

PROBIOTICS



THE RUNDOWN

When thinking about using food as medicine, here's an element that can't be overlooked: probiotics. Probiotics are the beneficial bacteria found in certain foods. These friendly bacteria help maintain a healthy immune system and are beneficial in dealing with a wide range of GI problems from Irritable Bowel Syndrome or Disease, to people who are on a regimen of antibiotics, and can even help with seasonal allergies. Our digestive tract contains about 100 trillion bacteria that make up our intestinal microflora, with more than 400 different species of bacteria in our intestines that can weigh up to 1-2 kilograms (1). This helps our gut provide about 50% of the body's immune response, digests our food, and helps to reduce gastrointestinal problems like diarrhea. Having a good microflora balance of bacteria in your intestines can also help reduce your risk for developing gastrointestinal problems. Prevention can be as delicious as it is important!

Q&A

HOW MUCH DO I NEED IN A DAY?

Consuming at least 1 billion good bacteria per day is the recommended dose. It is not well known how long it takes for probiotics to move out of your system and for negative bacteria to take over, so a daily intake is a great way to ensure you are meeting your basic probiotic needs. One cup of high-quality keifer or yogurt can provide 10 billion count of probiotics.

HOW DO I KNOW HOW MANY PROBIOTICS I AM GETTING FROM MY FOODS?

Fermented foods can be a good source of probiotics, but it's difficult to determine the true probiotic count that you will be consuming. Many yogurts and keifers use the label "live and active cultures" seal which guarantees that at the time of manufacturing there are 100 million probiotics per gram of yogurt. You might also find package information for serving size/probiotic count. Use these as your guide and know that as long as the product is refrigerated, a

good percentage of these organisms should still be alive and able to help with your flora even though you may not be able to get a true count.

NUTRITION NOTES

PREBIOTICS

Prebiotics are non-digestible fiber compounds that actually feed probiotics. They're found in whole grains, onions, bananas, garlic, greens, berries, legumes and fortified foods. Eating these foods keeps your intestinal microflora well-fed.

SUPPLEMENTS

When choosing a probiotic supplement aim for at least 10 billion organisms per capsule. A probiotic supplement that is refrigerated is always preferable; this ensures you're ingesting live, potent beneficial bacteria that will successfully adhere to your intestinal tract.

Choose a supplement with a minimum of 5 strains of bacteria. Our GI tracts contain many different species and it is easier to give your

GI tract a healthy starting colony if there is more than one to work with. Strains to choose include come from the genus names: Lactobacillus, Saccharomyces, Bifidobacterium.

THE BOTTOM LINE

Consuming a healthy daily dose of probiotics is essential! Whether you get your dose from a supplement or your diet, probiotics go a long way in preventing illness and keeping your digestive system working efficiently.

INTEGRATION STATION

Use delicious everyday fermented foods to provide daily probiotics. The best sources of a variety of probiotics are yogurts, keifer, kombucha, sauerkraut, miso, sour cream and pickles.

KEIFER

This delicious cultured milk drink is much like a drinkable yogurt. It comes in many different flavors and most keifers have the benefit of offering up to 12 different strains of probiotics in each serving and 7-10 billion beneficial bacteria per serving. This is a great way to use a quick snack before the gym, have with a breakfast or even use as a replacement for milk on your morning cereal.

YOGURT

Is also a cultured milk product with many varieties. Greek yogurts, made by straining out the whey, have twice the protein as regular yogurt. This higher protein treat will provide probiotics and a filling meal addition.

LACTOSE FREE CHOICES

There are many choices for individuals who cannot tolerate lactose. Soy, coconut and almond milk yogurts are now available. Kombucha (a fermented tea), high quality sauerkraut or kim chi are great choices for those who cannot tolerate lactose or dairy. (Be

sure to keep these refrigerated.) Small doses of keifer are often tolerated as it is 99% lactose free.

RECIPE

HOMEMADE SAUERKRAUT

Making homemade fermented foods is easy and delicious! Try this recipe for sauerkraut below.

INGREDIENTS

- 2 medium cabbage heads (about 4 to 5 total pounds, cored and finely shredded)
- 2 tablespoons sea salt (find unrefined sea salt here)

DIRECTIONS

Toss cabbage and salt together in a large mixing bowl and begin to squeeze the cabbage and salt together with your hands, kneading it thoroughly to break up the cellular structure of the shredded cabbage.

When the cabbage has become limp and releases its juice, transfer it to a sauerkraut crock or vegetable fermenter (available here). Pack the salted cabbage into the crock or fermenter as tightly as you can, eliminating air bubbles. A kraut pounder (available here) is particularly helpful in packing the cabbage tight within the crock.

Continue packing the cabbage into the container until the cabbage is completely submerged by liquid. Cover loosely and allow it to sit at room temperature, undisturbed, for at least 1 month and up to 6 months, testing the sauerkraut every few days until it is done to your liking. Transfer to the refrigerator or other cold storage where it should keep for at least 6 months and up to 1 year.

NOTES

If scum appears floating in the brine of your homemade sauerkraut, simply skim it off. You won't be able to remove it all, but skim off what you can

and don't worry about any remaining. The real key to preparing homemade sauerkraut, and any fermented food, is that the solid materials rest below the liquid. Fermentation is an anaerobic process and to expose fermenting produce to air increases the likelihood of contamination by stray microbes, yeasts and molds which is why crocks designed specifically for fermentation (like this one) can help to eliminate the risk of microbial contamination and increase the reliability and consistency of your ferments.

SOURCES

SOURCES

Verna E. Use of probiotics in gastrointestinal disorders: what to recommend? 2010;September: 3(5): 307-319. (PubMed) <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3002586/>