Gut Rescue

ULTIMATE PROBIOTIC GUIDE

EFFORTLESSLY BANISH BLOATING, CRAVINGS, AND BELLY FAT

Contents

What Are Probiotics?

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Probiotic is a word used to describe the many beneficial microorganisms that can populate or modulate your microbiome. The word probiotic is coined from the Latin word pro that simply translates to 'for or support' and the Greek word biotic that loosely translates to 'life' - meaning 'for life'.

Probiotics are found naturally in some foods - especially fermented foods like yogurt, sauerkraut, and kombucha - but they're also commonly taken as a supplement in a powder or capsule form.

There are millions of kinds of probiotics and thousands of supplements available to purchase.

How Probiotics Work?

A big misconception is that when you take probiotic supplements, the bacteria in the capsules "move in" and becomes part of your microbiome.

This is partly true - but the truth is a little more complex.

Probiotics are largely transitory - meaning they only stay in your gut for a short period of time. Some probiotics do colonize the gut and move in permanently, but most only stay in your gut for a few weeks to a few months.

But while the probiotic is "visiting" your gut, it performs important tasks and can even help promote the growth of beneficial microbes that already exist there.

Taking a probiotic is less like planting new seeds in your garden and more like sending down fertilizer and a gardener to tend to the plants already growing.

Why You Need Probiotics?

Though probiotics may not work in the way you originally imagined, most people in the modern world can benefit from taking a probiotic supplement.

Why? For all the same reasons your microbiome is damaged in the first place: birth and childhood, antibiotic use, stress, diet, and more.

Probiotics can help to rebuild and rebalance your microbiome to achieve your health, energy, and weight loss goals.

You may not need to continue a probiotic supplement for life, but especially during the healing process, taking the right probiotic can accelerate microbiome healing.

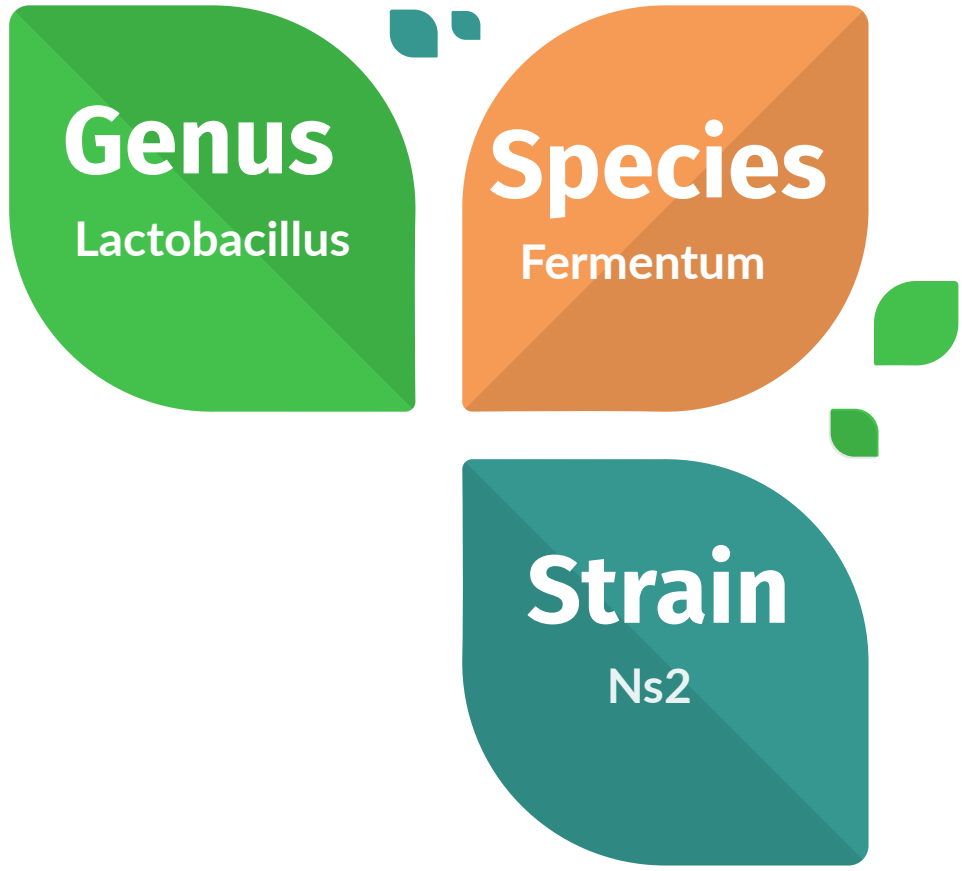
Genus, Species, & Strain

Probiotics have a genus, a species, and (often) a strain.

Take **Lactobacillus Fermentum Ns2** as an example.

It's important to know that some probiotics' characteristics are strain specific. That means that even if two probiotics have the same genus and species if they are different strains they are entirely unique!

Some genus and species have just one strain identified - and others have 1,000s!



Major Categories of Probiotics

Lactic Acid Producing Probiotics

These are mainly from the Lactobacillus genus and Bifidobacterium genus and are the most well-known and well-researched of all the probiotics. There are hundreds of lactobacillus and bifidobacterium strains and species available!

You can find Lactobacillus and Bifidobacterium probiotics at grocery stores, pharmacies, and health food stores. Some are refrigerated, and some are shelf-stable Their benefits and effectiveness vary significantly so understanding the differences among them becomes very important.

Specific Species To Look For:

Lactobacillus rhamnosus has been shown to colonize the intestines (not just pass through!). It's especially beneficial for skin health (problems like eczema and dermatitis) and weight loss.

Lactobacillus casei is especially useful for supporting mental health and can be beneficial for those with anxiety, depression, and brain fog.

Bifidobacterium longum is one of the first species to colonize an infants gut. It has been shown to reduce inflammation, respiratory infections, and allergy symptoms.

Bifidobacterium animalis prevents various GI tract symptoms, especially in children. It also combats weight gain, boosts immunity, and prevents infections.

Bifidobacterium breve has been shown to combat allergies, gastrointestinal infections, and inflammation in children. It is also good for the skin and promotes a healthy weight.

Soil-Based Probiotics

Soil-based probiotics (also called spore-forming or SBOs) are a wide range of probiotics that are found naturally in soil. Since humans evolved in close contact with soil and dirt, these microbes tend to be extremely beneficial and very well tolerated. SBOs are often "shelf stable" - meaning they don't need to be refrigerated to stay active.

Some specific strains of spore-forming probiotics are especially beneficial because they can survive being exposed to stomach acid and make it to the intestines alive. Many other probiotics cannot survive stomach acid and die before they reach the intestines.

SBOs don't just add more good bacteria to the mix - they also help weed out overgrowths of harmful bacteria and help to heal any damage to the gut walls.

Specific Species To Look For:

Bacillus Subtilis HU58 has been shown to fight harmful bacteria and can produce Nattokinase in the digestive tract which promotes healthy blood pressure, cholesterol levels, and circulation.

Bacillus indicus HU36 has been shown to produce highly-bioavailable antioxidants (like Beta-Carotene, Lycopene, Lutein, and Astaxanthin) in the gut as well as reduce inflammation.

Bacillus clausii can withstand stomach acid and make it into the intestines alive. It also is antibiotic-resistant and a good choice for supporting the microbiome after antibiotic exposure.

Bacillus coagulans is particularly good at colonizing and has a profound effect on inflammatory conditions like IBS and Crohn's. It is an immune booster and aids in digestion.

Yeast Based Probiotics

Some yeasts can be very beneficial probiotics. Saccharomyces is a beneficial yeast that has been extensively studied. It's especially useful for people who struggle with diarrhea - but it has many other benefits!

It can help decrease candida - a yeast that commonly overgrows and causes vaginal yeast infections, oral thrush, and other problems in the gut. It's also useful in fighting gut infections like Giardia (a common cause of food poisoning).

Saccharomyces can also help combat gut dysbiosis and Small Intestinal Bacterial Overgrowth (SIBO) by eradicating bacteria where it doesn't belong and promoting the spread of beneficial bacteria where it does belong.

Specific Species To Look For:

Saccharomyces boulardii has been shown to be beneficial in the treatment of hard-to-treat gut infections like C. difficile, candida, and H. pylori as well as an ability to eradicate gut parasites.

Achieve your Weight Goals with Probiotics

Here's what scientists know so far: people who are overweight or obese have different microbial composition compared to lean people. In general, overweight people have more Firmicutes bacteria while lean individuals have a higher amount of Bacteroides bacteria.

People who are overweight also have reduced microbial diversity compared to lean people. Meaning lean people have more types of bacteria and a greater amount of bacteria living in their gut.

Using any probiotic to increase diversity may help with weight loss - but some specific species have been well studied and are a great place to start.

Specific Species To Look For:

Lactobacillus gasseri has been shown in human and rat studies to lead to reduced belly fat, reduced BMI, and overall weight loss.

Lactobacillus fermentum led to a reduction of body fat in research studies.

Lactobacillus paracasei has been shown to reduce food intake in human studies, as well as reducing fat cell size and fat production.

Lactobacillus plantarum has been shown to produce conjugated linoleic acid (CLA), which can help increase fat burning and lowers BMI.

Clostridium butyricum has been shown to reduce fat accumulation in the liver and fat tissue inflammation, lower insulin levels, and improve insulin sensitivity.

Species to Avoid When Trying to Lose Weight:

While the following species may have other health benefits, they've been shown to increase weight gain in several studies. Avoid them if weight loss is your primary goal.

- Lactobacillus acidophilus
- Lactobacillus fermentum
- Lactobacillus ingluviei
- Lactobacillus reuteri

Fermented Foods vs. Probiotics

Both naturally fermented foods and probiotic supplements are great for microbiome support and healing. Both can be used during this protocol. But even if you do eat fermented foods, you should also consider using a targeted probiotic supplement while healing the gut.

This is because the strains of bacteria in high-quality probiotic supplements are specifically chosen to be beneficial to gut health, and for their ability to survive the stomach and make it through the digestive tract alive.

While these same strains may be present in fermented foods, they may also not be - the strains in fermented foods can vary significantly from batch to batch.

You'll likely want to use a probiotic whether or not you also eat fermented foods regularly.

Probiotic Rich Foods

Fermented foods are the best source of probiotics in your diet. But not all fermented foods contain equally beneficial probiotics. To be good for your microbiome, fermented foods must be naturally fermented and unpasteurized.

You can find these foods at many grocery and specialty stores - but you can also make them at home yourself! For beginners, yogurt and sauerkraut are some of the easiest ferments to master.

Here are some fermented foods to look for:

Yogurt is the most well-known fermented food. Look for whole, raw milk yogurts (including alternatives like coconut and almond milk) that are made using 24-hour fermentation methods.

Kefir is traditionally a fermented milk, similar to yogurt (but a thinner consistency). It can also be made with water or coconut water for a dairy-free alternative. Choose unsweetened varieties.

Kimchi is a spicy fermented cabbage dish that originated in Korea. Look for refrigerated kimchi with minimal added ingredients and preservatives.

Kombucha is a fermented tea. Some brands contain lots of added sugar and juice and very little live and active cultures - so make sure you check the bottle before drinking. And note that some kombuchas also contain alcohol.

Raw Apple Cider Vinegar is a powerful probiotic food when raw and unpasteurized! To get the probiotic benefits from apple cider vinegar, look for raw, unpasteurized vinegar with "the mother" included. It should be cloudy and have sediment at the bottom.

Sauerkraut is a fermented cabbage relish best known in the U.S. as a hot dog topping. When made traditionally, it is a rich source of probiotics. Look for it in the refrigerated section.

All Probiotics Are Not Created Equal

Each individual probiotic strain offers unique benefits. Additionally, some strains survive temperature changes, digestive transit, and the manufacturing process better than others.

When Choosing a Probiotic, You Should Consider:

- Research on the strains included
- Shelf stability
- Ability to survive the stomach
- Ability to colonize the gut
- Amount of CFU (colony forming units) per capsule
- Reputation of the manufacturer
- Do they contain binders or fillers
- Are they allergen-free (gluten, dairy, soy, etc.)

Because quality varies significantly among brands, and supplements aren't highly regulated, it is essential that you buy from a brand you trust. We recommend looking for brands that have their products third-party tested for purity and potency.

What to Expect on Probiotics

Because everyone has a completely unique microbiome, everyone will experience different benefits from probiotics.

Listen to your body and take note of changes happening when you introduce probiotics. If you notice anything improve around the time you start taking a new probiotic, it's likely the probiotic had some effect.

Some things to take note of when you start a new probiotic:

- Are you less bloated?
- Are you less inflamed?
- Are your cravings reduced?
- Has your digestion improved?
- Do you have more energy?
- Do you have less anxiety or depression?
- Have skin issues resolved?
- Has your mental clarity improved?
- Are you sleeping better?
- Do you have less joint pain?
- Has your mood improved?
- Is your immune system more robust?
- Do you just "feel" better?

Because our microbiome affects so many areas of our health and wellbeing, the benefits of probiotics can show up in many ways.

Negative Probiotic Reactions

It is also possible to have negative reactions to probiotics. One of the primary roles of probiotics is to fight and kill the bad bacteria in your body. But as these harmful microbes die they can cause you to have what's known as a die-off reaction. Usually, these reactions will cause you to feel like you have the flu. You may also experience headaches, bloating, digestive distress, lethargy, anxiety or depression.

A die-off reaction could mean the probiotic is doing precisely what it should be doing - healing your gut. But these reactions should last no longer than a few days to a week, so if they proceed past that, this specific probiotic might not be right for you.

You may want to consider decreasing your dosage if you are experiencing a die-off reaction. Once the symptoms go away, you can slowly increase your dose.

Dosage & Rotating Probiotics

Again, because our microbiomes are so diverse, everyone will benefit from a unique combination of probiotics and dosages. You may need to go through a process of trial and error with several probiotics before finding one that works best for you.

If you are not seeing benefits (or even having problems) with one category, for example, the lactic acid producing group, you should try another, like the soil based group.

Remember that research has shown that the healthiest microbiomes have the MOST diversity. That's why it can be beneficial to rotate probiotics and try different species and strains.

What about dosing?

Probiotics are sold in units of measurement called CFUs: colony forming units. One CFU is essentially one bacterium.

Different strains of probiotics are beneficial in varying amounts - so the best thing to do is use the suggested dose on the packaging of the probiotic you choose.

When you are first introducing probiotics, you should start with the lowest dose recommended by the manufacturer. If after a few days you see improvements, great - that dose works for you. If you tolerate the probiotic well but are not seeing improvements, slowly increase the dose to the top of the manufacturer's recommended range or until you see a benefit.

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