

Probiotics

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Bacteria are GOOD for you! Your mother would strongly argue otherwise. Nonetheless, the human body is home to more than four hundred types of bacteria weighing in at almost four pounds! The bulk of them are found within the GI tract while traces also occupy the throat, oral cavity, and vagina. These healthful bacteria protect our bodies from invasion of other 'unfriendly' microorganisms such as other bacteria, yeast, parasites, and fungi. Probiotics were first introduced to our bodies during birth. They were transferred from the walls of the birth canal during delivery. Afterwards, they were provided by mother's milk. And today even, you maintain your level of friendly intestinal flora by eating raw foods grown in soil, lactic-acid bacteria fermented foods (such as yogurts and cheeses and sauerkraut), and by more recently developed supplements.

The term 'probiotic' comes from Greek, meaning literally "for life." Our bodies act as hosts to billions of transitory bacteria. They are deemed 'transitory' because they don't take up permanent residence within our bodies. They are ingested, those that survive the stomach acid are led into the intestine where they colonize, compete for intestinal wall space with the harmful pathogens, digest undigested sugars, normalize the colonic pH, and then are either broken down or excreted.

Many studies have been conducted on the specific bacteria *Lactobacillus GG*. The 'GG' comes from the researchers who first isolated the strain- Sherwood Gorbach and Barry Goldin from Tufts University. The strain has since been patented by the pair and is available commercially as a product called 'Culturelle.'

Probiotics' Role in Pediatrics

Lactobacillus GG has been found to improve the condition of children hospitalized

with rotavirus related diarrhea. In a study conducted by pediatric gastroenterologist Stefano Goardalini through the University of Chicago, children undergoing oral hydration with a solution containing the bacteria strain were found to have hospital stays two to four days shorter than those of the children with the solution that did not contain the bacteria.

Probiotics' Role in Allergies

In another study, expecting mothers were given two capsules of *Lactobacillus GG* a day two to four weeks before delivery. The newborns were then on doses of the same bacteria for six months after delivery. The babies' rates of chronic allergic eczema were cut in half. The test serves as an indicator for the child's chances of having allergies in his or her life.

Probiotics' Role in Immunity

In a study sponsored by the New Zealand Dairy Board, children attending daycare centers in Helsinki were divided into two groups- those that drank milk and those that drank milk 'spiked' with *Lactobacillus GG*. It was observed that the children in the test group had 11% less absences and 17% less respiratory infections than those in the control group.

Probiotics versus Antibiotics

Antibiotics upset the balance of 'good' and 'bad' bacteria within the body by blindly annihilating everything. After certain antibiotics, a bacterium called *Clostridium difficile* produces a toxin, which in many cases leads to colitis, a condition in which the lining of the intestine becomes inflamed. This is not to undermine the significance and positive impact that antibiotics have had in our modern lives. They have helped us defeat many diseases that were once fatal. Misuse of these 'miracle' drugs has led to ill health.

References

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Above: A small sample of the various Probiotics available in pill or powder form.