

Research letter

The underuse of probiotics by family physicians

Lindsey Edmunds

Antibiotic treatment may destroy beneficial intestinal flora, often resulting in diarrhea. Between 3% and 22% of patients in hospital have antibiotic-related diarrhea, and this may cause pseudomembranous colitis.¹ Several placebo-controlled studies suggest that taking probiotics may reduce the incidence of diarrhea in patients receiving antibiotic treatment.²⁻⁵ Probiotics are live microbial supplements such as *Lactobacillus acidophilus* that beneficially affect humans by altering their intestinal microbial balance.

To determine whether physicians recommend probiotics to their patients to prevent antibiotic-related diarrhea, I surveyed a sample of family physicians in Nova Scotia. I mailed a cover letter, brief questionnaire on probiotic use and a stamped return envelope to the first 100 family physicians, in alphabetical order, listed in the telephone directories for northeastern and central Nova Scotia. Of the 100 surveys sent out, 66 were completed and returned. Three physicians returned the questionnaire uncompleted, stating that they were no longer in active practice. This resulted in a survey response rate of 68%.

The responding physicians were in practice for as few as 2 years to as many as 57 years (mean 19.7 years). All of the respondents stated that they prescribe antibiotics on a regular basis. Only 21 (32%) reported that they recommend probiotics to their patients when prescribing antibiotics; of these, 10 stated that they do so always or often, and 11 seldom do so. Only 12 physicians (18%) indicated that they were aware of any research on probiotics. Forty-two respondents provided reasons for not recommending the use of probiotics: 13 (31%) stated that there was not enough research to support such use, 13 (31%) were not familiar with probiotics, 10 (24%) felt that they were not necessary, 2 (5%) stated that it was not an accepted practice

to recommend their use, and 4 (10%) gave other, miscellaneous reasons.

Most of the family physicians who participated in this survey are not recommending probiotic use to their patients when prescribing antibiotics. However, physicians appear to be open to the possibilities of probiotic use. Some respondents commented that they are aware of anecdotal evidence that probiotics are effective in treating antibiotic-induced illnesses. The majority of respondents felt that more research is required into the effect of combining antibiotic treatment with probiotics (88%) and that more information about probiotics is needed (82%). Physicians need to be made aware of the current information available on probiotics, and more high-quality, double-blind trials are needed to answer some of the questions raised by physicians.

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Lindsey Edmunds is a high school student in Nova Scotia.

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References

1. Hogenauer C, Hammer HF, Krejs GJ, Reisinger EC. Mechanisms and management of antibiotic-associated diarrhea [review]. *Clin Infect Dis* 1998;27:702-10.
2. Contardi I. [Oral bacterial therapy in prevention of antibiotic-induced diarrhea in childhood.] [Italian] *Clin Ter* 1991;52(4):685.
3. Elmer G, Surawicz C, Macfarland L. Biotherapeutic agents: a neglected modality for the treatment and prevention of selected intestinal and vaginal infections. *JAMA* 1996;275(11):870-6.
4. Kasper H. Protection against gastrointestinal diseases — present facts and future developments. *Int J Food Microbiol* 1998;41(2):127-31.
5. Tankanow RM, Ross MB, Ertel IJ, Dickinson DG, McCormick LS, Garfinkel JF. A double-blind, placebo-controlled study of the efficacy of Lactinex in the prophylaxis of amoxicillin-induced diarrhea. *DICP* 1990;24(4):382-4.

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