Probiotics are “friendly” bacteria, so-called because they promote health rather than harm it. The most famous probiotic is *Lactobacillus acidophilus*, used in making yogurt. There are numerous other probiotics as well.

Probiotics are most often used to restore the normal intestinal balance of bacteria when it has been altered by use of antibiotics. Bacteria are constantly at war with one another; if friendly bacteria can be encouraged to grow, they will in turn inhibit or destroy unhelpful bacteria, which might otherwise cause diarrhea or other problems. For this reason, probiotics have been extensively studied for the treatment of intestinal disorders. However, they have shown promise for other conditions as well. For example, the ecology of microorganisms in the digestive tract can influence the function of the immune system, and there is some evidence that deliberate colonization of the digestive tract by certain bacteria might prove beneficial for disorders related to the immune system.

Allergic rhinitis (hay fever) and allergic asthma are a category of immune disorder for which probiotics have been advocated. To test the hypothesis that probiotics can help these conditions, Italian researchers conducted a study that was published in 2007 in *Pediatric Research*. This double-blind, placebo-controlled trial enrolled 187 children aged 2-5 years old. All the participants in this trial suffered from allergic rhinitis, allergic asthma, or both. Over the one-year study period, participants were given either ordinary milk or milk enriched with the probiotics *Lactobacillus casei, Lactobacillus bulgaricus,* and *Streptococcus thermophilus*. The results showed that use of the probiotic-enriched milk significantly reduced the severity of hay fever, but did not significantly affect the severity of asthma. (Use of the probiotic mixture also reduced episodes of diarrhea, but this was not a new finding.)

Note that the word “significantly” as used above refers to statistical significance. This means that the benefits seen were unlikely to be due to chance. It does not mean that these benefits were particularly marked. In fact, probiotics only very slightly reduced hay fever symptoms.

For more information, see the full articles on hay fever, asthma, and probiotics.

REFERENCES: