which acts as an antibiotic in the gastrointestinal tract.

***L. plantarum*** – produces enzymes necessary for the digestion of carbohydrates and proteins; and produces lactic acid, the body's natural antibiotic.

***L. salivarius*** – produces the B vitamins, vitamin K, digestive enzymes, and lactic acid. It also inhibits many types of food poisoning.

***L. rhamnosus*** – functions as an antioxidant; stimulates immune function; and aids in the digestion of carbohydrates.

***B. sporogenes*** – produces digestive enzymes and antioxidants, and acts as an antibiotic against drug resistant bacteria.

1 Grubb et al. Reg and Prot Role of the Normal Microflora. Wenner-Gren Intl Symposium V52, 1989.

2 Med Hypotheses. 2005;64(6):1089-92.

3 Asia Pac J Clin Nutr. 2004;13(Suppl):S28.

4 Fernandes et al. Am J Clin Nutr 1980; 33:2443-2457.