



“Immune support through gut health.”

Recommended by **W. Gifford-Jones, MD**
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CERTIFIED
...for daily
immune
health!



Fermented postbiotics for immune health and the reduction of cold and flu symptoms

NEW!

Certified Naturals™ Postbiotic Immune Formula Capsules



What is the microbiome?

The human microbiome is the community of microorganisms that live in and on our body, primarily in the gut. These microorganisms include bacteria, fungi and viruses that can number over 100 trillion in each of us.

Emerging science has linked the condition of our microbiome to the well-being of our overall mind and body. There is a strong connection between the health of our gut and our brain, which affects every system in the body. For example, a gut rich in healthy bacteria can improve our mood and the performance of our immune system.

The foods we consume impact our microbiome as the bacteria within our gut feed on those same foods. Foods that contain probiotics and prebiotics can improve the composition of our microbiome, leading to better health outcomes.



Everyone knows probiotics...

Probiotics are living microorganisms which, when they populate the microbiome, provide health benefits to the host. Increased research in recent years has affirmed that brain, digestive and immune health are all linked to whether the population of bacteria in the gut is tilted towards beneficial bacteria or pathogenic bacteria. Eating probiotic-rich foods or supplementing with probiotics such as *Lactobacillus* and *Bifidobacterium* can help increase the ratio of probiotics to pathogens through competition for resources.



Some of you know prebiotics...

To grow and proliferate, the living microorganisms in the gut require nourishment or fuel. It is prebiotics that the microbiome feeds on. When the microbiome consumes prebiotics, beneficial metabolites are produced that benefit the host including energy for our gut lining, vitamins, amino acids, proteins and peptides.

By consuming prebiotics in the diet, humans can encourage the growth and proliferation of beneficial bacteria in the microbiome, in turn improving the health of the gut. Prebiotics are found in foods such as fibrous leafy greens, fruits (apples) and vegetables (onions, garlic) and are sometimes supplemented as powders or capsules in the form of fibres like inulin, chicory root and fructooligosaccharides (FOS). Polyphenols found in fruits also have been found to have prebiotic effects.



But what are...postbiotics?

Postbiotics are not living microorganisms like probiotics. In fact, they are not alive at all. Postbiotics are inactivated microorganisms that can provide numerous health benefits including support of the microbiome. In the past, postbiotics have been referred to as "zombie probiotics" or "ghost biotics".

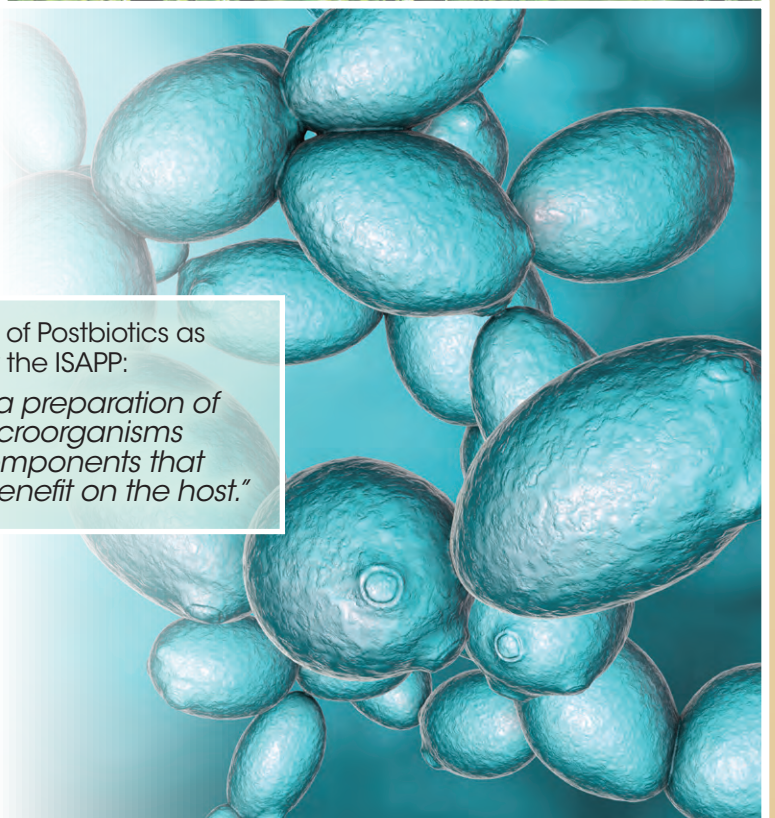
As of 2021, there is an official definition of "postbiotic". The International Scientific Association for Probiotics and Prebiotics (ISAPP) has defined postbiotics as a "preparation of inanimate microorganisms and/or their components that confers a health benefit on the host".

Postbiotics are not new. In the 1980's, researchers discovered that heat-killed *L. acidophilus* had a beneficial effect on digestive health.¹ Years later, evidence emerged that the metabolites released from heat-inactivated bacteria delivered immune modulating benefits to humans by helping the microbiome defend against pathogens.² Postbiotics are now being researched for their anti-inflammatory, antiobesogenic, antihypertensive, hypocholesterolemic, antiproliferative and antioxidant benefits.

Fermented foods, like probiotics, are becoming widely consumed by health seekers. Drinks like kombucha and kefir, foods like yogurt, natto and tempeh all contain metabolites similar to those found in postbiotics and tout health benefits. Are all fermented foods considered to be postbiotics? The answer is no. A true postbiotic must follow the officially accepted definition of postbiotic and provide benefits to the host. A fermented ingredient called EpiCor™ fits that definition perfectly.

Official Definition of Postbiotics as defined by the ISAPP:

"Postbiotics are a preparation of inanimate microorganisms and/or their components that confers a health benefit on the host."



EPICOR™ The Ultimate Postbiotic for Immunity

EpiCor™ is a postbiotic that was developed long before the word postbiotic was defined. In the early 1900's, a farmer in Iowa, C.W. Bloomhall, fed fermented material to his livestock and noticed multiple health benefits for the animals. His business for this unique livestock feed began to grow rapidly because of these consistent results. In the 1990's, the employees of the same company Bloomhall founded noticed that those workers who were exposed to the fermented material had reduced incidence of sickness and sick days. Clinical studies were undertaken which confirmed the beneficial effects of this fermented material in humans. A new product for human health was born – EpiCor™.

EpiCor™ is made from the fermentation of the yeast *Saccharomyces cerevisiae*. The yeast is fermented using a secret process in a natural plant-based medium before being inactivated by heat. What is preserved is a unique and consistent fingerprint of

metabolites, proteins, polyphenols, vitamins, minerals, amino acids, polysaccharides, fiber and beta glucans. These nutrients are similar to what one would absorb from the metabolic waste produced by probiotics digesting prebiotics in the gut. EpiCor™ helps to increase levels of beneficial bacteria in the gut while elevating levels of butyrate SCFAs (short-chain fatty acids) and secretory IgA (alpha immunoglobulins).

Unlike most fermented foods, EpiCor™ meets the true definition of a postbiotic in that it has a well-characterized, reproducible production process and it has proven benefits for the human host. EpiCor™ has over a dozen published studies showing how EpiCor™ supports the immune system through its modulation of gut microbiota. It is also produced outside the body in a consistent, controlled process which delivers repeatable benefits to those that consume it.

Postbiotics vs. Probiotics: What are the advantages?

Postbiotics and probiotics are both beneficial to human health, but there are some differences between the two:

- **Stability:** Because postbiotics are not alive, stability both in a capsule or in the extreme conditions of the gut is not a concern as it is for probiotics. Refrigeration is never needed for postbiotics
- **Predictability:** Postbiotics such as EpiCor™ are fermented and manufactured in controlled, oxygen-free conditions (i.e., outside the human body), which guarantees a certain fingerprint of post-fermentation metabolites. Probiotic-generated metabolites generated in the human body, on the other hand, depend on microbe survival and propagation and several other biological variables, which makes predictable metabolite creation difficult.
In the case of EpiCor™ postbiotic, research is on a specific stable postbiotic, at a consistent and specific dose. Research on probiotics varies dramatically by strain, stability, CFU level, etc.
- **Resources:** Postbiotics don't compete for necessary food (fiber, nutrients) like probiotic strains do. Different probiotic strains can be actively competing against one another.
- **Safety:** With probiotic supplements, there is a small risk that the live bacteria may be absorbed through the gastrointestinal lining and enter the bloodstream in individuals with poor barrier lining. There is no risk of this with postbiotic supplementation, which is critical for those who are immunosuppressed and are unable to take probiotics.
- **Tolerability:** Since every individual has a unique microbiome, each of us tolerates individual probiotics to varying degrees. However, since most postbiotics (like EpiCor™) interact directly with the gut lining, inconsistency is unlikely to be as extreme as with probiotics.

EpiCor™ Postbiotic: The Science

EpiCor™ postbiotic is backed by peer-reviewed published research for a variety of health benefits, focused primarily on immune health.

Impact on Cold and Flu Symptoms on Healthy Adults (Unvaccinated)

A double-blind placebo-controlled study on immunity was conducted on healthy, unvaccinated adults during prime cold/flu season. Half of the adults took 500 mg of EpiCor™ daily and the other half a placebo over a 12-week period. By the study's conclusion, the incidence of colds and flus was significantly lower in the EpiCor™ group. There was also a non-significant reduction in the duration of colds and flus for the EpiCor™ users.³

Impact on Cold and Flu in those Vaccinated

In a double-blind placebo-controlled study of adults who had taken the flu vaccine, those who also took 500 mg of EpiCor™ postbiotic daily had significantly reduced number of symptoms over a 12-week period versus a placebo group. In addition, the duration of cold and flu symptoms was reduced significantly (by 26%) in the EpiCor™ group. Specifically, symptoms of hoarseness, nasal stuffiness and body weakness were lessened when taking EpiCor™.⁴

Rapid Immune Response in Humans

While the use of EpiCor™ to enhance immune response over several weeks had already been previously proven, a double-blind placebo-controlled study was conducted to see how quickly EpiCor™ delivers its immune benefits.

It was demonstrated that adults taking 500 mg of EpiCor™ experienced a rapid increase in antioxidant protection within one hour of dosing, with the effects becoming statistically significant within two hours. During that same period EpiCor™ was observed to significantly increase the activation of serum NK (Natural Killer) cells. NK cells play a large role in the body's immune response to viruses.⁵

Allergy relief

A 12-week double-blind, placebo-controlled clinical trial of seasonal allergy sufferers with rhinitis was conducted on EpiCor™. Daily supplementation with 500 mg of EpiCor™ was compared to a placebo during prime seasonal pollen counts. The EpiCor™ group had significantly lower nasal congestion and rhinitis symptoms, as well as a reduction in total days of nasal congestion.⁶

Gastrointestinal discomfort and constipation

A study was conducted to determine EpiCor's ability to relieve constipation and bloating. Patients with gastrointestinal discomfort were studied in a six-week double-blind placebo-controlled study with half of patients receiving a placebo and half receiving 500 mg of EpiCor™ daily.⁷

The EpiCor™ group experienced significant improvement of symptoms such as bloating, feeling full and an improvement in stool frequency.

Looking at the content of the microbiome after EpiCor™ usage, an increase in the good bacteria that increase digestion times in the gut was observed. EpiCor™ was able to achieve these beneficial gut bacterial changes with substantially less dosages (500 mg) than common prebiotic fibres.

Extra natural immune support

Certified Naturals™ Postbiotic Immune Formula derives much of its immune enhancing properties from EpiCor™. For even more immune support, we have combined EpiCor™ with two other beneficial ingredients.

Elderberry – European elderberry is traditionally used for its ability to relieve symptoms of colds, flus and fevers. Elderberry contains powerful polyphenols called anthocyanidins. Postbiotic Immune Formula contains the equivalent of 1500 mg of elderberry in a single dose.

Zinc – The antioxidant mineral zinc has become more popular than ever for its immune enhancing properties.



Postbiotic Immune Formula EpiCor™ with Elderberry & Zinc Capsules

A unique One Daily formula for maintaining the immune system.



Recommended use: Helps maintain immune system. Helps to reduce the incidence of cold and flu symptoms during the winter months. (Traditionally) used in Herbal Medicine to help relieve symptoms of colds and flus (such as coughs, sore throat and mucus buildup (catarrh) of the (upper) respiratory tract). (Traditionally) used in Herbal Medicine to promote sweating (diaphoretic) to help relieve fever (in cases of common colds, flus). (Traditionally) used in Herbal Medicine (as an alternative) to help remove accumulated waste products via the kidneys, skin and mucus membranes. (Traditionally) used in Herbal Medicine to help relieve joint pain associated with conditions such as arthritis. An antioxidant that helps to support good health.

Recommended dose: Adults: Take 1 capsule daily.

Medicinal ingredients: Each vegetable capsule contains:

EpiCor™ Yeast Fermentate (<i>Saccharomyces cerevisiae</i>)	500 mg
Elderberry (<i>Sambucus nigra</i> L.) (100:1 extract equivalent to 1500 mg of elderberry fruit)	15 mg
Zinc (citrate)	2.5 mg

EpiCor™ is a natural, clinically studied whole food fermentate for immune support.

Non-medicinal ingredients: Microcrystalline cellulose, dicalcium phosphate, vegetable grade magnesium stearate and hypromellose (vegetable capsule).

Cautions and warnings: Consult a health care practitioner prior to use if you have low blood pressure or if you are taking medication for high blood pressure, if you are pregnant or breastfeeding or if symptoms persist or worsen.

Known adverse reactions: Stop use if hypersensitivity/allergy occur. Diuretic effect may occur.

KEEP OUT OF THE REACH OF CHILDREN. Do not use if under cap safety seal is broken.

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Postbiotics are a brand-new category of health products. So where should they be merchandised at retail?

Postbiotics do NOT need refrigeration but have many of the same benefits as probiotics which are often refrigerated. Three places in your store make sense (and all three can be done at the same time to maximize awareness and sales!):

- Postbiotic Immune Formula CAN be merchandised in your immune health section because of its verified Health Canada claims for immune support.
- Postbiotics CAN be merchandised on your regular shelves beside shelf-stable probiotics and prebiotics.
- Postbiotics don't require refrigeration, but CAN be merchandised in the fridge next to probiotics to give probiotic consumers a clinically studied gut health option.



EPICOR™ EpiCor™ is a trademark of Embria Health Sciences, LLC.

Certified Naturals™ is a new line of supplements that selects only the world's best clinically proven natural ingredients. Ingredients that deliver health results. These formulas are Certified... for your health.

www.certifiednaturals.ca

