

# GI PRIME


## Comprehensive Pre/Pro/Post Biotic Formula\*



GI Prime is a dietary supplement formulated to support gut health and promote overall digestive well-being. This advanced blend combines the following ingredients known for their beneficial effects on gut microbiota and immune function: **Epicor®**, which has been shown to support gut health by promoting a balanced gut microbiota, modulating immune function, and improving gut barrier integrity. **IMMUSE™**, a cutting-edge postbiotic clinically shown to activate your body's natural defenses at the cellular level to provide comprehensive gut and immune support year-round. **Butyragen™** serves as a butyrate-producing innovation and finally a combination of Bacillus coagulans, subtilis, and clausii.



### DEMOGRAPHIC & CLINICAL APPLICATIONS

<p><b>MEN &amp; WOMEN</b></p> 	<p><b>PATIENTS REQUIRING</b></p> <ul style="list-style-type: none"> <li>• Overall Digestive Support</li> <li>• Acute &amp; Ongoing Immune System Support</li> <li>• Gut Dysbiosis Assistance</li> <li>• Gut Permeability Protocols</li> </ul>
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### BENEFITS



Supports a Healthy Gut Microbiota



Strengthens Immune System



Aids in Optimizing Gut Barrier Integrity



Modulates Immune Response in the Gut via Activation of pDC's,



Supports Digestive Function & Regularity

### DIRECTIONS:

Take 3 capsules daily or as directed by your healthcare practitioner.

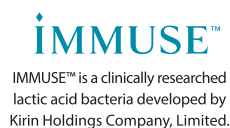
### SUPPLEMENT FACTS

Serving Size: 3 Capsules | Servings Per Container: 30

	Amount Per Serving	%DV
Dried Yeast Fermentate (EpiCor®) ( <i>Saccharomyces cerevisiae</i> )	500 mg	*
<i>Lactococcus lactis</i> strain Plasma (IMMUSE™ Postbiotic)	50 mg	*
Butyragen™	200 mg	*
Spore Probiotic Blend	12 billion CFU	*
Bacillus Coagulans (SNZ 1969)		
Bacillus Subtilis (SNZ 1972)		
Bacillus Clausii (SNZ 1971)		

\* Daily Value Not Established

Other Ingredients: Vegetable Capsule (Hydromellose), Rice Powder, Microcrystalline Cellulose, Magnesium Stearate, Silicon Dioxide.





## INGREDIENTS

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### EPICOR®

**EpiCor®** is a postbiotic, a term which when broken down means ‘after’ and ‘life’. The term postbiotic appropriately refers to substances derived after the microorganisms are no longer alive, or, in other words, inanimate, dead or inactivated but still confer a health benefit. EpiCor® is a whole food fermentate made using yeast (“*Saccharomyces cerevisiae*”) that goes through a closely held trade secret fermentation and drying processes. This fermentation process makes a unique fingerprint of metabolites including proteins, polyphenols, vitamins, minerals, amino acids, polysaccharides, fiber, and other nutrients.

Over a dozen published studies show EpiCor® postbiotic helps to support your immune system and modulate the gut microbiota. The direct role it has on gut health relies on two main mechanisms of action. First, the modulation of gut microbiota: EpiCor® promotes a balanced gut microbiota by enhancing the growth of beneficial bacteria, such as *Lactobacillus* and *Bifidobacterium* species, while inhibiting the growth of potentially harmful bacteria. This modulation helps maintain a healthy microbial balance, which is essential for optimal digestion, nutrient absorption, and overall gut health. Second, is through supporting gut barrier integrity: EpiCor® supports the integrity and function of the gut barrier, which acts as a protective barrier between the gut lumen (the inner space of the intestines) and the rest of the body. It prevents the translocation of harmful substances, such as toxins and bacteria, into the bloodstream. By strengthening the gut barrier, EpiCor® reduces gut permeability and helps maintain a healthy gut environment.<sup>1,2</sup>

### IMMUSE™

**IMMUSE™** is a novel postbiotic, specifically targeting the immune system. The primary benefit of IMMUSE™ (*Lactococcus lactis* JCM 5805) is its ability to activate pDC, which are a rare subset of immune cells that have been described as the commander-in-chief or leader of the immune system.\* It's been well established that pDC's themselves activate natural killer cells, killer T cells, helper T cells and B cells. In short, this postbiotic provides comprehensive immune support and is backed by 30 published studies, 15 of which are human trials.<sup>3,4</sup> In addition to IMMUSE's™ clinical successes, it's been awarded the Product of the Year by NutraIngredients-Asia, as well as being bestowed the North American Immune Health Ingredient New Product Innovation Award. Both of these honors further validate the strength of this ingredient as a groundbreaking postbiotic.



**ButyraGen™** is an innovative next-generation prebiotic - its primary function is as a direct butyrate generator that lends to gut health and beyond, generating high levels of butyrate directly in the colon. This is what sets it apart from traditional prebiotics: its unique ability to generate butyrate mostly independent of the state of the microbiome. In other words, the microbiome doesn't have to be fully balanced and in its most optimal state in order for butyrate to be made.

Other prebiotics work solely by feeding bacteria that then generate butyrate and are completely dependent on the state of the microbiome. ButyraGen™ delivers benefits as a low-dose prebiotic, and can be especially effective when combined with probiotics to further enhance the health benefits of the probiotic strains. When consumed, ButyraGen™ is broken down into butyrate, which serves as a primary energy source for the cells lining the intestinal tract. Butyrate supports the integrity of the gut barrier, strengthening its function and reducing gut permeability. This helps prevent the translocation of harmful substances and toxins, maintaining gut health and optimal digestion.<sup>5,6</sup>

Additionally, butyrate possesses inflammatory supportive properties in the gut. This in turn aids in optimizing digestion and nutrient absorption. But the impact is not limited to the digestive system alone. The gut-brain axis is influenced by butyrate production in the gut as well. Butyrate acts as a signaling molecule, communicating with the central nervous system and influencing brain function. By supporting butyrate production, ButyraGen™ indirectly contributes to a balanced gut-brain axis, potentially impacting cognitive function, mood, and mental well-being.



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## Bacillus Strains of Probiotics

The probiotic strains *Bacillus coagulans*, *Bacillus subtilis*, and *Bacillus clausii*, found in GI Prime, can potentially influence the gut-brain axis. The gut-brain axis refers to the bidirectional communication pathway between the gut and the brain, involving the nervous, endocrine, and immune systems.

**Probiotics have been shown to influence the gut-brain axis through several mechanisms:**

**Production of Neurotransmitters:** Certain strains of probiotics, including *Bacillus* species, have the capability to produce neurotransmitters such as serotonin, dopamine, and gamma-aminobutyric acid (GABA). These neurotransmitters play a crucial role in mood regulation, cognitive function, and overall mental well-being. By producing these neurotransmitters, probiotics can indirectly influence the gut-brain axis and potentially impact mental health.

**Healthy Expression of Inflammation:** Probiotics have been shown to support healthy levels of inflammation in the body, including within the nervous system. By supporting this healthy expression, probiotics, including *Bacillus* strains, can help modulate excessive neuronal stress and strengthen the gut-brain axis.

**Regulation of Stress Response:** The gut-brain axis is closely involved in regulating the body's response to stress. Probiotics, including *Bacillus* strains, have been found to modulate the stress response through interactions with the hypothalamic-pituitary-adrenal (HPA) axis and the release of stress-related hormones. By influencing stress pathways, probiotics can indirectly impact the gut-brain axis and potentially improve stress-related mental health outcomes.

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## REFERENCES

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6. Gao ZG, Yin J, Zhang J, Ward RE, Martin RJ, Lefevre M, Cefalu WT, Ye JP. Butyrate improves insulin sensitivity and increases energy expenditure in mice. *Diabetes* 2009;58:1509-17.