

Probiotics for Specific Conditions

Please use this handout along with the Whole Health handout “[How a Healthy Gut Makes for a Healthier You.](#)” It is a tool for you to use together with your health care provider if you will be taking probiotics as part of your medical treatment.

Not all strains of probiotics have been studied for all conditions. This is a growing area of research. It’s a good idea to choose a probiotic that already has been researched. It’s more likely to help your condition. The following recommendations are based on a review of research findings. The conditions listed are those that have been researched the most.

Probiotics are dosed in “Colony-Forming Units,” or CFUs. This is how the amount of good probiotic bacteria is measured. The scientific names of bacteria have two main parts. For example, one common probiotic is called *Lactobacillus acidophilus*. Many bacteria share the first part of that name. They are in the same “family,” but they are not the same probiotic. So, it is important to make sure that the second part of the name is exactly the one you are looking for.

It is important to use a reliable and high-quality brand. Independent organizations such as [Consumerlab.com](#) conduct tests of brands to make sure they actually contain what they say they do. In addition to these tests, the labels “USP Verified” or “Good Manufacturing Practice (GMP)” indicate that the product is likely of good quality.

Note: the goal is not to take probiotics continuously for the rest of your life. Instead, it is best to support your gut with good prebiotic food, which will help it remain healthy on its own. Prebiotic foods encourage good bacteria to grow. For a list of these foods, see the Whole Health handout, “[How a Healthy Gut Makes for a Healthier You.](#)”

Please also note that although this handout contains information briefly describing some medical conditions, it is not meant to diagnose a specific condition or replace an actual medical evaluation. Also, probiotics are generally very safe, but they should still be thought of as a type of medicine. Please talk with your health care team to determine whether you should take one of the probiotics listed below.

To Help Treat Irritable Bowel Syndrome^{1,2}

Irritable Bowel Syndrome (IBS) is a group of uncomfortable symptoms affecting the intestine, also called the bowel. Symptoms of IBS include pain or discomfort in the belly, diarrhea, constipation, bloating, or gas. To help treat IBS, choose a probiotic that contains one of the following strains or combinations of strain. Be sure to take the correct dose. Studies have shown that lower doses are often not effective. Take the probiotics for at least two months in order to see the full effect of the treatment.

Probiotic Strain Name and Dose
<i>Lactobacillus rhamnosus</i> GG, 3×10^9 (3 billion) CFUs twice daily
<i>Lactobacillus plantarum</i> , 10×10^{10} (100 billion) CFUs daily
<i>Bifidobacterium bifidum</i> , 1×10^9 (1 billion) CFUs daily
<i>Bifidobacterium infantis</i> , 1×10^8 (800 million) CFUs daily

To Help Decrease Symptoms of Stomach Flu (Viral Gastroenteritis)³

Research has shown that certain probiotics may help decrease symptoms of stomach flu.

Probiotic Strain Name and Dose
<i>Saccharomyces boulardii</i> , 4×10^{10} (40 billion) CFUs twice daily
<i>Lactobacillus rhamnosus</i> GG, 2×10^{10} (20 billion) CFUs twice daily (for 7 days or duration of symptoms)

To Help the Treatment for *Helicobacter pylori* Work Better⁴⁻⁶

Helicobacter pylori (*H. pylori*) is a type of bacteria that can lead to stomach irritation and sometimes ulcers or even cancer. Your health care provider may decide to test for this if they are concerned you might have this bacteria. *H. pylori* is usually treated with several prescription medications, including antibiotics and a stomach acid reducer taken at the same time (often called triple therapy). Studies have found that when used with these medications, probiotics can help this treatment for *H. pylori* work better. Probiotics also may help decrease side effects, such as diarrhea, that can occur when taking several antibiotics at once.

As you can see below, the length of time to take the probiotics varies. That's because different studies used probiotics for different lengths of time.

Probiotic Strain Name and Dose
<i>Saccharomyces boulardii</i> , 3×10^{10} (30 billion) CFUs 3 times daily for 4 weeks (starting together with triple therapy)
<i>Lactobacillus acidophilus</i> , 5×10^9 (5 billion) CFUs three times daily for 10 days (together with and continuing 3 days after triple therapy)
Kefir (<i>Lactobacillus</i> + <i>Bifidobacterium</i>), 250 mL daily for 2 weeks (together with triple therapy)
<i>Lactobacillus gasseri</i> , $\geq 10^9$ (at least 1 billion) CFUs twice daily for 4 weeks (3 weeks before and 1 week during triple therapy)

To Help Prevent Traveler's Diarrhea⁷

Traveler's diarrhea is an infection that can occur when you eat food that has not been handled safely. This can happen anywhere but often occurs in developing countries. You may have

heard of a bacterium called *Escherichia coli* (*E. coli*). *E. coli* is often the cause of this type of diarrhea. If you will be travelling, you may want to consider taking the following probiotic.

Probiotic Strain Name and Dose
<i>Saccharomyces boulardii</i> , 500mg once daily starting 5 days prior to trip and for entire length of trip

To Help Prevent Diarrhea Caused by *Clostridium difficile*^{8,9}

Clostridium difficile, often called *C. diff*, is a type of bacteria that can cause an infection when the normal bacteria in your gut get out of balance. (See the Whole Health handout “[How a Health Gut Makes for a Healthier You](#)” for more information on gut balance.) You are most at risk for this illness if you take antibiotics for a long time. This is often the case with people in the hospital for a long time or a long-term care facility like a nursing home. If you are in this situation, you may want to talk with your health care team about taking the probiotic listed below. Research on using probiotics to prevent diarrhea caused by *C. diff* involved patients who had not had this infection in the past. They were at higher risk for getting this diarrhea because they were in the hospital and receiving antibiotics.

Probiotic Strain Name and Dose
<i>Lactobacillus acidophilus</i> CL1285 & <i>Lactobacillus casei</i> LBC80R, total 100 billion CFUs daily for duration of antibiotics + 5 days after completion of antibiotics
<i>Lactobacillus casei</i> , 1.9x10 ¹⁰ (19 billion) CFUs + <i>Lactobacillus bulgaricus</i> , 1.9x10 ¹⁰ (19 billion) CFUs + <i>Streptococcus Thermophiles</i> , 1.8x10 ⁹ (1.8 billion) CFUs twice daily for length of course of antibiotics and then for 1 week

For you to consider:

- Do you have a condition listed in this handout and want to use probiotics to help treat it? Or are you interested in preventing one of these conditions? Which one/s?
- If so, do you want to take this handout to an appointment and discuss probiotics with a member of your health care team? When will you make the appointment?

The information in this handout is general. **Please work with your health care team to use the information in the best way possible to promote your health and happiness.**

For more information:

ORGANIZATION	RESOURCES	WEBSITE
University of Wisconsin Integrative Health Program	A variety of Integrative Whole Health handouts on your surroundings	https://www.fammed.wisc.edu/integrative/resources/modules/



This handout was adapted for the University of Wisconsin Integrative Health Program from the original written for the Veterans Health Administration (VHA) by Jonathan Takahashi MD, MPH, Academic Integrative Health Fellow, Integrative Health Program, University of Wisconsin Department of Family Medicine and Community Health. It is based on the book chapter co-authored by Dr. Takahashi and J. Adam Rindfleisch MD, MPhil, titled "Prescribing Probiotics," in *Integrative Medicine*, 4th edition, edited by David Rakel MD. The handout was reviewed and edited by Veterans and VHA subject matter experts.

References

1. Ford AC, Quigley EM, Lacy BE, et al. Efficacy of prebiotics, probiotics, and synbiotics in irritable bowel syndrome and chronic idiopathic constipation: Systematic review and meta-analysis. *Am J Gastroenterol*. Oct 2014;109(10):1547-61. doi:10.1038/ajg.2014.202
2. Rutten JM, Korterink JJ, Venmans LM, Benninga MA, Tabbers MM. Nonpharmacologic treatment of functional abdominal pain disorders: A systematic review. *Pediatrics*. Mar 2015;135(3):522-35. doi:10.1542/peds.2014-2123
3. Allen SJ, Martinez EG, Gregorio GV, Dans LF. Probiotics for treating acute infectious diarrhoea. *Cochrane Database Syst Rev*. 2010;(11):CD003048. doi:10.1002/14651858.CD003048.pub3
4. Hauser G, Salkic N, Vukelic K, JajackKnez A, Stimac D. Probiotics for standard triple Helicobacter pylori eradication: a randomized, double-blind, placebo-controlled trial. *Medicine (Baltimore)*. May 2015;94(17):e685. doi:10.1097/md.0000000000000685
5. Dang Y, Reinhardt JD, Zhou X, Zhang G. The effect of probiotics supplementation on Helicobacter pylori eradication rates and side effects during eradication therapy: A meta-analysis. *PLoS One*. 2014;9(11):e1111030. doi:10.1371/journal.pone.01111030
6. Zhang MM, Qian W, Qin YY, He J, Zhou YH. Probiotics in Helicobacter pylori eradication therapy: A systematic review and meta-analysis. *World J Gastroenterol*. Apr 14 2015;21(14):4345-57. doi:10.3748/wjg.v21.i14.4345
7. McFarland LV. Meta-analysis of probiotics for the prevention of traveler's diarrhea. *Travel Med Infect Dis*. Mar 2007;5(2):97-105. doi:10.1016/j.tmaid.2005.10.003
8. Goldenberg JZ, Ma SS, Saxton JD, et al. Probiotics for the prevention of Clostridium difficile-associated diarrhea in adults and children. *Cochrane Database Syst Rev*. 2013;(5):Cd006095. doi:10.1002/14651858.CD006095.pub3
9. Evans CT, Johnson S. Prevention of Clostridium difficile Infection With Probiotics. *Clin Infect Dis*. May 15 2015;60 Suppl 2:S122-8. doi:10.1093/cid/civ138