

According to a meta-analysis of 63 studies, taking probiotics significantly reduces the risk of developing diarrhea that often results from the use of antibiotics.

Probiotics reduce the incidence of diarrhea during antibiotic therapy

Antibiotics are prescribed for the treatment of bacterial infections. They serve their purpose by killing the harmful bacteria inside the body. Unfortunately they kill many of the helpful bacteria within the body as well. This can create a disturbance in the flora of the gastrointestinal tract. A common symptom of this disturbance is diarrhea, which occurs in as many as 30% of those taking antibiotics. Probiotics are microorganisms that can help maintain or restore the balance of gut flora.

In a large meta-analysis published in the *Journal of the American Medical Association*, researchers pooled data from 63 different randomized clinical trials to determine the usefulness of probiotics in the “prevention and treatment of antibiotic-associated diarrhea.” The trials involved 11,811 participants, the majority of which were outpatients, but some of those included were hospitalized patients. The majority of the trials used a *Lactobacillus* based strain; the other strains included *Bifidobacterium*, *Saccharomyces*, *Streptococcus*, *Enterococcus*, and/or *Bacillus*. Analysis of all the included data revealed that those taking probiotics had on average a 42% lower risk of developing diarrhea than those in the control groups.

The results of this meta-analysis support the idea that concurrent use of probiotics during antibiotic therapy may help maintain gut flora balance and reduce the incidence of side effects such as diarrhea.

Hempel S, Newberry SJ, Maher AR, et al. Probiotics for the prevention and treatment of antibiotic-associated diarrhea: a systematic review and meta-analysis. *JAMA: the journal of the American Medical Association*. 2012;307(18):1959-69.