

## 6 Probiotic Foods to Cultivate Gut Health

By Jack Challem

The old adage, “you are what you eat” couldn’t ring more true than when it comes to your gut. The human digestive tract is home to trillions of microorganisms—collectively called the microbiota—that are proving to be instrumental in shaping our health. And emerging research is showing that diet plays a dominating role in shaping the microbiota, for good or bad.

The World Health Organization defines probiotics as “*live microorganisms which, when administered in adequate amounts, confer a health benefit on the host.*”

A diet full of processed foods, sugar, and omega-6 oils can wreak havoc on the microbiota, causing dysbiosis (microbial imbalance), but a diet that includes fiber-rich vegetables and fruit, along with probiotic-rich foods—foods that contain living microorganisms—support and enhance the estimated 1,000 species of bacteria that inhabit your digestive tract. When there is a healthy balance of these beneficial bacteria they help the body digest food, absorb nutrients, and make small amounts of certain vitamins and neurotransmitters. The latest research has shown that a balanced and diverse microbiota can also positively influence immunity, mood, weight, and inflammation levels, and may lower the risk of allergies, autoimmune diseases, and even some forms of cancer.<sup>i ii iii iv v vi vii viii ix x xi xii</sup>

We have the power to optimize the diversity and balance of beneficial bacteria every single day, with the foods we choose to eat.<sup>xiii xiv xv</sup> Probiotic-rich foods are one of the quickest and most effective ways to promote health and diversity in the gut. Aim to regularly incorporate these six foods in your diet to start cultivating your own healthy gut.

### 6 Probiotic Foods to Nourish Your Gut

**Yogurt.** Live-culture yogurt is typically rich in *Lactobacillus bulgaricus*, *Streptococcus thermophilus*, and other species such as *Lactobacillus acidophilus*, and *Bifidobacterium bifidum*. It’s important to read labels carefully. Many brands of yogurt are pasteurized after manufacture, which kills the probiotics. Always look for some indication of live-cultures, such as the term “live culture” or the names of species on the label. And avoid yogurt with a high sugar content—sugar damages the healthy balance of intestinal bacteria.

**Cheese.** Beneficial bacteria help convert milk to cheese, but not all cheeses provide the same benefits. Swiss, Parmesan, cheddar, Gouda, and blue cheese are all good choices, but other cheeses, such as American, are heavily processed and end up with little to no beneficial bacteria. Some of the bacterial species used in cheese include *Lactococcus*, *Lactobacillus*, and *Streptococcus*.

**Kefir.** This fermented dairy drink, which has a slightly sour taste and is similar to yogurt, originated in Russia and is now available commercially in a variety of flavors. Kefir is especially rich in probiotics, including *L. acidophilus*, *B. bifidum*, *S. thermophilus*, and *L. helveticus*.

**Fermented vegetables.** Many different cultures eat fermented vegetables, with the best known probably being sauerkraut and kimchi. In addition to being rich in probiotics, the prebiotic fiber in these veggies also supports the growth of healthy gut bacteria. However, not all fermented vegetables are the same. Many commercial products are devoid of probiotics because of heat treatment or being stored at room

temperature. Therefore, opt for kimchi, sauerkraut, dill pickles, and other fermented vegetables in the refrigerated section of stores.

**Miso.** Miso is made by fermenting soybeans with the fungus *Aspergillus oryzae*. Most Americans are familiar with miso in the form of soup, but its umami flavor adds depth to a variety of foods—try it in salad dressing, as a seasoning to replace salt or soy sauce (just mix it with a little water), or whipped with butter to serve over vegetables. Heating miso above 120 degrees destroys the beneficial microorganisms, so don’t ever boil it. Try a traditional Japanese breakfast of miso soup with a small side of fermented vegetables.

**Kombucha.** This beverage is made by fermenting green or black tea with *Saccharomyces boulardi*, a beneficial probiotic yeast, and can contain a variety of different probiotic strains, including *Lactobacillus*. The fermentation process yields alcohol, but kombucha usually contains the bacterium *Gluconacetobacter xylinus*, which converts most of the alcohol to acetic, gluconic, and lactic acids. Kombucha comes in a wide variety of flavors and is a healthy alternative to soda and other sugar-sweetened beverages.

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One animal feeding study found that dietary changes were responsible for 57% of the population changes and variation in the gut microbiota, whereas genetics accounted for no more than 12%.<sup>xvi</sup>

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### Prebiotic Foods

Prebiotics are non-digestible fibers that bacteria break down in your digestive tract and consume as food—in other words, prebiotics feed your microbes. Some of the most common types of prebiotics are fructo-oligosaccharides (FOS, fructans) and galacto-oligosaccharides (GOS). All fibrous foods contain prebiotics, but some foods have greater prebiotic benefits. For example, avocados are rich in inulin (not insulin), an especially beneficial type of FOS.

A study in the *Journal of Nutrition* noted the specific foods richest in prebiotics. In order, they include chicory root, Jerusalem artichoke, dandelion greens, garlic, leek, onion, and asparagus.<sup>xvii</sup> Other excellent sources of prebiotics include cruciferous vegetables, such as broccoli, cauliflower, bok choy, Brussels sprouts, kale, and collard greens. In terms of fruit, berries and sour cherries are particularly good sources of prebiotics.

***Resistant Starch: A Superfood for the Digestive System***  
Resistant starch is a type of dietary fiber that passes through the small intestine undigested and makes its way to the colon, where it feeds the friendly bacteria there, promoting growth and diversity. The microbiota can ferment these starches into short chain fatty acids (SCFAs) that support immunity, provide energy to colon cells, inhibit the growth of certain pathogenic bacteria, maintain healthy blood sugar levels, and inhibit the absorption of toxic compounds. Pumpernickel bread, potato starch, raw and slightly unripe bananas, cooked plantains, canned white beans, lentils, cooked and cooled rice, and cooked and cooled potatoes are just a few sources of resistant starch. (Reheating rice or potatoes after they’ve cooled will *not* destroy the resistant starch.)

Every meal and snack is a chance to feed your microbiota, promoting its health and diversity, and in turn, optimizing your overall health. You may already regularly enjoy some of these probiotic and prebiotic foods, but try branching out and giving some new ones a go—because really, you are what your *microbes* eat!

**Eat This, Not That to Feed Your Microbes**

| <i><b>Eat This</b></i>          | <i><b>Not That</b></i>  | <i><b>Why?</b></i>                                                                                                                                      |
|---------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Live-culture plain Greek yogurt | High-sugar fruit yogurt | Sugar is especially damaging to the microbes living in our guts. Opt for plain Greek yogurt with plenty of live probiotics.                             |
| Japanese miso soup              | Tomato soup             | Canned tomato soup can be high in sugar and other unnecessary ingredients; even if you make it from scratch, it still lacks probiotics.                 |
| Sauerkraut                      | Slaw                    | Many people have a hard time digesting raw cabbage. Fermenting it not only creates beneficial probiotics, it makes it easier to digest!                 |
| Dark chocolate                  | Milk chocolate          | Certain bacteria in our guts break down polyphenols in dark chocolate, turning them into beneficial compounds that exert an anti-inflammatory effect.   |
| Butter                          | Vegetable oils          | Vegetable oils are high in omega-6 fatty acids, which disrupt the gut microbiota; whereas butter contains butyric acid, a fuel source for colon cells.) |

*References Available Upon Request*