# dōTERRA<sup>®</sup> | EUROPE

# Microbiome





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## Welcome



## Microbiome - The Invisible Organ

Human beings have evolved alongside trillions of tiny organisms called microbes. Scientists estimate that there are at least as many microbes in the human body as human cells!

These microbial communities are known as microbiomes, functioning as invisible organs that affect overall health beyond the digestive system. Microbiomes can be found in various parts of the body that have contact with the outside world, such as the skin, mouth, eyes, ears, nose, lungs, kidneys, urinary tract, and reproductive system. Each microbial community supports and communicates with your cells and vital organs, forming the foundation for systemic health.

However, disruptions in the microbiome can impact your health. Lifestyle factors such as diet, stress, sleep, activity level, and environmental influences all affect your microbial communities. In this eBook, we will explore the recent advances in microbiome science and discuss the complex ecosystem of microorganisms within the human body and their profound impact on digestive, immune, metabolic, and mental health.

Most importantly, we will also discuss what you can do to encourage a healthy, thriving, and diverse microbiome in your gut and beyond. By understanding how it works, adopting friendly habits, and using PB Products, you can unlock the potential for improved overall health and vitality.

Macro change starts with your microbiome.

## A Vibrant Garden

Your microbiome is akin to a vibrant garden filled with diverse plants, flowers, and insects. The bacteria, viruses, and fungi within it play roles similar to different inhabitants. Just as a thriving garden requires a balanced mix of plants and insects, your body needs a diverse and balanced microbiome for optimal health.

The gut microbiome, a crucial part of your health, aids in food digestion and nutrient absorption, similar to microbial gardeners breaking down dead leaves for plant nourishment. Additionally, the gut microbiome acts as a protective barrier in the same way a garden fence wards off unwanted pests.

However, imbalances can occur in your microbiome, just as a garden can endure too many of one plant or insect. Poor diet, stress and certain medications can disrupt this balance, leading to health concerns. To care for your microbiome, it is vital to maintain a diverse and healthy diet, get adequate sleep, and manage stress. Proper microbiome care promotes overall health, much like a well-tended, blossoming garden.

Microbiomes are their ecosystems; they're sensitive to temperature, pH, nutrients, and the environment. Healthy microbiomes – sometimes referred to as flora – boast more beneficial microbes than others, emphasising the importance of diversity. Diverse microbiomes handle stressors and adapt to changes effectively. A variety of microbes is crucial for metabolising food, producing signalling messages, supporting the immune system, and other vital functions. Caring for your microbiome is like tending a garden – it helps the good thrive and keeps the bad at bay. When the good bacteria thrive, harmful pathogens struggle to colonise, reducing the risk of infections.

This is just one way a well-maintained microbiome supports your health, contributing to essential functions like immunity, digestion, energy metabolism, sleep, brain and heart health, and weight maintenance. Disruptions to the microbiome have been linked to metabolism issues.



# Your Microbiome and Health

The microbiome has been a slow and complex subject to study. Your microbiome is unique and intricate, with significant impact on your wellbeing despite being minuscule in visibility. Although there is still more research to be done, recent cutting-edge exploration has provided valuable insights into its impact on health and wellness.

While waiting for more discoveries, it's important to apply what we already know about the microbiome since its effect on overall health and wellness is profound.



## Your Microbiome and Health

# Your Microbiome Is More than the Gut

It's natural to be wary of bacteria and viruses, but they are essential for your health. When you maintain a healthy microbiome, your body is equipped to determine which ones are good and bad, and your body even contains more bacterial and fungal cells than human cells.

Just like different natural habitats, your body has various areas where microbes reside, including your skin, mouth, gut, and other mucous membranes. These communities of tiny organisms live within you, where healthy fungi, bacteria, and viruses coexist.

The organisms in your microbiome thrive together as a community, rather than existing independently; they rely on each other for survival. The balance that these species create both within and outside microbial communities is highly beneficial, with research showing that a diverse microbiome is a healthy one. Imagine if you only grew one type of food in your garden – you wouldn't flourish due to the lack of diversity.

In today's world, a lack of food diversity is a reality. 75% of the world's food is generated from only twelve plants and five animal species. Modern food systems effectively starve your microbiome of the diversity it needs to thrive!

Research has shown that having a diverse range of microbes in your gut can make your microbiome more capable and resilient. If one microbe is unable to perform its function, another can step in and take its place. Let's go through your different bodily organs, starting from the top of your head, and summarise how the microbiome affects and is affected by these organs. The brain is a central processing unit that manages everything you encounter, organises it into patterns, and then transmits signals to the rest of your body. A link of short-chain fatty acids connects your brain and gut, and scientists have determined that the ecosystem of microbes that live and communicate along this chain affects your gut health, mood, cognition, mental health, and even pain sensitivity. When you feel stressed, your gut knows it and reacts accordingly.

Your skin is a physical barrier that protects you against foreign pathogens. However, it would have a difficult time performing its function without a team of diverse microbiota that colonise your skin, eyes, ears, and, for women, reproductive tract. Similar to the microbiota in your gut, these essential microorganisms help to support your whole body.



## Your Microbiome and Health



Next, let's discuss your nose, sinuses, and lungs. As you breathe from 10 to 20 times a minute, each breath introduces new bacteria, fungi, yeast, and protozoa internally. Your immune system handles millions of interactions every day, many of which are with microorganisms, and not all are harmful.

Your dentist may have informed you about the harmful bacteria present in your mouth. Since the mouth provides an ideal environment for microorganism growth, the oral microbiome differs from your gut and skin microbiomes. To maintain a healthy oral microbiome, you should drink enough water, consume essential nutrients, and maintain a moderate temperature. Be conscious of oral hygiene products; research has shown that regular use of alcohol-based mouthwash can disrupt the oral microbiome and cause sugar metabolism problems, with a 4.5-fold increase in sugar metabolism issues in people who use the product regularly. This connection demonstrates the type of research we can expect in the future, which will validate the interconnectivity between our microbiome and health.

Now, let's talk about your gut. The microbial communities in your stomach, small and large intestines, liver, and colon all play crucial roles in bodily health and must function correctly for everyday wellbeing. Your gut microbiome decides which nutrients to keep and which to dispose of, and it can even determine how your food impacts your genes. Your microbiome serves as a sensor for your external environment and a communication network within your body. Similar to how your gut microbiome communicates with the brain in bidirectional axes, there is also a connection between your oral microbiome and the brain. Throughout your body, your microbiome communicates with your tissues and organs and receives information from other microbial communities.

It's important to note that your microbiome changes as you age. Your microbiome undergoes rapid development as a baby and toddler. Microflora colonisation of the GI tract begins at birth. Within a few days, a complex microbial ecosystem is established. Within a month, a newborn's microflora is predominantly composed of Lactobacilli and Bifidobacteria. Within one to two years, the microflora resembles that of a young adult. This rate of colonisation is vast.

This early period of rapid growth and development is followed by relative stability through most of early adulthood. But your microbiome is never static. As you age, your gut microbiome isn't the same. The microbial communities become less diverse, and beneficial microbes – like Lactobacillus and Bifidobacterium – decrease. Instead, there's an increase in enterobacteria populations, opportunistic bacteria that can cause infection should the opportunity arise. Many researchers are studying the role of the microbiome in the ageing process.

## When You Care for Your Microbiome, It Cares for You

## Foundational Lifestyle Habits for a Healthy Microbiome

Healthy lifestyle habits promote a healthy microbiome, which in turn supports healthy ageing. Scientists have discovered gut microbiome patterns are different in elderly adults who exercise and eat well. Those with healthy microbiomes tend to live longer, healthier lives. If you take care of your microbiome as you age, it'll take care of you.

What habits can be adopted to promote healthy microbiomes? The same lifestyle habits that promote optimal wellness: a balanced and nutritious diet, exercise, and plenty of restful sleep.



Nutrition and digestion are the foundation of the doTERRA Wellness Chart, and also microbiome support. A balanced diet with a variety of whole foods, raw fruits and vegetables and fermented foods like kimchi, sauerkraut, and kefir, supports a healthy microbiome. Research shows that processed foods, including fast food, can decrease the number and variability of bacteria in your gut, which can lead to weight challenges.

Next is movement and metabolism. Sufficient exercise and caring for your metabolic health reap rewards for your microbial communities. Studies suggest exercise enhances and encourages microbiome diversity, and in turn, your gut microbiome plays an important role in metabolic health.

You also need adequate rest and to manage stress to support healthy flora. Although sleep can easily be overlooked, it affects nearly every aspect of your health, just like your microbiome! Prioritising sleep and stress management while working on your microbiome health will benefit both areas.

## When You Care for Your Microbiome, It Cares for You



When practising informed self-care, it's important to consider other everyday methods you can adopt to support and maintain various microbiomes. For example, though sanitisers can protect against pathogens, they can also discourage friendly microbes. Sometimes, using simple soaps and water to wash hands instead of regularly using sanitisers is best. As we complete this chapter, we recognise the intricate balance of microbiomes and their significance in overall health, and it becomes clear that modest adjustments in daily habits can have a significant impact on these microbial communities. One of the simplest habits to implement is proactive supplementation. In the following chapter, we'll explore quality microbiome supplements and the benefits of dōTERRA PB products for you and your family.

## Defining the Three Ps of ProBiome





### Prebiotics

Prebiotics are different to probiotics. Prebiotics are dietary substances that favour the growth of probiotics, or beneficial bacteria. They are the food/ fuel for probiotics. Prebiotics are selectively fermented by commensal probiotic bacteria to produce short-chain fatty acids such as acetate, propionate, and butyrate.

#### Probiotics

Probiotics are live microorganisms that provide benefits to the host when taken in sufficient quantities. They compete with pathogenic bacteria for epithelial binding sites on cells, which helps maintain a healthy gut barrier. For probiotics to be effective, they must survive and resist gastric, bile, and pancreatic secretions, and be able to attach to epithelial cells and colonise the intestines. People have been consuming probiotic cultures for thousands of years through fermented foods such as yoghurt, kefir, sauerkraut, and soybeans. Recently, there has been a growing appreciation for the benefits of daily supplementation with high-quality probiotics to support the microbiome.

### Probiotics

Probiotic bacteria function within your body to produce beneficial nutrients, such as folate; vitamins B1, B2, and B12; and more. Think of them as little superheroes that can help you with a variety of mechanisms. For example:

- They use teamwork or direct combination, working together and combining their efforts to be more effective.
- They can protect you via competitive exclusion, competing with bad bacteria and crowding them out so they don't take over and cause trouble.
- They can secrete antimicrobial compounds, which are like germ-fighting weapons that keep you healthy.
- They interact with the host, being friendly with the microbial communities already present in your microbiome.

- They enhance the epithelial barrier, strengthening the walls of your gut to ensure gut barrier integrity.
- They support your natural defense system, modulating the immune system to strengthen your natural immunity.
- They assist your body with absorbing important electrolytes and nutrients from the food you eat.
- They're beneficial for modulating gut mobility, helping with smooth bowel movements and preventing problems like constipation.

Probiotics have also been shown to be effective at altering pain sensations, which can help reduce how much pain you feel from stomach upset or similar maladies.



### **Postbiotics**

Postbiotics are beneficial substances created by probiotics and healthy gut bacteria after they consume prebiotic fibre. These substances, also known as metabolites, deliver long-lasting benefits even after the probiotics have passed through the digestive tract. The ultimate goal of taking prebiotics or probiotics is to produce postbiotics! Some examples of postbiotics include short-chain fatty acids, bioavailable vitamins and amino acids, peptides, enzymes, quorum-sensing molecules, indole, GABA, dopamine, and other neurotransmitters. Postbiotics have five mechanisms that support your health:

- 1. Modulation of resident microbiota
- 2. Enhancement of epithelial barrier function
- 3. Modulation of systemic and localised immune responses
- 4. Modulation of systemic metabolic responses
- 5. Systemic signalling via the nervous system

As you can see, postbiotics are the quiet heroes of the microbiome story!

## **Choosing a Quality Microbiome Supplement**

Growing awareness of the gut microbiome has become more popular in recent years and you may already be taking probiotic supplements. But all supplements aren't created equal, with vast differences in standards and quality among different product ranges. Choosing a high-quality supplement for your microbiome takes more than a high CFU count. Here are five factors to help you evaluate the quality of any microbiome product, including ones from dōTERRA.

### 1. Strains and Species

Have you ever questioned the meaning of the names and numbers on a probiotic's supplement facts? The names refer to the bacteria species, while the numbers next to the name refer to a specific strain within the species.

Microbial diversity matters, so you want a microbiome supplement with multiple strains and species. You also want prebiotics as food for probiotics, fueling their growth and survival, and ultimately serving the creation of metabolites.

Finally, make sure your supplement is gluten- and sugar-free so you avoid feeding unhealthy bacteria.

# **Supplement Facts**

Serving Size 1 Sachet Typical Values Per Serving Serving= 1 Sachet

Fructooligosaccharides	150 mg
Bifidobacterium lactis BS01	2.45 Billion AFU
Lactobacillus rhamnosus GG	1.4 Billion AFU
Lactobacillus rhamnosus LR06	0.7 Billion AFU
Lactobacillus plantarum LP01	350 Million AFU
Lactobacillus plantarum LPO2	350 Million AFU
Bifidobacterium breve BR03	350 Million AFU
Lactobacillus rhamnosus LRO4	350 Million AFU
Bifidobacterium longum 04	350 Million AFU
Bifidobacterium breve B632	350 Million AFU
Bifidobacterium lactis BS05	140 Million AFU
Streptococcus thermophilus FP4	70 Million AFU
Lactobacillus reuteri LRE02	70 Million AFU
Lactobacillus salivarius subsp.	
salivarius CRL1328	70 Million AFU

## 2. Origin

When choosing a probiotic supplement, it's important to consider where the strains used in the supplement come from. At dōTERRA, we intentionally select a variety of natural sources and strains from human origin when creating our microbiome products. You may have heard of human-origin strains in other microbiome products, and it's important to note that these strains are not collected from or contain any human byproducts.

Human-origin strains are strains of bacteria that can grow within your body and are widely considered the best source for microbiome supplements. These strains have co-evolved alongside people and provide us with health benefits. The strains we use at dōTERRA have been isolated from human cultures and carefully cultivated to produce the best products possible.





### dōTERRA PB Restore™ offers 28 strains:

L. plantarum 14D	
B. animalis ssp. lactis BLC1	
L. rhamnosus SP1	
L. paracasei NTU101	
L. rhamnosus IMC501	
L. paracasei IMC502	
L. acidophilus LA1	

- L. paracasei BGP2
- L. rhamnosus Lb21
- B. breve BBR8
- B. lactis Bi1
- L. acidophilus LA3
- L. brevis SP48
- L. lactis LL82
- L. rhamnosus CRL1505
- P. acidilactici SP29 L. johnsonii SP72 B. bifidum SP9 L. casei BGP93 L. fermentum CS57 L. helveticus SP27 L. reuteri LR92 B. infantis SP37 B. longum SP54 L. bulgaricus-LB2 L. crispatus SP28 L. gasseri LG050
- L. salivarius SP2



### dōTERRA PB Assist+™ offers 13 strains:

Bifidobacterium lactis BSO1 Lactobacillus rhamnosus GG Lactobacillus rhamnosus LRO6 Lactobacillus plantarum LPO1 Lactobacillus plantarum LPO2 Bifidobacterium breve BRO3 Lactobacillus rhamnosus LRO4 Bifidobacterium longum O4 Bifidobacterium lactis BSO5 Streptococcus thermophilus FP4 Lactobacillus reuteri LREO2 Lactobacillus salivarius subsp. salivarius CRL1328

### 3. Potency

Probiotic supplements must contain active, live bacteria cultures and the life of the strains should be guaranteed at the time of use rather than at the time of manufacture.

Colony-forming units (CFU) count in supplements indicates the number of live cell bacteria. However, some companies advertise their CFU 'at the time of manufacture' rather than giving a shelflife commitment. This labelling method markets products with a higher CFU count than what you receive at the time of use, so check your products and avoid misleading CFU counts.

Another measurement method is active fluorescent units (AFU). This measurement comes from a modern, sophisticated flow cytometry test method for the precise enumeration of live cells. AFU is considered the most advanced and precise enumeration method to calculate all viable cells.

## 4. Survivability and Viability

It's important to consider the survivability and viability of the probiotics in your microbiome supplement. The stomach has an acidic environment which can be hostile to these microbes. Therefore, it's best to choose a probiotic complex that has an encapsulation, an enteric coating, or a similar solution to help the microbes survive in the stomach and reach the gut where they are needed.

### 5. Testing and Science

There are hundreds of microbial strains and genera present in the human microbiome, but only a fraction of these are available in probiotic supplements. Even fewer have been clinically tested to prove any significant health benefits when included in supplements. So, when researching microbiome supplements, it's essential to review whether the strains selected in any product have been wellresearched or clinically tested. You should also check whether the claims made by the manufacturer are confirmed by science.

All strains selected for dōTERRA PB Restore capsules and PB Assist+ have been chosen based on scientific substantiation and medical publications about the strains. Our team of researchers and science and medical experts meticulously reviewed all research papers as we created the formulas for these marketleading products.



The PB in dōTERRA PB Restore<sup>™</sup> and dōTERRA PB Assist+<sup>™</sup> stands for ProBiome. It outlines our intention to always deliver the best proactive support for your microbiome so you can experience macro benefits all the while.

Your microbiome extends all over your body, not just in the gut. dōTERRA PB Restore™ is designed with your whole-body biome in mind. It's formulated as a foundational, holistic supplement to benefit your systemic health in several ways.

The gut microbiome is a powerful force in our body, and dōTERRA PB Assist+<sup>™</sup> aims to support it with its unique formulation. This supplement provides additional strains that specifically target the gut microbiome, and it's safe enough for both adults and children.

dōTERRA PB Restore<sup>™</sup> is a revolutionary supplement for the microbiome. It comes in a dual-chambered capsule and contains 30 bioactive components of prebiotics, probiotics, and postbiotics. This is three times the number of strains compared to the previous formula. This formulation makes dōTERRA PB Restore<sup>™</sup> the market leader in the diversity of strains and species within a microbiome supplement! Each capsule of dōTERRA PB Restore™ offers 18 billion active, live cells at the time of use, which is triple the potency of the previous capsules.

To ensure the survival and viability of the bioactive cultures, dōTERRA PB Restore™ uses patented encapsulation technology with an inner and outer capsule. The outer capsule houses the prebiotic FOS and the postbiotic, while the time-release inner capsule contains 28 strains of probiotics. This unique double-layer capsule technology protects the bioactive cultures from the harsh environment of the stomach, delivering their active benefits to the site of adhesion in the intestinal tract.

PB Restore

Explore the 30 science-backed bioactive components in the formulation. One key component is the essential prebiotic fructooligosaccharide (FOS), a naturally occurring carbohydrate found in various fruits and vegetables. FOS, an indigestible fibre, is present in foods like artichokes, bananas, barley, garlic, honey, onions, wheat, and tomatoes. It selectively promotes the growth of beneficial bacteria. dōTERRA PB Restore™ includes 28 carefully chosen probiotic strains, each with demonstrated benefits in multiple clinical studies.

### Primary Probiotic Strains and Health Benefits

#### Synbio L. rhamnosus IMC501 + L. paracasei IMC502

- Increases healthy bacteria counts, while inhibiting the impact of unwanted bacteria.
- Improves the body's recovery processes and tiredness sensation after training by lowering exercise-induced oxidative stress.<sup>4</sup>
- Supports gastrointestinal functions.
- Lowers reactive oxygen metabolites after exertion.<sup>4</sup>
- Maintain strength and efficiency of gastrointestinal tract.

#### B. animalis ssp. lactis BLC 1

- Promotes lactose digestion to suppress occasional bloating or digestive discomfort.<sup>1</sup>
- Maintains healthy bowel habits and digestive health and helps manage occasional constipation.<sup>1</sup>

#### L. acidophilus LA1

- Offers general digestive health support.
- Stimulates natural system by inhibiting unwanted bacteria.
- Can improve lipid metabolism, benefiting overall health.
- Produces enzymes that are associated with supporting cardiovascular health.

#### L. rhamnosus SP1

- Maintains the health of teeth and maintenance of oral mucosa, which acts as a barrier to harmful microbes, when regularly taken.<sup>3</sup>
- Promotes skin health and visual improvement in occasional blemishes or dryness.
- Supports maintaining of oral health.<sup>3</sup>

#### L. brevis SP48

• Supports naturally increasing GABA levels—a principal neurotransmitter of the central nervous system.<sup>1</sup>

#### L. rhamnosus LB21

• Maintains oral health and supports healthy teeth.<sup>3</sup>



# Contributing Probiotic Strains and Health Benefits

#### B. breve BBr8

- Helps sustain a healthy microbiota for improved digestive health.
- May contribute to healthy weight.1

#### L. fermentum CS57

- Can improve lipid metabolism, benefiting overall health.<sup>3</sup>
- May improve long-term quality of life and wellness health.<sup>3</sup>
- Supports gut function by releasing specific healthy microbial molecules.<sup>3</sup>

#### L. paracasei BGP2

- Positively impacts intestinal pathways for biological health benefits.<sup>1</sup>
- Can improve lipid metabolism, benefiting overall health.<sup>1</sup>
- Enhances gut health.1

#### L. plantarum 14D

- Helps sustain a healthy microbiota for improved digestive health.
- Sustains bifidobacteria—a beneficial bacteria.1

#### L. crispatus SP28

Maintains predominance of lactobacilli.

#### L. delbrueckii ssp. bulgaricus LB2

- Aids in digestion.1
- Helps sustain a healthy microbiota for improved digestive health.<sup>1</sup>

#### B. longum ssp. longum SP54

• Supports the intestinal barrier to help inhibit unwanted microbes from growing.<sup>2</sup>

#### L. gasseri SP33

• Maintains predominance of lactobacilli.

1 Based on preclinical research. More clinical research is needed.

- 2 Based on multi-strain research. More research on this strain alone is needed.
- 3 Based on research involving different delivery systems. More research involving capsules is needed.
- 4 Based on research of young athletes. More research on other age groups is needed.





In dōTERRA PB Restore<sup>™</sup>, there's one postbiotic strain, L. *rhamnosus* CRL 1505 HI, functioning like a ghost probiotic. Although nonliving, it's recognised by your epithelial cells.

Both the prebiotic FOS and postbiotic strain are enclosed in the outer cap of the dual-chamber capsule, ready to work before the release of the probiotics inside the dark green inner cap.

Support your body's microbiome diversity by taking one dual-chamber capsule per day with a meal.

In summary, clinical and experimental research about the 30 bioactive components in dōTERRA PB Restore™ suggest this formulation:

- Benefits overall digestive health and may provide digestive comfort.
- Promotes a protective and cleansing effect and healthy microflora.
- May promote healthy-looking skin.
- Promotes healthy lipid metabolism.

# Meet dōTERRA PB Assist+™

While dōTERRA PB Restore<sup>™</sup> is meant for your body's overall microbiome, dōTERRA PB Assist+<sup>™</sup> provides targeted strains to support gut and digestive health specifically.

dōTERRA PB Assist+™ is a family-friendly probiotic blend with 13 strains and a prebiotic, offering double the strains compared to our previous product. It complements dōTERRA PB Restore™ for maximum gut health diversity.

dōTERRA PB Assist+™ delivers seven billion AFU at the time of use, (AFU stands for active fluorescent units), representing live cultures in a sophisticated probiotic counting method.

Similarly to dōTERRA PB Restore<sup>™</sup>, dōTERRA PB Assist+<sup>™</sup> contains prebiotic FOS inulin, which clinical and experimental research suggests it may promote a healthy digestive system, digestive comfort, and healthy lipid metabolism. Kids and adults love the strawberry melon flavour, making it a fun, powerful supplement safe for both.

dōTERRA PB Assist+™'s unique powder form eliminates the requirement for double-layer capsule technology, as seen in dōTERRA PB Restore™. Instead, it uses microencapsulation to ensure that probiotics survive stomach acid and reach your gut. While the product appears to dissolve in your mouth, keep in mind that they are microscopic, beneficial floras. The probiotic strains are microencapsulated with a protective shell, allowing for effective delivery to the lower GI tract, where they can thrive and begin working.



# Meet dōTERRA PB Assist+™

Take a look at each of the 13 science-backed probiotic strains in dōTERRA PB Assist+™:

- L. rhamnosus LGG
- L. plantarum LP01
- L. plantarum LPO2
- B. breve BR03
- B. lactis BS01
- L. rhamnosus LRO4
- L. rhamnosus LR06
- B. longum 04
- B. breve B632
- B. lactis BS05
- Streptococcus thermophilus FP4
- L. reuteri LREO2
- L. salivarius ssp. salivarius CRL 1328





In summary, clinical and experimental research about the 13 bioactive components in dōTERRA PB Assist+™ suggest this formulation:

- Benefits overall digestive health and may provide digestive comfort.
- Promotes healthy gut microflora.
- Promotes a healthy mouth in children.
- May promote healthy-looking skin in toddlers and children.
- Supports childhood health.

These 13 strains differ from the 28 probiotic strains found in dōTERRA PB Restore<sup>™</sup>. Combining dōTERRA PB Assist+<sup>™</sup> and dōTERRA PB Restore<sup>™</sup> gives you a total of 41 probiotic strains, along with pre- and postbiotics, making it a remarkable 43 bioactive components! For optimal diversity and health support, adults may opt to use both ProBiome supplements daily.

# How to Use dōTERRA ProBiome Supplements

Now that we've covered how to identify a quality microbiome supplement and looked at dōTERRA PB Restore<sup>™</sup> and PB Assist+<sup>™</sup>, let's talk about how to use these two microbiome supplements.

Taking dōTERRA ProBiome supplements is simple. You can take one dōTERRA PB Restore ProBiome Complex a day just prior to a meal. You can pour PB Assist+ powder straight into your mouth or mix it with cold water and drink immediately. It can also be mixed with cold foods like a smoothie or yogurt.

We do recommend taking these supplements with a meal. That's when your digestive system is most active and will move the probiotics through the stomach's harsh environment at the pace required for the encapsulation technology to do its job. If you were to take them at another time—like before bed—your supplement is more likely to sit idle in stomach acid for too long because digestion slows when you sleep.

We recommend taking your probiotics with a meal, but not with foods that are over body temperature or with hot beverages, since these will harm the bioactive components.

Be sure to take your new microbiome supplements daily! It might surprise you, but when we talk about how probiotics colonize, that doesn't actually mean they settle in and take up residence in your body long-term. Don't be confused by the enumeration terminology. CFU stands for colony-forming units, but probiotics are transient microorganisms. They travel through your digestive tract and activate systemic benefits through interactions with your gut, dietary nutrients, and gut microbiota already rooted in your intestines before they leave your body. Because the probiotics in your supplements are transient, their benefits depend upon daily use. Just like how you need water to hydrate your cells each day or you take dōTERRA Lifelong Vitality Pack™ daily for sufficient micronutrient intake, dōTERRA PB Restore and PB Assist+ are recommended as a foundational daily supplement.



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