

# The Natural Pharmacy Newsletter

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## *In The News*

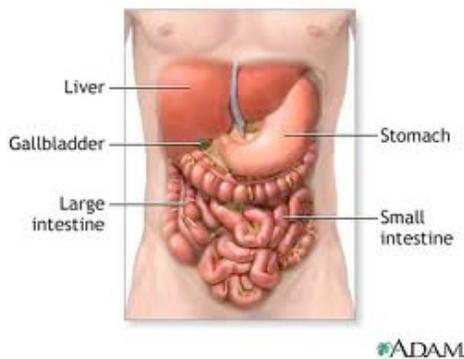
*by Sarah Webb, Pharm D, Candidate*

### **Probiotics**

#### ***Their Role in Healthy Digestion***

We all, at one time, have heard someone talk about these things called probiotics. Maybe it was your doctor, a friend, even the news anchor on TV. But do you really know what probiotics are and the benefits associated with them?

Probiotics are actually living micro-organisms (usually bacteria, but can be viruses and yeast). These probiotics are very similar to the “good bacteria” normally found in your gut. The “good bacteria” in your gut help protect against other microorganisms that may cause disease, improve your immune system, and help digest and absorb food and nutrients your body needs. Not everyone has the same kind or amount of these “good



bacteria”, but this is alright as long as there is a balance between you and your environment.

What can throw off this balance-taking antibiotics or having “bad bacteria” in your gut. Antibiotics can kill the “good bacteria” as well as the “bad bacteria”. By lowering the amount of “good bacteria”, you increase your chance of infection or diarrhea. Also, if you have “bad bacteria” in your gut, there may be overgrowth of the “bad bacteria” which lowers the amount of “good bacteria”.

An unbalanced gut can lead to more infections, diarrhea, gas, or cramping. Sound familiar? Luckily, probiotics are not hard to find. You can find them here at the pharmacy or even at your local grocery store in some foods like yogurt or some milk. The most common probiotics used today include lactobacilli (*Lactobacillus acidophilus*, *rhamnosus* GG, etc) bifidobacteria (*Bifidobacterium bifidum*, *breve*, etc) and yeasts (*Saccharomyces boulardii*).

What about safety? Who can take these and who probably shouldn't? Probiotics are typically thought of to be generally safe with little to no side effects. It doesn't happen often, but some people may have gas or bloating during the first few days of taking probiotics. It is usually recommended that

people with compromised immune health not take probiotics since these are live microorganisms.

So what all can you use probiotics for?

**1. Antibiotic-associated diarrhea (AAD).**

Probiotics are a great treatment option for AAD. Regular use of a probiotic before, during, and a little bit after the antibiotic therapy seems to help prevent diarrhea. However, you need to make sure you are getting the right kind. Studies have shown that *Saccharomyces boulardii* has the best success rate in preventing AAD. Dosages of this probiotic range from 5 to 40 billion CFU/day with the most common dosage of 20 billion CFU/day.

**2. Improve gastrointestinal diseases (IBS, diverticulitis, etc).**

Probiotics seem to help alleviate the symptoms associated with gastrointestinal diseases such as diarrhea, gas, and cramping. It may also prevent future infections from occurring in these individuals. The probiotics seem to stabilize the intestinal wall and prevent inflammatory response. They also improve the immune barrier to help keep bad bacteria out. Dosages for IBS or Crohn's are a bit complicated. Typically, you can see anywhere from 20-100 billion CFU/day being used. More studies are showing that the doses on the higher end (80-100 billion) are more effective.

**3. Viral diarrheal infection.** Probiotics have shown to reduce stool frequency and the duration of infection. At the onset of the symptoms, you should start taking your probiotics and continue for at least 5 days.

Recommended dose is 20 billion CFU/day. Remember, always drink plenty of water especially when you are having diarrhea.

- 4. Clostridium difficile (C. diff).** As with viral diarrhea infections, you need to start taking the probiotics as soon as possible. If you are taking antibiotics for your C. diff. make sure to spread out the times you take both medicines (typically you want 2 hours between). Studies are showing that by using probiotics, you can decrease the symptoms associated with C. diff.
- 5. Lactose intolerance (LI).** Recent studies have shown that *Lactobacillus acidophilus* and *Lactobacillus bulgaricus* significantly reduces symptoms associated with LI. Researchers believe that the probiotic adheres to the side of the intestine and aids in the digestion of lactose. Typical doses for L. acidophilus and L. bulgaricus range from 1 to 5 billion CFU/day
- 6. Atopic dermatitis (AD).** While it might seem strange that probiotics are now being researched as a treatment for AD, remember that probiotics help shape up the immune system. It is thought that AD may be a result of little to no exposure to microorganisms early in childhood. Thus, the immune system isn't prepared for any bad bacteria, so when a child comes into contact with one it may result in AD. Probiotics are thought to help increase the immune system by stimulating the production of immune cells needed in the body. The best probiotics for treatment is a combination of L. acidophilus and *Bifidobacterium lactis* with doses of 5 billion CFU/day.