

## Hormone µBiomic

## Hormone Balance Probiotic

Alimentum Labs

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# Hormone Balance Probiotic

Probiotic formula containing Alimentum Labs' patent-pending, exclusive species of bacteria that enhances reproductive and urinary tract health by supporting the body's natural mechanisms in regulating hormone balance.

Hormone	ပါ Gut	Metabolism	skin
Health Indications	<ul> <li>Relieves Chronic, Recurrent Infections</li> <li>Regulates Hormone Imbalances</li> <li>Promotes Healthy Microbiomes</li> <li>Reduces Inflammation</li> <li>Supports Fertility</li> <li>Mitigates Hormone-Related Metabolic Changes</li> </ul>		
Instructions For Use	<ul> <li>Take 1-2 capsules daily for 30 days with or without food.</li> <li>Refrigerate after opening to optimize shelf life.</li> <li>We highly recommend Hormone μBiomic be paired with its synergistic prebiotic formula, Hormone Superfood, for unparalleled results and remarkable health benefits.</li> <li>**Individual needs may vary; please consult your practitioner before altering the prescribed doses or protocols.</li> </ul>		

## **Product Description**

Hormones act as the body's messengers, facilitating communication and coordinating changes in the body that are necessary for maintaining a functioning organism. These powerful chemical messengers control overall homeostasis by regulating essential functions like body temperature, blood pressure, metabolism, sexual function, reproduction, sleep-wake cycles, mood, growth and development. The body system that controls hormone production and response is called the endocrine system. It is made up of several glands found throughout the body, which include the hypothalamus, pituitary gland, pineal gland, thyroid, parathyroid glands, adrenal glands, pancreas, ovaries, and testes; other tissues and organs, such as fat cells, liver, kidneys, and the gastrointestinal tract, are also capable of secreting hormones.

Given the powerful and crucial role that hormones play in multiple bodily functions, they are tightly regulated. Any imbalance, regardless of severity, can have profound effects on an individual's health by disrupting numerous bodily processes. These imbalances can be created through various means, including tumors, gland injuries, chronic stress, chronic inflammation, autoimmune diseases, genetics, environmental pollutants, and microbiome dysbiosis.





Hormone  $\mu$ Biomic specializes in addressing the dysbiosis aspect of hormone imbalances. Research reports that changes in the composition of the microbiome is correlated with changes in hormones, especially sex hormones and cortisol. This research also shows that this relationship works both ways. One of the mechanisms involved in this bidirectional relationship is when the microbiome is in a dysbiotic state, it increases the activity of  $\beta$ -glucuronidase enzymes, which are responsible for releasing oestrogen from glucuronic acid. This can affect the body's ability to excrete excess estrogen from the body.

Stress on the body is more than just emotional or mental stress; it can also be caused by physiologic conditions like chronic inflammation. Dysbiosis can lead to chronic inflammation on its own and can even exacerbate existing inflammation. When the body is in a chronically inflamed and stressed state, it can lead to an imbalance in the hormone cortisol. There are many more examples that highlight the intricate relationship between hormones, their intended function, and the complex influence of the microbiome on this process.<sup>1</sup>

Hormone µBiomic is a science-backed probiotic blend that utilizes insights from some of the world's most extensive microbiome databases and recent research. It is designed to address missing microbial species that may be lacking in the microbiome of individuals experiencing hormone imbalances or hormone-related issues. The symbiotic relationship between these specifically chosen probiotics, both amongst themselves and with the microbiomes they support, facilitate permanent and temporary changes in the body that are crucial for hormone balance and hormone-related health.



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## Key Elements & Features of Hormone µBiomic

#### **Support Balanced Hormones**

Probiotic microbes repair microbiome dysbiosis throughout the body. Repairing the gut microbiome is particularly important because it influences other microbiomes, and has body-wide health impacts that science is still working to fully comprehend. Dysbiosis of the gut can lead to hormone imbalances, and by restoring the gut to its optimal state, hormone health is supported at a deeply integral level.

#### Fights Difficult, Lingering, and Recurrent Infections

The urogenital tract is particularly susceptible to recurrent infections in both men and women. Probiotics like those found in Hormone  $\mu$ Biomic are specifically designed to kill pathogenic biofilms that cause these infections, restore the populations of beneficial microbes, balance pH levels, and soothe inflammation.

#### **Support Balanced Hormones**

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## **Encourage Healthy Microbiomes** There are multiple microbiomes in the body, and many of them influence each other, especially the gut microbiome and the urogenital microbiome. Hormone µBiomic aims to promote stable and robust microbiomes in both of these locations because they are so intertwined. By targeting both, the benefits are more likely to last longer, or even become permanent.

#### Improve Hormone-Related Metabolic Changes

One frustrating aspect of aging is the unwanted hormone changes that can lead to shifts in metabolic function and body composition. The probiotics offered here have been clinically shown to improve hormone-related metabolic changes due to age. Hormone µBiomic helps limit the effects of these changes and supports a healthy, fulfilling lifestyle despite aging and natural hormone changes.





### **Exclusive Probiotic Spotlight**

This formulation features our own exclusively researched and developed probiotics, known as keystone species. These species are directly related to adverse health effects when missing or lacking in human microbiomes. Through more than 15 years of research, Alimentum Labs has carefully selected these specialized probiotic species, each offering unique benefits for hormone and urogenital health.

The nature of our exclusive keystone strains of probiotics grants them a distinctive advantage as they colonize specific niches within the body where they are intended to thrive. These probiotics offer unique health benefits by protecting the microbiomes specific to the human lower urinary tract, as well as the male and female genital tract. They achieve this by inhibiting pathogen growth, supporting the immune system, promoting the growth of symbiotic microbes, and producing compounds like lactic acid that suppress harmful inflammation.

#### Bacteroides uniformis MS03

Lactobacillus vaginalis MS21 *B. uniformis* is a beneficial bacteria that is also one of the first colonizers of the gut. It serves as a powerful modulator of the immune system, helping the body defend against pathogens and other foreign bodies without triggering excessive immune responses that cause it to attack itself. Additionally, its immune-modulating abilities enable it to help combat systemic inflammation associated with metabolic changes that may occur alongside hormone fluctuations. Consuming high-quality prebiotics increases the amount of *B. uniformis*, which may help relieve chronic prostate inflammation.<sup>2-4</sup>

L. vaginalis does not typically make up a large portion of the vaginal microbiome, but its presence is indicative of an exceptionally healthy and diverse microbiome. It produces lactic acid, one the most important components of a functional microbiome due to its pH-modulating, pathogen-inhibiting, and anti-inflammatory abilities.<sup>5-8</sup>

#### How Hormone µBiomic Works

Hormone µBiomic combines exclusive, keystone probiotics with carefully selected probiotics that offer specific, research-backed benefits to reproductive health, urinary tract health, and hormone balance. These probiotics work synergistically to repair dysbiosis in the gut and urogenital tract by destroying harmful biofilms, promoting the growth of symbiotic microbes, and restoring proper pH levels. This repair process leads to a reversal of hormone imbalances and hormone-related problems, resulting in a revitalization of overall health in some of the body's most important systems.



## **Key Ingredients**

Lactobacillus vaginalis MS21

Bacteroides uniformis MSO3

Ligilactobacillus salivarius SD-5851 *L. vaginalis* helps maintain healthy microbiomes throughout the body and serves as a marker of a healthy vaginal microbiome. It can inhibit the growth of pathogens and destroy biofilms causing persistent infections. It has also been reported to increase the populations of an important group of bacteria: *Bifidobacteria*.<sup>5–8</sup>

- General Benefits: Supports full-body microbiome.
- Female Benefits: Supports the vaginal microbiome.

*B. uniformis* is an important gut microbiome symbiont with powerful immune–modulating effects. It regulates the immune system through the gut and helps alleviate inflammation associated with metabolic changes. Lower than normal levels of *B. uniformis* has been associated with chronic prostate inflammation.<sup>2-4</sup>

- General Benefits: Improves inflammation due to metabolic changes.
- Male Benefits: Protects against chronic prostate inflammation.

*L. salivarius* supplementation has been shown to improve chances of conception after long-term, unexplained infertility. It maintains healthy urogenital microbiomes in both men and women. It is particularly beneficial to the urogenital tract because it produces lactic acid and hydrogen peroxide, which help keep pathogens at bay.<sup>9,10</sup>

• General Benefits: Improves conception success and supports healthy urogenital microbiomes.

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#### Lactobacillus crispatus CCG22

*L. crispatus* is a crucial member of both the male and female urogenital tracts, as well as being beneficial in the gut microbiome. Low levels are associated with post-menopause, fertility treatment failure, preterm birth, increased infection risk, prostatitis, and decreased sperm quality.<sup>11–14</sup>

- General Benefits: Supports healthy urogenital microbiomes and increases conception success.
- Female Benefits: Alleviates changes related to menopause and helps chronic or recurrent infections.
- Male Benefits: Alleviate prostatitis and promotes sperm quality.

LactiplantibacillusL. plantarum is proficient at binding environmental toxinsplantarumand facilitating their excretion before causing damage to<br/>the body, especially in reproductive toxicity leading to<br/>infertility in both men and women. It can restore<br/>hormones to healthy levels and provides protection<br/>against testicular dysfunction due to excessive<br/>inflammation.15-18

- General Benefits: Protects against reproductive damage and infertility.
- Female Benefits: Restores hormones to healthy levels.
- Male Benefits: Protects against testicular dysfunction.

*L. gasseri* is one of the most important members of the vaginal microbiome. It helps maintain a healthy vaginal microbiome by preventing short- and long-term invasion by pathogens. Additionally, it can help prevent sporadic or chronic urinary tract infections, which can lead to chronic bladder dysfunction. It can also repair harmful changes in the gut microbiome that arise from chronic stress.<sup>19,20</sup>

- General Benefits: Repairs damaged gut microbiome.
- Female Benefits: Prevents sporadic and chronic vaginal and urinary infections.

Lactobacillus gasseri SD-5585



#### Lacticaseibacillus rhamnosus

Lactobacillus acidophilus

Limosilactobacillus reuteri *L. rhamnosus* has been shown to regulate an overactive hypothalamic-pituitary-adrenal (HPA) axis, modulating a key system in balanced hormone secretion. Recent studies suggest that *L. rhamnosus* supplementation may slow breast cancer tumor growth through modulation of the immune system.<sup>21,22</sup>

- General Benefits: Regulates the HPA axis.
- Female Benefits: May slow breast cancer progression.

*L. acidophilus* has been shown to protect against osteoporosis associated with hormone changes occurring in midlife. Additionally, it may ameliorate adverse health effects that develop with changes in body mass, often related to hormone shifts in later life. Supplementation with *L. acidophilus* can be helpful in maintaining or restoring a healthy urogenital tract in both men and women.<sup>23-25</sup>

- General Benefits: Supports a healthy urogenital tract and helps mitigate body mass-related health changes.
- Female Benefits: Protects against hormone-related osteoporosis.

Recent studies on *L. reuteri* demonstrated its ability to improve the harmful metabolic effects of dysregulated hormones. *L. reuteri* is capable of breaking down mature urogenital biofilms, such as those created by *Escerichia coli* and *Gardnerella vaginalis*.<sup>26,27</sup>

- General Benefits: Breaks down harmful biofilms in the urinary tract.
- Female Benefits: Improves hormone-related metabolic changes and restores a healthy vaginal microbiome.

Lactobacillus delbrueckii ssp bulgaricus	<ul> <li>L. bulgaricus has been shown to greatly reduce the populations of pathogenic bacteria in vaginal microbiomes that cause persistent or recurrent infections, providing protection against these stubborn infections.<sup>28</sup></li> <li>Female Benefits: Protects against vaginal dysbiosis.</li> </ul>		
Limosilactobacillus fermentum SD-5847	<ul> <li>L. fermentum is capable of reversing and preventing vaginal infections caused by both bacteria and yeast.<sup>29,30</sup></li> <li>Female Benefits: Restores a healthy vaginal microbiome.</li> </ul>		
Bifidobacterium	B. longum has been shown to modulate hormones through		

*B. longum* has been shown to modulate hormones through the hypothalamic-pituitary-adrenal (HPA) axis to help reduce visceral pain related to irritable bowel syndrome (IBS). It is also helpful in increasing conception success, likely through reducing inflammation.<sup>31,32</sup>

 General Benefits: Modulates the HPA axis, reduces IBS-related symptoms, and improves conception success.

In a clinical trial, *B. breve* supplementation was shown to lower systemic inflammation and cortisol levels, which are known to impede healthy hormone function.<sup>33</sup>

• Female Benefits: Reduces inflammation and cortisol to allow proper hormone function.

Bifidobacterium breve Bb-18

longum Bi-05



## Warnings/Contraindications

When used as directed there are no known contraindications for Hormone µBiomic. Taking Hormone µBiomic will not affect birth control efficacy.

\*\*It is always recommended that you consult your practitioner prior to adding any new supplement to your regimen if you are pregnant, breastfeeding, experiencing renal failure, undergoing an organ transplant(s), managing diabetes with insulin, or are taking medication(s) for any pre-existing conditions.\*\*

## Safety

All ingredients are tested before use for:

- Pathogenic microbial contaminants
- Heavy metals and/or chemical contaminants
- · Correct genus and species of probiotic microbes
- Purity

#### **Additional Information**

- Gluten Free
- Dairy Free
- Vegan
- No Sugar
- Non-GMO
- cGMP Facility



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