

# Probiotics and You: Meet the Bugs that can Improve Your Health

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Normally you hear about bacteria making you ill, but a growing body of research is showing numerous health benefits of the bacteria in our large intestine. The makeup of our “gut biome” has been shown to impact everything from our immune system, vitamin and mineral status, gastrointestinal track health and even our body composition. Probiotics, in foods, beverages and supplements are gaining popularity because of these touted health benefits. Read below to find out more about these microorganisms including how to keep your gut biome healthy and happy.



**What are Probiotics?** According to the Cleveland Clinic, probiotics are live bacteria and yeast that are considered beneficial since they promote the growth of the “good” microorganisms in our large intestine. Though probiotics are found in different foods and drinks, we do not need to ingest them to have a healthy gut. Probiotics help balance the “good” and “bad” bacteria in our gut. Probiotics also help replace the “good” bacteria after taking a round of antibiotics.



**Why take Probiotics?** The typical American lifestyle and diet can really disrupt the balance of our gut biome. Sedentary lifestyles and low fiber diets combined with taking multiple medications, frequent traveling, drinking alcohol are all independent factors that can cause an imbalance of the microbes. Probiotics in foods and supplements will help restore this balance and can help prevent or improve some gastrointestinal side effects that are signs of bacterial imbalance including gas, bloating, diarrhea and constipation.



**What Foods Contain Probiotics?** Probiotic foods contain these live strains of bacteria that are cultivated from the fermentation process. Common probiotic containing foods include yogurt, kefir, sauerkraut, miso and kombucha tea. You can purchase these products at most stores or make your own at home (*see sauerkraut recipe on back*). Since 80% of one’s immune system is housed in the large intestine, ingesting foods that contain probiotics is one way to promote a healthier immune system.



**Are Probiotic Supplements Safe? Which one should I choose?** A point to remember is that the supplement industry is not regulated so you can never guarantee that supplements are 100% what they claim on the packaging. However probiotics are safe to take in a supplemental form for most people with normal immune function. Discuss this with your physician if you are in doubt. Try and find a probiotic that has multiple different strains of bacteria versus just buying one because it has a high volume of one or two strains. Also making sure the packing is opaque and kept in a cool place since the bacteria are sensitive to light, heat and moisture. Due to advancements in packaging, not all probiotics supplements have to be refrigerated. Some common brands that are often recommended include Align, Jarrow, Claire Labs and Culturelle.

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# How To Make Homemade Sauerkraut in a Mason Jar

Adapted from <http://www.thekitchn.com/>

## What You Need

### Ingredients

- 1 medium head green cabbage (about 3 pounds)
- 1 1/2 tablespoons kosher salt
- 1 tablespoons caraway seeds (optional, for flavor)



### Instructions

- **Clean everything:** When fermenting anything, it's best to give the good, beneficial bacteria every chance of succeeding by starting off with as clean an environment as possible. Make sure your Mason jar and jelly jar are washed and rinsed of all soap residues.
- **Slice the cabbage:** Cut the cabbage into quarters and trim out the core. Slice each quarter down its length, making 8 wedges. Slice each wedge crosswise into very thin ribbons.
- **Combine the cabbage and salt:** Transfer the cabbage to a big mixing bowl and sprinkle the salt over top. Begin working the salt into the cabbage by massaging and squeezing the cabbage with your hands. If you'd like to flavor your sauerkraut with caraway seeds, mix them in now.
- **Pack the cabbage into the jar:** Grab handfuls of the cabbage and pack them into the canning jar. Every so often, tamp down the cabbage in the jar with your fist. Pour any liquid released by the cabbage while you were massaging it into the jar.
- **Weigh the cabbage down:** Once all the cabbage is packed into the mason jar, slip the smaller jelly jar into the mouth of the jar and weigh it down with clean stones or marbles. This will help keep the cabbage weighed down, and eventually, submerged beneath its liquid.
- **Cover the jar:** Cover the mouth of the mason jar with a cloth and secure it with a rubber band or twine. This allows air to flow in and out of the jar, but prevents dust or insects from getting into the jar.
- **Press the cabbage every few hours:** Over the next 24 hours, press down on the cabbage every so often with the jelly jar. As the cabbage releases its liquid, it will become more limp and compact and the liquid will rise over the top of the cabbage.
- **Add extra liquid, if needed:** If after 24 hours, the liquid has not risen above the cabbage, dissolve 1 teaspoon of salt in 1 cup of water and add enough to submerge the cabbage.
- **Ferment the cabbage for 3 to 10 days:** As it's fermenting, keep the sauerkraut away from direct sunlight and at a cool room temperature — ideally 65°F to 75°F. Check it daily and press it down if the cabbage is floating above the liquid. Because this is a small batch of sauerkraut, it will ferment more quickly than larger batches. Start tasting it after 3 days — when the sauerkraut tastes good to you, remove the weight, screw on the cap, and refrigerate. You can also allow the sauerkraut to continue fermenting for 10 days or even longer. While it's fermenting, you may see bubbles coming through the cabbage, foam on the top, or white scum. These are all signs of a healthy, happy fermentation process. The scum can be skimmed off the top either during fermentation or before refrigerating. If you see any mold, skim it off immediately and make sure your cabbage is fully submerged; don't eat moldy parts close to the surface, but the rest of the sauerkraut is fine.
- **Store sauerkraut for several months:** This sauerkraut is a fermented product so it will keep for at least two months and often longer if kept refrigerated. As long as it still tastes and smells good to eat, it will be. If you like, you can transfer the sauerkraut to a smaller container for longer storage.