Six Truths You Need to Know Before Choosing a Probiotic

? You're confused.

We understand. There are hundreds of probiotic products out there and they all claim to be "the most effective" and "packed with 50 GAZILLION CFUs" and "the #1 probiotic on the market."

So how do you know what the real TRUTH is when it comes to probiotics?

Reading this material is a good start. We are going to tell you the following **SIX TRUTHS** about probiotics that you may or may not have known:

TRUTH #1: Your body needs GOOD bacteria.

TRUTH #2: Knowing which strains keep you healthy is important.

TRUTH #3: The WAY your probiotic is prepared is critical.

TRUTH #4: All probiotics do NOT need to be refrigerated.

TRUTH #5: Having GAZILLIONS of live cultures (CFUs) does NOT make it better.

TRUTH #6: Very few probiotics have EVER been scientifically tested.

After you read this material, we encourage you to go do more homework based on what you learn here.

You MUST do some homework if you hope to choose a probiotic that will have any significant effect for you and your family.

And when you are out there researching, be careful what you read. There is a lot of good information. But there is also a lot of marketing disguised as scientific information. Marketing does not tell you what you NEED to know. It tells you what they WANT you to know.

That's why you will not see the name of ANY SPECIFIC PROBIOTIC in this material.

Because it is intended to be objective information that you can use to clear up any confusion you might have about the sometimes crazy world of probiotics. Now, since we are being 100% truthful, we are two doctors who have developed our own probiotic, but we will not name it in this material. Naturally, since you probably found this material on our web site, you already know who we are. But this is NOT a marketing piece. Honestly, we hope you find the BEST probiotic that's right for you. Whether it's ours or not.

So congratulations on being someone willing to do the necessary homework to find the right probiotic. We hope that you will find this information valuable. And we hope it helps clear up some misunderstandings and myths that are still floating around out there.

And clears up a little confusion too! Be healthy!

» TRUTH #1: Your body needs GOOD bacteria.

Let's start with an easy truth. Everyone can agree on this. Your body needs good bacteria.



Your intestines are full of it.

It is estimated that you have about a QUADRILLION microorganisms (bacteria, molds, viruses, etc.) in your intestines alone. That's a thousand trillion. The number looks like this—1,000,000,000,000,000. So with all these microorganisms in there, it only makes sense that your gastrointestinal (GI) tract is the primary way that harmful substances gain access into your body. Approximately 60–70% of your body's immune system surrounds the gastrointestinal tract to help prevent microbial access into your body.²



When your GI immune system is healthy, you are.

The immune protections in your GI tract protect you — preventing destructive materials such as toxins and harmful microbes from entering your body. But when this system is down, you are at risk. In fact, if your GI immune system fails seriously enough, it can lead to a wide range of substantial health problems beginning with autoimmune diseases, which are the third leading cause of morbidity (rate of disease) and mortality (death rate of disease) in the industrialized world.³

Beyond autoimmune disease, failure of the GI immune system has also been linked to multi-organ system failure, and systemic (whole body) disease and immune dysfunction.4 It has also been associated with a number of inflammatory conditions such as asthma, eczema, psoriasis, and Crohn's disease.⁵



OK, you get it. Keep your intestines healthy. But how?

In addition to the obvious remedies of eating healthier, better foods, research recommends that you maintain the ideal ratio of 85% "good bacteria" (known as probiotics and/or intestinal microflora) to 15% "bad bacteria."6



"Probiotic" means pro life.

It refers to the trillions of good bacteria that line your intestinal tract and positively alter the balance of microflora by inhibiting the growth of bad bacteria, promoting good digestion, reducing toxins, and boosting immune function. When colonies of probiotics are flourishing in your GI tract, you are better equipped to combat the development of many different chronic diseases.⁷

And if you are interested in weight loss, nearly every study performed that analyzed the intestinal flora in an obese population found a greater occurrence of "bad" bacteria and lower levels of beneficial "good" bacteria. There is even a study that found test subjects who received supplemental probiotics daily were able to reduce abdominal fat by almost 5 percent over a 12-week period, while the group that did not take a probiotic experienced no such positive changes.9

So there is no doubt about it...



Your body needs GOOD bacteria.

» TRUTH #2: Knowing which strains keep you healthy is important.

When you are choosing an overall probiotic, you should be looking for one that best addresses the health issues that you (and/or your family members) are facing.



Each individual probiotic strain offers specific benefits.

When ANY strain makes the journey through your stomach (provided they survive the destructive acid and bile), they then take up residence in your intestinal tract and begin to do what they do. In general, most strains help promote healthy digestion and work to strengthen your immune system. They grow good bacteria to combat bad bacteria and other microbes.

But some strains are better for some health issues than others. Certain types are better for general health conditions — mental health, stress relief, digestive issues, women's health, children-focused health, etc. In addition, you might consider specific strains for specific issues, for example:

- » Irritable Bowel Syndrome (IBS)
- » Vaginal infections
- » Urinary infections
- » Constipation
- » Diarrhea/traveler's diarrhea
- » Crohn's disease

- » High cholesterol
- » Bone mineral density
- » Blood pressure
- » Cancer
- » Lactose intolerance
- » Cold & flu
- » Allergy symptoms

- » Antibiotic counteraction
- » Dental issues/Bad breath
- » Eczema
- » Colic
- » Improved sleep
- » Stress relief

On the following page is a chart detailing some of the more common probiotic ingredients and what health issues they are typically used for.



Having MORE strains is not always better.

When you're researching probiotic supplements, you'll probably come across some products that boast as many as 15 or more different strains of bacteria. Just like the number of CFUs doesn't matter unless they make it alive into your intestines (we'll discuss later in Truth #5), the total number of strains may not matter either.

Here's what matters—does the supplement have strains that will help you with your particular issues? If you are lactose intolerant, does your supplement contain the best probiotic strains to strengthen your system against those negative effects? However, if you have been taking antibiotics or you have multiple health issues, you may need a large variety of specific strains to bring the intestinal flora (good bacteria) back into balance, in

efforts to regain and maintain your health.



But here's the MOST IMPORTANT THING...

Much more important than WHICH strains and HOW MANY strains your supplement contains is this—HOW MANY OF THOSE CULTURES GET DELIVERED ALIVE AND INTACT INTO YOUR SYSTEM?

It doesn't matter at all if you have all the best strains in the world if they don't survive through the acid and bile in your stomach. So after you choose a supplement that contains the strains you are looking for, do some research about how it is manufactured. Be sure that it has maximum possible potency when you purchase it, and maintains as much of that potency for as long as possible. (Read more about shelf life and potency in TRUTH #4: All probiotics do NOT need to be refrigerated.)



The right strains = better overall health.

As you are undoubtedly finding out, there are a lot of things to consider when choosing the probiotic that's best for you. And science is still exploring all the benefits and uses for these wonderful microorganisms—and discovering new things every day!

Here's the truth—choosing a probiotic with the right strains and the right delivery system for you is a great way to start improving your overall health. **And the sooner the better.**

Twelve Common Probiotic Strains and Their Benefits

Strain	Could help if you have issues with*:	What it does:
Lactobacillus plantarum	Irritable Bowel Syndrome (IBS)Cold and fluOther immune system deficiencies	This bacterium helps you fight against getting sick by defending your system from invading viruses, molds, toxins, etc.
Lactobacillus rhamnosus	 Irritable Bowel Syndrome (IBS) Diarrhea Lactose intolerance Urinary tract infections Other intestinal tract illnesses including stomach ulcers 	This strain of probiotic is known for its ability to survive through the harsh gastric acid and bile of the stomach – to make it through to the intestine and compete against bad bacteria. It enhances the strength of your immune system by stimulating mucous production, inhibiting the growth of intestinal pathogens, and reducing inflammation in the intestines.
Bifidobacterium bifidum	ConstipationAllergy symptomsDigestive issuesLactose intolerance	In addition to keeping your colon healthy and increasing your ability to absorb important nutrients, BB also reduces intestinal inflammation and competes with pathogens for adhesion to the intestinal cells to help make your immune system stronger. This is one of the four good bacteria species typically found in infants.
Bifidobacterium infantis	 Irritable Bowel Syndrome (IBS) Gastroenteritis Defends against pathogens such as Salmonella 	A probiotic bacterium common in breast-fed infants, but which can also be found in teens and adults. It is known to successfully survive the trip through the stomach acids and bile and adhere to the intestinal tissues where it produces acetic acid and bacterocinlike substances, and some strains even produce B-vitamins such as thiamine, nicotinic acid, and folate. This is one of the four good bacteria species typically found in infants.

Strain	Could help if you have issues with*:	What it does:
Bidifobacterium Iongum	 Ulcerative colitis Intestinal inflammation Vaginal flora balance Constipation Crohn's disease High cholesterol Colon cancer 	Like most strains, they are still discovering all the positive benefits of this bacteria. They do know that it will strengthen your immune system, improve your overall gut health, and can help with re-establishing beneficial vaginal flora. Studies have led researchers to believe that B. longum may minimize the effects of or prevent a full range of other ailments and diseases.
Lactobacillus reuteri	 Eczema Colic Diarrhea Rotovirus Workplace sicknesses Dental health issues Female Urogenital Tract Infections Constipation 	This bacteria produces a unique broad-spectrum antibiotic substance called reuterin–which has been found to inhibit the growth of some harmful bacteria, along with yeasts, fungi, and protozoa, while keeping normal gut flora intact. In addition, reuterin has also been shown to suppress infections related to H. pylori (linked to peptic ulcers and gastric cancer). It is found naturally in some milk and meat products.
Lactobacillus acidophilus	 Acute, infectious diarrhea Vaginal infections Urinary tract infections 	One of the most popular lactic bacteria, Lacidophilus is commonly used in foods such as yogurt and other dairy products. It works very well in combination with other probiotics to reduce the toxic effects of mold and yeast growth, and can prevent parasite growth in your intestinal tract.
Lactobacillus casei	ConstipationLactose intoleranceCrohn's diseaseDiarrhea	Another lactic bacteria, L. casei occurs naturally in both your mouth and intestines, and helps support a healthy immune system. It can also reduce the rate and risk of bacterial infections. It has also been administered safely and with positive results to critically ill children suffering from diarrhea.

Strain	Could help if you have issues with*:	What it does:
Lactobacillus helveticus	 Bone mineral density Blood pressure Improved sleep Stress relief Calcium absorption Diarrhea Lactose intolerance Allergies 	Found in many cheeses, this lacticacid producing bacteria boasts a variety of health benefits—ranging from stimulating the immune and digestive systems to increasing bone density in post menopausal women, to reducing arterial stiffness and blood pressure. It can also improve health by increasing the bioavailability of the nutrients in the body.
Lactobacillus salivarius	Gum sensitivityPlaqueTooth and gum healthChronic bad breathUlcers	In addition to the wide range of proven dental health benefits, L. salivarius is currently being tested and is believed to have the potential to improve immune system responses to colitis and septic shock.
Pediococcus acidilactici	 Stress relief Digestive issues Diarrhea Constipation Multiple Sclerosis relief 	This bacterium can balance the bacteria in your gut to enhance your overall health and promote a healthier inflammatory response in the intestines. It can reduce and prevent unhealthy bacteria and parasites—like salmonella and E.Coli—from entering your intestinal tract. It is even believed that it can provide a supportive role in patients who are suffering from Multiple Sclerosis.
Streptococcus thermophilus	 Lactose intolerance Colic Digestive issues Irritable Bowel Syndrome (IBS) Diarrhea Dermatitis Ulcers 	One of the two original strains used to make yogurt, this probiotic is still one of the most effective strains for boosting your immune system and improving your digestive health. It is currently being tested for limitless applications, especially for treating the causes and symptoms of cancer.

^{*} Probiotic strains are constantly being tested to determine efficacy and indications in both humans and animals. The indications listed here are simply a representation of what the most recent testing has shown to be the likely benefits for each strain. There are no guarantees of efficacy for any probiotic ingredients. The material and opinions expressed in this document are believed to be accurate based on the best judgment available to the authors. Whilst the information in this document is regularly updated and every attempt is made to ensure that the material is accurate, medical research is being continually published and thus some information may be out of date and/or may contain inaccuracies and typographical errors.

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The following sources were consulted in the preparation of this list: https://medlineplus.gov, www.probiotics.org, www.mayoclinic.org, www.probioticsdb.com, and www.probiotics-lovethatbug.com

» TRUTH #3: The WAY your probiotic is prepared is CRITICAL.

Liquid. Capsule. Tablet. The delivery system doesn't really matter. What matters is that your probiotic must be able to withstand the storage process and deliver the maximum possible dosage of living cultures through the stomach acid and into the intestinal tract. But research indicates that anywhere from

80–99% of traditional unprotected live probiotic cells will be killed off before reaching your intestine

due to the extreme acidic environment of the stomach and the release of bile from the gallbladder.¹⁰

That is why the delivery system you choose doesn't matter. But HOW the probiotic you choose was prepared does.

In order for the good bacteria to provide their beneficial effects to you, they must be able to withstand processing conditions and also be viable in sufficient numbers during storage.¹¹ Many probiotic supplements boast billions of active cells per dose, but cannot promise they are alive and well as they enter your intestines. (HINT: That's why having MORE active cells isn't always BETTER—see Truth #5.)



Microencapsulation hasn't been scientifically validated yet.

Microencapsulation is a process that some companies have been using to "shield" the probiotics from the damaging effects of the stomach acid. However, several methods of micro-encapsulation of probiotic bacteria have been reported and include spray drying, extrusion, emulsion and phase separation, but research indicates none of these reported methods has resulted in the large numbers of shelf-stable, viable probiotic bacteria.¹²



One acid coating process HAS been proven to protect the live cultures.

A process in which the probiotic is coated in an acidic protection, has been tested and been proven to protect from the damaging effects of stomach acid and bile. As of the date of the writing of this material, this is the **only process that has been scientifically tested and proven to protect live probiotic cultures.** (For more about the scientific testing, see TRUTH #6.)

So, again, the real truth here is:

The WAY your probiotic is prepared for delivery is CRITICAL.

After you ensure you're getting the right dosage, you can choose the delivery system—liquid, gel, caplet, etc.—based on personal preference. Liquid is often the preferred method for children and seniors because there's no swallowing large pills and can be easily dropped into a cold beverage every day.

» TRUTH #4: All probiotics do NOT need to be refrigerated.

Refrigeration of probiotics is a very old school way of thinking. The days when probiotic supplements required refrigeration are long gone. In fact, many of the ones that do require refrigeration are likely to be less active and have less of a chance to survive the trip through the stomach acid. Let us review some basic science for a moment so you have a better understanding of how bacteria grow.



Probiotic bacteria have a four-phase life cycle.

- 1. **LAG Phase** In the beginning, the bacteria are dormant, and not replicating. They are not consuming food and simply adapting to their environment.
- 2. **GROWTH Phase** The bacteria are replicating exponentially and using up nutrients in their environment. They are also generating lots of waste as a by-product of their replication process (i.e. acids, etc.)
- 3. **STATIC Phase** Growth has plateaued, because much of the available nutrients have been used up.
- 4. **DEATH Phase** Pretty self-explanatory.

Probiotics are literally sold in all 4 Phases. Those in the LAG Phase typically do not require refrigeration, because they are not growing or consuming nutrients, only adapting to their environment in a dormant stage. However, live bacteria that are in the GROWTH Phase typically require refrigeration because they are packaged with a food source (e.g., simple sugars) and have already started growing. The purpose of the refrigeration is to slow down their metabolism so they do not consume all their food while sitting on the shelf in stores waiting for you to purchase them. Now imagine what happens when they run out of food... Yep that is right, they plateau and reach a STATIC phase followed by death all before you even take the supplement.



Probiotics that DO NOT require refrigeration have a longer shelf life.

This makes sense since the bacteria is only in the LAG Phase (as opposed to refrigerated probiotics which are already past that phase and into the GROWTH Phase, STATIC Phase, and DEATH Phase). Compare the expiration dates to confirm this. So for financial reasons, it just makes sense to go with the supplements that will remain potent longer, right? Remember, the most expensive supplement is the one that does not work.



Probiotics that DO NOT require refrigeration might be more likely to survive.

And that means they are more likely to do the job you want them to do. Unrefrigerated probiotic supplements that contain bacteria in the LAG Phase, do not need to be manufactured or coated with PREbiotics (simple carbohydrate food), because they are not actively dividing. Being in the LAG phase, and being able to adapt to an acidic environment, helps the bacterial cultures better survive through the stomach acid, as they have already adapted and been trained to withstand this type of acidic conditions.



Heat and moisture can "accelerate" the death of some refrigerated probiotics.

Because they don't want the bacteria to be replicating faster as they are in full GROWTH Phase, they must be kept refrigerated to minimize moisture and temperature. The basic concept simply takes us back to chemistry class. If you want to speed up a reaction...you add heat. If you want to slow down the speed of a reaction...you make it cold. In extreme cases, heat can have an effect on nonrefrigerated probiotic supplements, not because it speeds up the reactions and causes them to eat all their food and die, but because probiotics are typically not able to stay alive when exposed to temperatures above 110°F for longer than 8 hours.

It's a matter of choice.

Twenty years ago, all probiotics had to be refrigerated. Not today. So the choice is yours—refrigerated or non-refrigerated. A big part of the decision comes down to convenience. And how the nonrefrigerated supplements get manufactured.

Bottom line—if your supplement says "KEEP REFRIGERATED," you'd better listen.

» TRUTH #5: Having GAZILLIONS of live cultures (CFUs) does NOT make it better.

When some of those companies out there tell you that "You need the maximum possible number of cultures in your supplement!" it is probably the biggest myth, AND THE BIGGEST BUNCH OF BALONEY in the probiotic industry today.



It's all marketing.

The days of marketing tactics referencing the billions and billions per capsule are going by the wayside as new groundbreaking formulations are proving to be superior.

And truthfully, they don't know if their product works.

If they had scientific proof how well their products survive the trip through the stomach acid, they would know exactly how many CFUs they would need to put in their supplements. But they don't. So they use the "shotgun" approach. They pack as many as possible into each dose, and hope that enough cultures make it through your stomach to deliver the benefits that they promised you.



Survivability is the ONLY number that matters.

All those giant numbers on the label means nothing if the CFUs all die before they can reach your intestinal tract. If they are boasting 50 BILLION CFUs, it's probably because they are hoping that even 1-2% of those cells are going to make it through alive. In fact, the truth is that research indicates an "effective probiotic dosage seems to be in the range of 10 million to 1 billion CFU/mg per day in humans, but a case-by-case evaluation is needed." 13



Look for probiotics manufacturers that can PROVE that their bacteria can survive the trip through your stomach.

Remember, it's those probiotics that are delivered during earlier phases (LAG) that are more likely to survive, so finding manufacturers that are committed to longer shelf life and better survivability is the place to start.

Next, look for manufacturers that have gone to the trouble and expense of scientifically testing the efficacy of their supplements. This kind of testing is not easy, and it's not cheap...so any company that goes to that kind of trouble to do it, you know they are serious about their probiotics and your health.



Your goal? Minimum dosage. Maximum effect.

As with all healthful supplements, or even medications, your goal should always be to achieve the best possible results from the smallest possible dosage. Probiotics should be no different.

You don't need a GAZILLION CFUs to see the benefits of a probiotic.

You just need the right probiotic.

» TRUTH #6: Very few probiotics have EVER been scientifically tested.

Obviously, it is not easy to prove how many CFUs from a probiotic actually survive through the stomach acids and into the intestines. It's a complicated testing process—and it's NOT CHEAP. Which is why very few probiotics companies go to the trouble to perform the testing necessary to prove that their product actually does what they claim it does.

If a probiotic hasn't been tested, then they are just guessing.

A company manufacturing Probiotic products without testing them cannot know how many CFUs survive into the intestines—they are really just guessing at their dosage. That's why they jam gazillions into their supplements—in the hope that enough survive to actually do you some good.

But with something as important as the health of your family and not to waste your hard earned money, shouldn't you be more certain?

There are a few probiotics companies out there that have done the testing and can tell you a precise range of CFUs you can expect to survive into your intestines. If you are serious about using a probiotic supplement to improve your health or your family's health, you owe it to yourself to investigate these products first.

FDA Remember-probiotics are not regulated by the FDA.

So keep this in mind when you read claims that certain probiotics are "#1" or "The Most Effective" or "The Strongest"...these are all marketing terms, not scientific descriptions.

Bottom line-ASK FOR TESTING.

When doing your homework, ask a company if they have tested their product. Ask them if they can prove what they are saying about the product they want you to put into your body...OR YOUR CHILD'S BODY!

Conclusion

OK. Hopefully at this point, you are a little less confused than you were on page 1.

And hopefully the Six Truths laid out in this piece gave you some valuable information for you to consider as you continue to look for the best probiotic for you and your family.

To recap, those Six Truths are:



TRUTH #1: Your body needs GOOD bacteria.

TRUTH #2: Knowing which strains keep you healthy is important.

TRUTH #3: The WAY your probiotic is prepared is critical.

TRUTH #4: All probiotics do NOT need to be refrigerated.

TRUTH #5: Having GAZILLIONS of live cultures (CFUs) does NOT make it better.

TRUTH #6: Very few probiotics have EVER been scientifically tested.

It's also important to remember to be careful of the sources you read when you are doing your homework. The better you can distinguish between science and marketing, the better chance you have of reaching the best decisions.

You are already 2/3 of the way toward better health!

- 1 You've decided to use a probiotic to improve your digestive health.
- 2 You realized the importance of doing homework to find the right supplement.

The only thing left to do is finish your homework and make the right choice.

Good luck!

And be healthy!

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