

Probiotics: A Consumer Guide for Making Smart Choices Developed by the International Scientific Association for Probiotics and Prebiotics www.isappscience.org

The concept of probiotics* has been around for over 100 years, but scientists are just starting to understand their role in maintaining health, regulating the immune system and managing disease. There are hundreds of probiotic products available and an overwhelming amount of information for consumers to sort through. The International Scientific Association for Probiotics and Prebiotics (ISAPP) has developed the following key criteria to help consumers find a credible probiotic product.

Not all probiotics are created equal

- Different strains of even the same species can be different. A probiotic is defined by its genus (e.g. Lactobacillus), species (e.g. acidophilus) and strain designation (often a combination of letters or numbers). The concept of a bacterial "strain" is similar to the breed of a dog all dogs are the same genus and species, but different breeds of dogs have different attributes and different breeds are good for different tasks. So different strains of even the same probiotic species may be different from each other. You cannot assume that different strains of the same species will have the same effects. The names of probiotics sound complicated, but they are important to connecting the specific probiotic strain to the published scientific literature.
- What about trademarked names? Often, product manufacturers will create a consumer-friendly, trademarked (™) or registered trademark (®) name for the strain in their product. It is just an "alias" for the probiotic strain. These names are not scientific names and they do not reflect product quality.
- Food or supplement which is better? Probiotics can be found in various foods, yogurts, and supplements. Probiotic content is generally more important than the way in which you consume them.

Probiotics must be tested in humans and shown to have health benefits

- Claims what do they mean? Most probiotics are sold as dietary supplements or as ingredients in foods. Their labels cannot legally declare that the probiotic can cure, treat or prevent disease. Claims which relate the product to health are allowable if there is evidence to support them. Any claim made on a product, no matter how general, is supposed to be truthful and substantiated even though FDA approval is not required to make these claims.
- "Clinically proven." You might have to do some homework. Product claims of health benefits must be based on sound research done on the particular probiotic. The product should contain the specific strain(s) of bacteria at the same levels as used in published research. The studies should be performed in humans and published in peer-reviewed, reputable journals. Check product websites to see study results. Your pharmacist or healthcare provider should be able to help you sort through the scientific language.
- Just because it says "probiotic," doesn't mean it is a probiotic. Some products labeled "probiotic" do not have clinically validated strains at a functional dose in the product.

Get your doctor's OK. Probiotic foods and dietary supplements should be safe for the generally healthy population to consume. But consult a physician before administering probiotics to infants or to people with compromised immune systems or other major underlying illnesses. Read "Warning" and "Other Information" on the product package and be aware of any expected symptoms or side effects.

Choose a product at the right quantity

- What is the minimum CFU I should look for? Probiotics are typically measured in "CFU." CFU stands for colony forming units, which is the measure of the number of live microbes in a probiotic. CFU amount should be the same as that shown to be effective in clinical studies. More CFUs does not necessarily mean better.
- Different probiotics have been shown to be effective at different levels. It is not possible to provide one potency for all "probiotics." Scientific literature has documented health benefits for products ranging from 50 million to more than 1 trillion CFU/day.

Pick a product from a trusted manufacturer. A responsible manufacturer will make sure its probiotic product has the same strain(s) and is as potent through the end of shelf life as what was used in clinical studies.

Here's what the label should tell you:

- **Strain.** What probiotic is inside?
- **CFU.** (Colony Forming Units). How many live microorganisms are in each serving? When does it expire? Packaging should ensure an effective level of live bacteria through the "best by" or expiration date, not 'at time of manufacture'.
- Suggested serving size. How much do I take?
- **Health benefits.** What can this product do for me?
- Proper storage conditions. Where do I keep it to ensure maximum survival of the probiotic?
- Corporate contact information. Who makes this product? Where to do I go for more information?

^{*} Scientists define probiotics as "live microorganisms that, when administered in adequate amounts, confer a health benefit on the host." https://www.nature.com/articles/nrgastro.2014.66