

RESTORING & OPTIMIZING GUT HEALTH WITH ALOVÉA CORE

The Importance of Gut Health

Over two millennia ago, Hippocrates declared that “All disease begins in the gut.” Modern science has since validated this insight, revealing that the human microbiome—an ecosystem of approximately 100 trillion microorganisms—plays a crucial role in overall health. A healthy microbiome directly influences the digestive, immune, nervous, and endocrine systems, while disruptions caused by poor diet, toxicity, and stress can lead to chronic inflammation and other health issues.

Alovéa CORE is a scientifically advanced gut health product designed to restore and maintain optimal microbiome health. By leveraging proprietary blends of best-in-class ingredients, CORE addresses the core mechanisms of immune system optimization, inflammation control, and detoxification.

The Gut Microbiome and Chronic Disease

The gut microbiome, comprising over 1,000 species of friendly bacteria, relies on a delicate balance. This balance includes a broad diversity of beneficial bacteria, with an ideal ratio of 85% beneficial to 15% harmful bacteria. A healthy gut also requires an effective level of short-chain fatty acid (SCFA) production. SCFAs are essential for nourishing, protecting, and repairing the cells that line the gut. They are produced during the fermentation process carried out by friendly bacteria in the gut.

Neither the production of SCFAs nor the ability to maintain a healthy balance of bacteria is possible without an adequate intake of soluble fiber. It is estimated that 95% of Americans do not consume enough soluble fiber to maintain a healthy gut. In addition to insufficient fiber intake, modern life poses significant threats to the microbiome. Toxins, chemicals, and heavy metals in the air we breathe and the food we consume—along with high sugar levels, low fiber content in processed foods, and the stress most people experience—can disrupt a healthy microbiome.

Disruptions to this balance can erode the gut lining, restrict nutrient absorption, and allow toxins to enter the bloodstream. An unbalanced microbiome can fuel chronic inflammation, which is linked to a wide range of diseases, including immune dysfunction and systemic health decline. In the 21st century, it is increasingly difficult for probiotics or prebiotics alone to counteract all these negative influences.

This is why Alovéa developed CORE—the most unique and efficacious, evidence-based gut health supplement designed for the maintenance and regulation of a healthy gut.

Approximately 60% of adults and 50% of children in the U.S. now suffer from one or more chronic conditions. With gut health at the root of these issues, restoring microbiome integrity is essential for reversing and preventing disease progression.

D. Quagliani, P. Felt-Gunderson. *Am J Lifestyle Med.* 2016 Jul 7;11(1):80–85. doi: 10.1177/1559827615588079

Boersma P, Black LI, Ward BW. Prevalence of Multiple Chronic Conditions Among US Adults, 2018. *Prev Chronic Dis* 2020;17:200130. DOI: <http://dx.doi.org/10.5888/pcd17.200130>

Soliman G. Nutrients, Dietary Fiber, Atherosclerosis, and Cardiovascular Disease 2019, 11(5), 1155; <https://doi.org/10.3390/nu11051155>

Alovéa CORE: Advanced Nutritional Support

Alovéa CORE is designed to support microbiome health with a proprietary blend of ingredients that target essential aspects of gut health. These ingredients are expertly combined into three distinct blends that make up the CORE formula.

• Glyco Prebiotic Blend

The Glyco Prebiotic Blend in CORE is a cutting-edge formula that goes beyond traditional soluble fibers. It provides three grams of glyconutrient-based prebiotic fibers that deliver exceptional support for the gut microbiome. By enhancing bacterial growth, the blend supports up to seven times more friendly bacteria compared to conventional fibers, ensuring a robust and balanced microbiota. This not only improves metabolic processes such as laxation, cholesterol management, and blood sugar regulation but also stimulates the production of short-chain fatty acids (SCFAs). SCFAs are critical signaling molecules that facilitate effective communication between cells and support systemic health.

Acacia Gum

Acacia gum is a rich source of soluble fiber that acts as a prebiotic, feeding beneficial gut bacteria. It has also been shown to help slow the absorption of refined sugars into the bloodstream, as well as cholesterol by binding to bile acids in the gut.

Scientific Validation: Studies have shown the ability of Acacia gum to significantly increase the population of bifidobacteria and lactobacilli, both of which are beneficial gut microbiota that help maintain digestive health and balance. Studies have also shown that the soluble fibers in acacia gum can help slow the absorption of refined sugars and cholesterol. Its ability to bind to bile acids in the gut helps lower cholesterol levels by increasing the excretion of bile, which is essential in cholesterol metabolism.

Di Cagno, R., et al. (2011). Prebiotic effects of acacia gum and its impact on the human gut microbiota. *International Journal of Food Microbiology*, 146(1), 59-64. <https://doi.org/10.1016/j.ijfoodmicro.2011.01.022>

Mariscal-Arcas, M., et al. (2015). Effects of acacia gum on blood lipid levels and its potential to regulate blood sugar. *Journal of Functional Foods*, 17, 14-22. <https://doi.org/10.1016/j.jff.2015.05.010>

Xylooligosaccharides

Xylooligosaccharides (XOS) are a type of prebiotic fiber made up of short chains of xylose. They are a minimum of 4 times more effective at feeding your gut's friendly bacteria than other forms of prebiotic fiber, including inulin or fructooligosaccharides. This promotes the growth of beneficial gut bacteria such as bifidobacteria. XOS also have the added benefit of restricting bad bacteria growth actually inhibiting the growth of potentially harmful bacteria by selectively promoting beneficial microbes, thereby supporting gut health and microbiota balance.

Scientific Validation: Studies have shown that XOS are fermented by specific gut bacteria, which break them down into short-chain fatty acids (SCFAs), such as acetate, propionate, and butyrate. These SCFAs are beneficial because they serve as an energy source for colon cells, help maintain gut barrier integrity and play a role in reducing inflammation and regulating immune function.

Van den Abbeele, P., et al. (2011). Xylooligosaccharides are efficient prebiotics: evidence from an in vitro fermentation study using human fecal inoculum. *Journal of Applied Microbiology*, 111(1), 124-136. <https://doi.org/10.1111/j.1365-2672.2011.05054.x>

He, J., et al. (2020). Xylooligosaccharides modulate gut microbiota, reduce gut inflammation and improve the growth performance of weaned pigs. *Animal Feed Science and Technology*, 267, 114-129. <https://doi.org/10.1016/j.anifeedsci.2020.114129>

Arabinogalactan

Arabinogalactan is a polysaccharide found in the cell walls of plants. It is a soluble fiber composed of the monosaccharides arabinose and galactose, and it is commonly derived from larch trees, although it is also present in smaller amounts in other plants like wheat, and some legumes. Arabinogalactan has various health benefits, particularly for digestive and immune system support.

Scientific Validation: Arabinogalactan has been shown to enhance the activity of macrophages, natural killer cells, and other immune cells that play a key role in protecting the body against infections. It also acts as a prebiotic, supports gut lining (epithelial), and improves satiety.

Kämmerer, U., et al. (2009). Arabinogalactan from larch and its effect on the immune system: a systematic review of the literature. *Journal of Medicinal Food*, 12(2), 413-419. <https://doi.org/10.1089/jmf.2008.0136>

Beta Glucan

Beta glucan is a versatile polysaccharide known for its immune-enhancing properties. In CORE, it activates macrophages, the body's first line of defense against pathogens, while modulating inflammatory responses. By reducing pro-inflammatory cytokines and promoting Th1 immune cell activation, beta glucan strengthens overall immunity. Additionally, its benefits extend to cardiovascular health by helping to manage cholesterol and protect against infections.

Scientific Validation: Clinical evidence supports beta glucan's role in enhancing macrophage function and natural killer (NK) cell activity. Studies have demonstrated its effectiveness in reducing cholesterol levels and lowering the risk of cardiovascular diseases. Furthermore, beta glucan has shown promise in reducing the frequency and severity of upper respiratory tract infections.

Vetvicka, V., & Vetvickova, J. (2011). Beta glucan: supplement or drug? *Anticancer Research*.

Acacia Gum, Xylooligosaccharides, Arabinogalactan, and Beta Glucan are all considered glyconutrient prebiotics (glyconutrients). Glyconutrients refer to a group of necessary sugars that are involved in cellular communication, immune function, and overall health. They are naturally occurring sugars found in plants and other foods, and they play a vital role in maintaining proper physiological functions. While they are not considered traditional "nutrients" like proteins, fats, or vitamins, glyconutrients are critical for cellular processes and communication.

Scientific Validation: Studies have demonstrated that glyconutrient prebiotics can significantly enhance the diversity of gut microbiota, promoting the proliferation of beneficial bacterial strains like Bifidobacteria and Lactobacilli. Additionally, SCFAs generated by these fibers have been shown to reduce inflammation and improve energy metabolism, with notable improvements in markers of metabolic health, such as triglycerides and glycemic control.

Slavin, J. (2013). Fiber and prebiotics: mechanisms and health benefits. *Nutrients*, 5(4), 1417-1435. DOI: 10.3390/nu5041417.

Macfarlane, G. T., & Macfarlane, S. (2003). Regulation of short-chain fatty acid production. *Proceedings of the Nutrition Society*, 62(1), 67-72.

Canfora, E. E., Meex, R. C., Venema, K., & Blaak, E. E. (2019). Gut microbial metabolites in obesity, NAFLD, and T2DM. *Nature Reviews Endocrinology*, 15(5), 261-273. DOI: 10.1038/s41574-019-0168-9.

Topping, D. L., & Clifton, P. M. (2001). Short-chain fatty acids and human colonic function: roles of resistant starch and nonstarch polysaccharides. *Physiological Reviews*, 81(3), 1031-1064.

• Bioactive Premium Blend

Bioactive Collagen Peptides

Bioactive collagen peptides in CORE are essential for maintaining structural integrity and health. These peptides promote skin elasticity, strengthen nails and hair, and play a pivotal role in gut health by reinforcing the intestinal lining. A stronger gut barrier improves nutrient absorption while preventing harmful microbes and toxins from entering the bloodstream, significantly reducing systemic inflammation.

Scientific Validation: Research indicates that daily supplementation with collagen peptides can restore gut barrier function by enhancing tight junction integrity. Clinical trials have shown reductions in symptoms associated with leaky gut syndrome and inflammation, while also improving joint health and skin hydration.

Proksch, E., Segger, D., Degwert, J., et al. (2014). Oral supplementation of specific collagen peptides has beneficial effects on human skin physiology. *Skin Pharmacology and Physiology*.

Bioactive Bovine Colostrum

CORE's colostrum is sourced from grass-fed cows, ensuring high bioavailability and potency. Rich in proteins, vitamins, minerals, and immunoglobulins, it aids in repairing intestinal damage, reducing permeability, and boosting mucosal immunity. Colostrum also contains growth factors that accelerate the regeneration of gut lining cells, fostering resilience against gastrointestinal disorders.

Scientific Validation: Numerous studies confirm that bovine colostrum enhances mucosal immunity by increasing secretory IgA levels. It also reduces intestinal permeability, a hallmark of gut dysfunction, and supports recovery in conditions like irritable bowel syndrome (IBS) and inflammatory bowel disease (IBD).

Playford, R. J., MacDonald, C. E., & Johnson, W. S. (2000). Colostrum and milk-derived peptide growth factors for the treatment of gastrointestinal disorders. *American Journal of Clinical Nutrition*.

• CORE Blend

Modified Citrus Pectin (MCP)

MCP is a specialized fiber that acts as a natural chelator, binding and removing heavy metals and toxins from the body. It also supports intestinal health by enhancing the activity of other bioactive compounds. MCP's buffering properties create an optimal environment in the gut for lactoferrin and colostrum to function effectively, promoting a balanced microbiome.

Scientific Validation: Studies indicate that MCP effectively binds and eliminates toxic metals such as lead and mercury, improving systemic detoxification. Its prebiotic effects also support gut microbial diversity and contribute to improved intestinal barrier function.

Eliaz, I., Weil, E., & Wilk, B. (2007). Integrative medicine and the role of modified citrus pectin/alginate in heavy metal chelation and detoxification—five case reports. *Forschende Komplementärmedizin*.

Lactoferrin

Lactoferrin is a bioactive protein that offers extensive immune-supporting and antimicrobial benefits. It enhances neutrophil activity, aiding in pathogen defense, and optimizes iron metabolism, addressing deficiencies without promoting harmful microbial growth. Combined with colostrum, lactoferrin amplifies the production of secretory IgA, a critical component of mucosal immunity.

Scientific Validation: Clinical studies have demonstrated lactoferrin's efficacy in reducing bacterial infections and supporting iron homeostasis. Research also highlights its role in mitigating inflammation, particularly in conditions such as anemia and chronic gut disorders.

Troost, F. J., Steijns, J., Saris, W. H., et al. (2001). Lactoferrin supplementation stimulates mucosal and systemic immune responses in humans. *European Journal of Nutrition*.

New Zealand Pine Bark Extract

This powerful antioxidant combats oxidative stress, protecting cells from damage. By reducing inflammation associated with gut and systemic health challenges, it supports vascular integrity and promotes better circulation. The extract's anti-inflammatory properties are particularly beneficial for chronic conditions related to oxidative damage.

Scientific Validation: Studies confirm that pine bark extract reduces markers of oxidative stress and inflammation, improving endothelial function and vascular health. Clinical evidence supports its use in managing conditions like hypertension and chronic venous insufficiency.

Packer, L., Rimbach, G., & Virgili, F. (1999). Antioxidant activity and biologic properties of a procyanidin-rich extract from pine (*Pinus maritime*) bark. *Journal of Free Radical Biology and Medicine*.

Beet Root

Beet root in CORE is a potent source of betalains, compounds renowned for their anti-inflammatory and detoxifying properties. These antioxidants support liver detoxification processes and enhance systemic health by neutralizing free radicals. Betalains also contribute to improved circulation and energy levels, making them a key component of CORE's holistic approach to wellness.

Scientific Validation: Research demonstrates that betalains reduce inflammation and oxidative stress while supporting liver function. Clinical trials highlight their effectiveness in improving blood flow, reducing blood pressure, and enhancing exercise performance.

Tesoriere, L., Butera, D., Pintaudi, A. M., et al. (2004). Supplementation with betalain-rich extract from red beetroots reduces oxidative stress and inflammation in humans. *Free Radical Research*.

Acemannan (Alovéa AE™)

Alovéa's exclusive Acemannan, known as Alovéa AE, is a bioactive polysaccharide derived from aloe vera. It is comprised mainly of the necessary sugar mannose which unlike d-mannose is complex and offers broader health benefits due to its unique structure and effects on the immune system. Alovéa AE contains the optimal molecular weights of Acemannan to provide the best immune system support. In CORE, Alovéa AE enhances immune cell communication, supports wound healing, and promotes gut lining integrity. Its unique properties make it a cornerstone of systemic immune and digestive health.

Scientific Validation: Studies have shown that Acemannan, especially in a specific molecular weight range, stimulates macrophage activity and increases the production of cytokines essential for immune defense. Research also indicates its effectiveness in enhancing gut barrier function and promoting recovery in conditions involving chronic inflammation and oxidative stress.

Sun-A Ima, Sun-Tack Oha, Sukgil Songa, Mi-Ran Kimb, Dong-Seon Kimb, Sung-Sick Woob, Tae Hyung Job, Young In Parkc, Chong-Kil Leeca,* (2005) Identification of optimal molecular size of modified Aloe polysaccharides with maximum immunomodulatory activity. *International Immunopharmacology* 5 (2005) 271 -279

Chinnah, A. D., Baig, M. A., Khan, M. A., & Fteita, D. (2013). The effects of acemannan on inflammatory responses and gut epithelial barrier function. *Phytotherapy Research*, 27(12), 1822-1830. DOI: 10.1002/ptr.4906.

Beatriz Gullón 1 , Patricia Gullón, Freni Tavaría, José Luis Alonso, Manuela Pintado (2015). In vitro assessment of the prebiotic potential of Aloe vera mucilage and its impact on the human microbiota. *Food Funct.* 2015 Feb;6(2):525-31. DOI: 10.1039/c4fo00857j.

Synergistic Composition of Ingredients in CORE

CORE's formulation is unique due to the synergy of its ingredients, which work together to maximize efficacy. For example, colostrum and beta-glucan individually enhance immune responses, but in combination, they amplify the production of neutrophils and macrophages while balancing inflammatory cytokine production. Similarly, modified citrus pectin enhances the bioavailability and function of lactoferrin, ensuring optimal intestinal health.

This novel approach, including delivery through sticks containing an easy-to-mix formula, activates the body's immune pathways, starting a number of systemic immuno-modulatory benefits. The combination of these ingredients in precise amounts ensures CORE's unparalleled effectiveness as a daily immunomodulatory and gut health supplement.

Summary

Alovéa CORE represents a groundbreaking approach to gut health restoration. By addressing the root causes of microbiome imbalance, CORE empowers individuals to optimize their digestive, immune, and systemic health. Its proprietary blend of glyconutrient prebiotics, bioactive collagen peptides, colostrum, beta-glucan, and other potent ingredients like MCP, beetroot, and Alovéa AETM make it an indispensable tool for combating modern lifestyle challenges.

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The information provided is for healthcare professionals only & is not intended for individual use. 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.