



Lacto Sinus Probiotic Powder - 15g

Overview

- This probiotic supplement supports sinus health by introducing beneficial bacteria into the mouth and sinuses.
- Lacto Sinus contains beneficial kimchi derived Lactobacillus sakei, a keystone bacteria found in healthy sinuses.
- 17 billion total CFU of Lactobacillus sakei at time of manufacture. Lab tested and verified.

Ingredients

Lactobacillus sakei proBio65, microcrystalline cellulose, dextrose anhydrous.

Other Information

- Serving Size 1/4 teaspoon (1g)
- Servings Per Container 15
- NET WT. 0.5 OZ (15g)
- Only needs refrigeration
- Product of South Korea
- Produced using GMP (Good Manufacturing Practice) standards

PROBUTE POWDER Supports Sinus Health Lacto Sinus PROBUTE POWDER Supports Sinus Health Proposition Save 17 Fillion 07 Proposition Net WT. 0.5 02 (15g) of

Suggested Use

Up to 1 gram per day. Mix with bottled water or place directly into the mouth. Or use as directed by a health professional. Please refer to LactoHealth.com for further information regarding how to use Lacto Sinus.

When does Lacto Sinus expire?

- We recommend using Lacto Sinus within six months of purchase to ensure that the L. sakei is potent and active.
- Once the bottle is opened, Lacto Sinus is most effective for 3 to 4 months.
- Every bottle has an expiration date printed on the bottom to help you keep track.

Where do we ship to?

We ship to all states/territories within the United States and Canada. We also ship internationally to Europe and Australia.

How can you contact us?

Feel free to email us at Hello@LactoHealth.com if you have any questions or would like to share your experience. Mailing Address: 519 Pompton Ave #125, Cedar Grove, NJ 07009-9998 USA

CAUTION

Keep out of reach of children. Consult with a physician if pregnant, have a medical condition, or taking prescription medication.

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

Science | Research

What is the sinus microbiome?

Our bodies have communities of microbes living within us and on us. We have more microbes (bacteria, viruses, fungi) than human cells, and they are called the human microbiome or human microbiota.

In our sinuses, we also have communities of different types of microbes - the sinus microbiome. Sometimes, perhaps due to illnesses, allergies, or antibiotics, the microbial community becomes disrupted and imbalanced. This microbial community imbalance is called dysbiosis. In the sinuses, dysbiosis can cause a sinus infection, or sinusitis.

Studies using modern state of the art methods (such as genetic sequencing) have found that people with chronic sinusitis have a somewhat different sinus microbiome than healthy people without sinusitis. They have fewer of some bacterial species or "depletion", and an increase or "abundance" of some other species. Researchers (Abreu et al., 2012) found that people with chronic sinusitis had less *Lactobacillus sakei* in their sinuses and more of other microbes.

What is Lactobacillus sakei?

Lactobacillus bacteria are generally viewed as beneficial bacteria and are thought to have various health benefits. Some Lactobacillus species are found in the microbial communities in and on our bodies. They are part of the lactic acid bacteria group. Lactobacillus sakei is one strain of Lactobacillus bacteria.

Studies have found *Lactobacillus sakei* in the human gut and sinuses. Researchers discovered *Lactobacillus sakei* in healthy humans (those without sinusitis), but diminished or absent in those with chronic sinusitis (Abreu et al., 2012). It is thought that *Lactobacillus sakei* may provide a protective effect by inhibiting pathogenic bacteria. A recent study (Yamashiro et al., 2017) found that patients with ischemic strokes had decreased numbers of *Lactobacillus sakei* in the gut (as compared to healthy individuals who did not have a stroke).

Where else is Lactobacillus sakei found?

Studies report that *Lactobacillus sakei* is found throughout the world. Currently there are over 230 known strains of *Lactobacillus sakei*, which were collected from meat, seafood, and vegetables (Chaillou et al., 2013). It was originally isolated years ago from sake or rice wine - thus the name *Lactobacillus sakei*. Studies from Korea have found it during fermentation in most brands of Korean kimchi.

More information:

Lactobacillus sakei is considered antibacterial, bacteriostatic, and bactericidal against many species of bacteria (Zagorec & Champonmier-Verges, 2017). Antibacterial means destructive to or killing bacteria or suppressing their growth, bacteriostatic means that it prevents the growth and reproduction of bacteria, and bactericidal means it kills bacteria. The food industry has studied and used *L. sakei* (e.g. as a sausage culture starter) because of its value against pathogens such as *Listeria*.

Also, clinical trials (Sung-Il Woo et al., 2010, Kim JY et al., 2013) show that *Lactobacillus sakei* supplements may benefit certain skin conditions such as atopic eczema-dermatitis syndrome (AEDS) and atopic dermatitis.

References:

Abreu, N. A., Nagalingam, N. A., Song, Y., Roediger, F. C., Pletcher, S. D., Goldberg, A. N., & Lynch, S. V. (2012). Sinus Microbiome Diversity Depletion and Corynebacterium tuberculostearicum Enrichment Mediates Rhinosinusitis. Science Translational Medicine, 4(151), 151ra124. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4786373/

Chaillou S, Lucquin I, Najjari A, Zagorec M, Champomier-Vergès M-C (2013) Population Genetics of Lactobacillus sakei Reveals Three Lineages with Distinct Evolutionary Histories. PLoS ONE 8(9): e73253. https://doi.org/10.1371/journal.pone.0073253

Yamashiro, K., Tanaka, R., Urabe, T., Ueno, Y., Yamashiro, Y., Nomoto, K., Hattori, N. (2017). Gut dysbiosis is associated with metabolism and systemic inflammation in patients with ischemic stroke. PLoS ONE, 12(2), e0171521. http://doi.org/10.1371/journal.pone.0171521

Zagorec M, Champomier-Verges M-C (2017) Lactobacillus sakei: A Starter for Sausage Fermentation, a Protective Culture for Meat Products. Microorganisms 2017, 5(3), 56. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5620647/

Woo, Sung-II et al Effect of Lactobacillus sakei supplementation in children with atopic eczema–dermatitis syndrome. Annals of Allergy, Asthma & Immunology, Volume 104, Issue 4, 343 - 348

