

Hormone μ Biomic

Hormone Balance Probiotic

Alimentum Labs

alimentumlabs.com

1.800.445.4647

Last Revision:
October 24, 2025

Hormone μ Biomic

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



Gut



Metabolism



Skin

Health Indications

- Relieves Chronic, Recurrent Infections
- Regulates Hormone Imbalances
- Promotes Healthy Microbiomes
- Reduces Inflammation
- Supports Fertility
- Mitigates Hormone-Related Metabolic Changes

Instructions For Use

Take 1-2 capsules daily for 30 days with or without food. Refrigerate after opening to optimize shelf life.

We highly recommend Hormone μ Biomic be paired with its synergistic prebiotic formula, Hormone Superfood, for unparalleled results and remarkable health benefits.

**Individual needs may vary; please consult your practitioner before altering the prescribed doses or protocols.

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 μ 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 β -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.¹

Hormone μ Biomic 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.



Key Elements & Features of Hormone μ Biomic

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 μ 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

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.

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 μ Biomic 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 μ Biomic 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**

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.²⁻⁴

***Lactobacillus* *vaginalis* MS21**

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.⁵⁻⁸

***Eubacterium
limosum* MS15**

Eubacterium limosum is a bacterium found in the human gut that plays a role in metabolizing various compounds, including one-carbon (C1) compounds like carbon monoxide and formate. It is known for its ability to produce butyrate, a short-chain fatty acid crucial for colonocyte health, gut barrier integrity, and possessing anti-inflammatory properties. Its metabolic activities can also contribute to the detoxification of certain compounds in the gut and influence the availability of essential nutrients. Research suggests its presence and activity can impact the overall gut environment and host metabolism.^{9–12}

***Bacteroides
thetaiotaomicron*
MS13**

Bacteroides thetaiotaomicron is a dominant and highly versatile bacterium in the human gut, renowned for its extensive ability to break down complex dietary polysaccharides (fibers). It plays a crucial role in nutrient extraction and significantly influences host physiology by reinforcing the mucosal barrier, modulating the immune system, and impacting overall host metabolism. *B. thetaiotaomicron* produces metabolites like succinate, which can improve insulin sensitivity, and sphingolipids that support gut homeostasis. It also contributes to estrogen metabolism through its β -glucuronidase enzyme and aids in B vitamin availability, thereby indirectly influencing hormonal balance and gut-brain communication. Its overall effect is often context-dependent, contributing to a healthy gut environment essential for endocrine stability.^{13–16}

How Hormone μ Biomic Works

Hormone μ Biomic 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

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*.⁵⁻⁸

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

Bacteroides *thetaiotaomicron* MS13

B. thetaiotaomicron is a dominant gut symbiont with unique capabilities that support hormonal balance by influencing immune signaling, gut barrier integrity, and enteroendocrine function. It enhances anti-inflammatory responses through IL-10 induction and modulates bile acid metabolism, which is tightly linked to estrogen signaling and metabolic hormone activity. This bacterium also helps maintain gut-brain-hormone communication by supporting the population of hormone-secreting enteroendocrine cells, including those producing GLP-1, which impacts appetite and insulin regulation.¹³⁻¹⁶

- **General Benefits:** Supports hormonal balance and metabolic health through immune modulation and bile acid signaling.
- **Female Benefits:** May regulate estrogen-related pathways via gut microbiome and bile acid interactions.
- **Male Benefits:** Supports metabolic hormone balance and gut-derived signals affecting androgen pathways.

Eubacterium limosum
MS15

E. limosum is a human gut bacterium with unique enzymatic capabilities that contribute to hormone balance, particularly through the transformation of dietary compounds into bioactive phytoestrogens. It converts methoxylated isoflavonoids like biochanin A and formononetin into their more potent estrogenic forms genistein and daidzein, supporting estrogen signaling and reproductive health. It also activates isoxanthohumol from hops into 8-prenylnaringenin, a powerful phytoestrogen with implications for hormone modulation in both men and women. Additionally, *E. limosum* produces butyrate, a short-chain fatty acid with anti-inflammatory properties that supports gut and endocrine function.^{9–12}

- **General Benefits:** Enhances phytoestrogen availability and supports hormonal equilibrium.
- **Female Benefits:** Promotes estrogenic activity via biotransformation of dietary isoflavonoids and hops compounds.
- **Male Benefits:** Supports reproductive hormone balance through microbiota-derived anti-inflammatory and metabolic signaling.

Bacteroides uniformis
MS03

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.^{2–4}

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

***Ligilactobacillus
salivarius* SD-5851**

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.^{9,10}

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

***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.¹¹⁻¹⁴

- **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.

***Lactiplantibacillus
plantarum***

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

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

Lactobacillus gasseri
SD-5585

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.^{19,20}

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

Lactobacillus acidophilus

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.^{23–25}

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

Limosilactobacillus reuteri

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 *Escherichia coli* and *Gardnerella vaginalis*.^{26,27}

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

***Lactocaseibacillus
rhamnosus***

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.^{21,22}

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

***Lactobacillus
delbrueckii ssp
bulgaricus***

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.²⁸

- **Female Benefits:** Protects against vaginal dysbiosis.

***Limosilactobacillus
fermentum* SD-5847**

L. fermentum is capable of reversing and preventing vaginal infections caused by both bacteria and yeast.^{29,30}

- **Female Benefits:** Restores a healthy vaginal microbiome.

***Bifidobacterium
longum* Bi-05**

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.^{31,32}

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

***Bifidobacterium breve*
Bb-18**

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

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

Warnings/Contraindications

When used as directed there are no known contraindications for Hormone μ Biomic. Taking Hormone μ Biomic 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



References

1. He, S.; Li, H.; Yu, Z.; Zhang, F.; Liang, S.; Liu, H.; Chen, H.; Lü, M. The Gut Microbiome and Sex Hormone-Related Diseases. *Front. Microbiol.* **2021**, *12*, 711137. <https://doi.org/10.3389/fmicb.2021.711137>.
2. Konkol, Y.; Keskitalo, A.; Vuorikoski, H.; Pietilä, S.; Elo, L. L.; Munukka, E.; Bernoulli, J.; Tuomela, J. Chronic Nonbacterial Prostate Inflammation in a Rat Model Is Associated with Changes of Gut Microbiota That Can Be Modified with a Galactoglucomannan-Rich Hemicellulose Extract in the Diet. *BJU Int.* **2019**, *123* (5), 899–908. <https://doi.org/10.1111/bju.14553>.
3. Gómez del Pulgar, E. M.; Benítez-Páez, A.; Sanz, Y. Safety Assessment of *Bacteroides Uniformis* CECT 7771, a Symbiont of the Gut Microbiota in Infants. *Nutrients* **2020**, *12* (2), 551. <https://doi.org/10.3390/nu12020551>.
4. Fabersani, E.; Portune, K.; Campillo, I.; López-Almela, I.; la Paz, S. M.; Romaní-Pérez, M.; Benítez-Páez, A.; Sanz, Y. *Bacteroides Uniformis* CECT 7771 Alleviates Inflammation within the Gut-Adipose Tissue Axis Involving TLR5 Signaling in Obese Mice. *Sci. Rep.* **2021**, *11* (1), 11788. <https://doi.org/10.1038/s41598-021-90888-y>.
5. Asan-Ozusaglam, M.; Gunyakti, A. A New Probiotic Candidate Bacterium from Human Milk: *Limosilactobacillus Vaginalis* MA-10. *Acta Aliment.* **2021**, *50* (1), 13–21. <https://doi.org/10.1556/066.2020.00073>.
6. Giordani, B.; Abruzzo, A.; Parolin, C.; Foschi, C.; Laghi, L.; Marangoni, A.; Luppi, B.; Vitali, B. Prebiotic Activity of Vaginal Lactobacilli on Bifidobacteria: From Concept to Formulation. *Microbiol. Spectr.* **2023**, *11* (1), e02009–22. <https://doi.org/10.1128/spectrum.02009-22>.
7. Parolin, C.; Croatti, V.; Giordani, B.; Vitali, B. Vaginal Lactobacillus Impair Candida Dimorphic Switching and Biofilm Formation. *Microorganisms* **2022**, *10* (10), 2091. <https://doi.org/10.3390/microorganisms10102091>.

8. Chee, W. J. Y.; Chew, S. Y.; Than, L. T. L. Vaginal Microbiota and the Potential of Lactobacillus Derivatives in Maintaining Vaginal Health. *Microb. Cell Factories* **2020**, *19*, 203. <https://doi.org/10.1186/s12934-020-01464-4>.
9. Hur, H.-G.; Rafii, F. Biotransformation of the Isoflavonoids Biochanin A, Formononetin, and Glycitein by Eubacterium Limosum. *FEMS Microbiol. Lett.* **2000**, *192* (1), 21–25. <https://doi.org/10.1111/j.1574-6968.2000.tb09353.x>.
10. Possemiers, S.; Rabot, S.; Espín, J. C.; Bruneau, A.; Philippe, C.; González-Sarrías, A.; Heyerick, A.; Tomás-Barberán, F. A.; De Keukeleire, D.; Verstraete, W. Eubacterium Limosum Activates Isoxanthohumol from Hops (Humulus Lupulus L.) into the Potent Phytoestrogen 8-Prenylnaringenin In Vitro and in Rat Intestine. *J. Nutr.* **2008**, *138* (7), 1310–1316. <https://doi.org/10.1093/jn/138.7.1310>.
11. Kanauchi, O.; Fukuda, M.; Matsumoto, Y.; Ishii, S.; Ozawa, T.; Shimizu, M.; Mitsuyama, K.; Andoh, A. Eubacterium Limosum Ameliorates Experimental Colitis and Metabolite of Microbe Attenuates Colonic Inflammatory Action with Increase of Mucosal Integrity. *World J. Gastroenterol.* **2006**, *12* (7), 1071–1077. <https://doi.org/10.3748/wjg.v12.i7.1071>.
12. Zhang, Y.; Yang, D.-H.; Zhang, Y.-T.; Chen, X.-M.; Li, L.-L.; Cai, S.-Q. Biotransformation on the Flavonolignan Constituents of Silybi Fructus by an Intestinal Bacterial Strain Eubacterium Limosum ZL-II. *Fitoterapia* **2014**, *92*, 61–71. <https://doi.org/10.1016/j.fitote.2013.10.001>.
13. Engelhart, M. J.; Glowacki, R. W. P.; Till, J. M.; Harding, C. V.; Martens, E. C.; Ahern, P. P. The NQR Complex Regulates the Immunomodulatory Function of Bacteroides Thetaiotaomicron. *J. Immunol. Baltim. Md* **2023**, *211* (5), 767–781. <https://doi.org/10.4049/jimmunol.2200892>.
14. Aktar, Rubina; Parkar, Nabil; Stentz, Regis; Baumard, Lucas; Parker, Aimee; Goldson, Andrew; Brion, Arlaine; Carding, Simon; Blackshaw, Ashley; and Peiris, M. Human Resident Gut Microbe Bacteroides Thetaiotaomicron Regulates Colonic Neuronal Innervation and Neurogenic Function. *Gut Microbes* **2020**, *11* (6), 1745–1757. <https://doi.org/10.1080/19490976.2020.1766936>.

15. McMillan, A. S.; Foley, M. H.; Perkins, C. E.; Theriot, C. M. Loss of Bacteroides Thetaiotaomicron Bile Acid-Altering Enzymes Impacts Bacterial Fitness and the Global Metabolic Transcriptome. *Microbiol. Spectr.* **2023**, *12* (1), e03576–23. <https://doi.org/10.1128/spectrum.03576-23>.
16. Durant, L.; Stentz, R.; Noble, A.; Brooks, J.; Gicheva, N.; Reddi, D.; O'Connor, M. J.; Hoyles, L.; McCartney, A. L.; Man, R.; Pring, E. T.; Dilke, S.; Hendy, P.; Segal, J. P.; Lim, D. N. F.; Misra, R.; Hart, A. L.; Arebi, N.; Carding, S. R.; Knight, S. C. Bacteroides Thetaiotaomicron-Derived Outer Membrane Vesicles Promote Regulatory Dendritic Cell Responses in Health but Not in Inflammatory Bowel Disease. *Microbiome* **2020**, *8* (1), 88.
17. Fernández, L.; Castro, I.; Arroyo, R.; Alba, C.; Beltrán, D.; Rodríguez, J. M. Immunomodulation of the Vaginal Ecosystem by Ligilactobacillus Salivarius CECT 30632 Improves Pregnancy Rates among Women with Infertility of Unknown Origin or Habitual Abortions. *Nutrients* **2023**, *15* (2), 362. <https://doi.org/10.3390/nu15020362>.
18. Iniesta, S.; Esteban, S.; Armijo, Ó.; Lobo, S.; Manzano, S.; Espinosa, I.; Cárdenas, N.; Bartha, J. L.; Jiménez, E. Ligilactobacillus Salivarius PS11610 Exerts an Effect on the Microbial and Immunological Profile of Couples Suffering Unknown Infertility. *Am. J. Reprod. Immunol.* **2022**, *88* (1), e13552. <https://doi.org/10.1111/aji.13552>.
19. Pan, M.; Hidalgo-Cantabrana, C.; Goh, Y. J.; Sanozky-Dawes, R.; Barrangou, R. Comparative Analysis of Lactobacillus Gasseri and Lactobacillus Crispatus Isolated From Human Urogenital and Gastrointestinal Tracts. *Front. Microbiol.* **2020**, *10*.
20. Mändar, R.; Punab, M.; Korrovits, P.; Türk, S.; Ausmees, K.; Lapp, E.; Preem, J.-K.; Oopkaup, K.; Salumets, A.; Truu, J. Seminal Microbiome in Men with and without Prostatitis. *Int. J. Urol.* **2017**, *24* (3), 211–216. <https://doi.org/10.1111/iju.13286>.
21. Gustafsson, R. J.; Ahrné, S.; Jeppsson, B.; Benoni, C.; Olsson, C.; Stjernquist, M.; Ohlsson, B. The Lactobacillus Flora in Vagina and Rectum of Fertile and Postmenopausal Healthy Swedish Women. *BMC Womens Health* **2011**, *11* (1), 17. <https://doi.org/10.1186/1472-6874-11-17>.

22. Krog, M. C.; Hugerth, L. W.; Fransson, E.; Bashir, Z.; Nyboe Andersen, A.; Edfeldt, G.; Engstrand, L.; Schuppe-Koistinen, I.; Nielsen, H. S. The Healthy Female Microbiome across Body Sites: Effect of Hormonal Contraceptives and the Menstrual Cycle. *Hum. Reprod.* **2022**, *37* (7), 1525–1543. <https://doi.org/10.1093/humrep/deac094>.
23. Cai, S.-S.; Zhou, Y.; Ye, B.-C. Reducing the Reproductive Toxicity Activity of *Lactiplantibacillus Plantarum*: A Review of Mechanisms and Prospects. *Environ. Sci. Pollut. Res.* **2021**, *28* (28), 36927–36941. <https://doi.org/10.1007/s11356-021-14403-6>.
24. Nie, P.; Wen, S.; Wang, M.; Xu, H. Exploration of *Lactiplantibacillus Plantarum* P101 Ameliorated the Alcohol-Induced Testicular Dysfunction Based on Metabolome Analysis. *Food Chem. Toxicol.* **2024**, *185*, 114463. <https://doi.org/10.1016/j.fct.2024.114463>.
25. He, Y.; Mei, L.; Wang, L.; Li, X.; Zhao, J.; Zhang, H.; Chen, W.; Wang, G. *Lactiplantibacillus Plantarum* CCFM1019 Attenuate Polycystic Ovary Syndrome through Butyrate Dependent Gut–Brain Mechanism. *Food Funct.* **2022**, *13* (3), 1380–1392. <https://doi.org/10.1039/D1FO01744F>.
26. Hao, Y.; Li, J.; Wang, J.; Chen, Y. Mechanisms of Health Improvement by *Lactiplantibacillus Plantarum* Based on Animal and Human Trials: A Review. *Fermentation* **2024**, *10* (2), 73. <https://doi.org/10.3390/fermentation10020073>.
27. Atassi, F.; Lievin-Le Moal, V. Diverse Expression of Antimicrobial Activities Against Bacterial Vaginosis and Urinary Tract Infection Pathogens by Cervicovaginal Microbiota Strains of *Lactobacillus Gasseri* and *Lactobacillus Crispatus*. *Front. Microbiol.* **2019**, *10*. <https://doi.org/10.3389/fmicb.2019.02900>.
28. Nishida, K.; Sawada, D.; Kuwano, Y.; Tanaka, H.; Rokutan, K. Health Benefits of *Lactobacillus Gasseri* CP2305 Tablets in Young Adults Exposed to Chronic Stress: A Randomized, Double-Blind, Placebo-Controlled Study. *Nutrients* **2019**, *11* (8), 1859. <https://doi.org/10.3390/nu11081859>.

29. *Lacticaseibacillus rhamnosus* Probio-M9-driven mouse mammary tumor-inhibitory effect is accompanied by modulation of host gut microbiota, immunity, and serum metabolome. <https://doi.org/10.21203/rs.3.rs-2053698/v1>.
30. Zhao, Y.; Kang, Y.; Zhao, Z.; Yang, G.; Gao, Y.; Gao, L.; Wang, C.; Li, S. *Lacticaseibacillus Rhamnosus* TF318 Prevents Depressive Behavior in Rats by Inhibiting HPA-Axis Hyperactivity and Upregulating BDNF Expression. *Neurosci. Lett.* **2023**, *814*, 137460. <https://doi.org/10.1016/j.neulet.2023.137460>.
31. Gholami, A.; Dabbaghmanesh, M. H.; Ghasemi, Y.; Koohpeyma, F.; Talezadeh, P.; Montazeri-Najafabady, N. The Ameliorative Role of Specific Probiotic Combinations on Bone Loss in the Ovariectomized Rat Model. *BMC Complement. Med. Ther.* **2022**, *22* (1), 241. <https://doi.org/10.1186/s12906-022-03713-y>.
32. Roth, R. S.; Liden, M.; Huttner, A. The Urobiome in Men and Women: A Clinical Review. *Clin. Microbiol. Infect.* **2023**, *29* (10), 1242–1248. <https://doi.org/10.1016/j.cmi.2022.08.010>.
33. Kaczmarczyk, M.; Szulińska, M.; Łoniewski, I.; Kręgielska-Narożna, M.; Skonieczna-Żydecka, K.; Kosciółek, T.; Bezshapkin, V.; Bogdański, P. Treatment With Multi-Species Probiotics Changes the Functions, Not the Composition of Gut Microbiota in Postmenopausal Women With Obesity: A Randomized, Double-Blind, Placebo-Controlled Study. *Front. Cell. Infect. Microbiol.* **2022**, *12*.
34. Li, S.; Zhai, J.; Chu, W.; Geng, X.; Wang, D.; Jiao, L.; Lu, G.; Chan, W.-Y.; Sun, K.; Sun, Y.; Chen, Z.-J.; Du, Y. Alleviation of *Limosilactobacillus Reuteri* in Polycystic Ovary Syndrome Protects against Circadian Dysrhythmia-Induced Dyslipidemia via Capric Acid and GALR1 Signaling. *Npj Biofilms Microbiomes* **2023**, *9* (1), 1–18. <https://doi.org/10.1038/s41522-023-00415-2>.
35. McMillan, A.; Dell, M.; Zellar, M. P.; Cribby, S.; Martz, S.; Hong, E.; Fu, J.; Abbas, A.; Dang, T.; Miller, W.; Reid, G. Disruption of Urogenital Biofilms by Lactobacilli. *Colloids Surf. B Biointerfaces* **2011**, *86* (1), 58–64. <https://doi.org/10.1016/j.colsurfb.2011.03.016>.

36. Chee, W. J. Y.; Chew, S. Y.; Than, L. T. L. Vaginal Microbiota and the Potential of Lactobacillus Derivatives in Maintaining Vaginal Health. *Microb. Cell Factories* **2020**, 19 (1), 203. <https://doi.org/10.1186/s12934-020-01464-4>.
37. Kang, C.-H.; Kim, Y.; Han, S. H.; Kim, J.-S.; Paek, N.-S.; So, J.-S. In Vitro Probiotic Properties of Vaginal *Lactobacillus Fermentum* MG901 and *Lactobacillus Plantarum* MG989 against *Candida Albicans*. *Eur. J. Obstet. Gynecol. Reprod. Biol.* **2018**, 228, 232–237. <https://doi.org/10.1016/j.ejogrb.2018.07.005>.
38. Saraf, V. S.; Sheikh, S. A.; Ahmad, A.; Gillevet, P. M.; Bokhari, H.; Javed, S. Vaginal Microbiome: Normalcy vs Dysbiosis. *Arch. Microbiol.* **2021**, 203 (7), 3793–3802. <https://doi.org/10.1007/s00203-021-02414-3>.
39. Ait-Belgnaoui, A.; Payard, I.; Rolland, C.; Harkat, C.; Braniste, V.; Théodorou, V.; Tompkins, T. A. Bifidobacterium Longum and Lactobacillus Helveticus Synergistically Suppress Stress-Related Visceral Hypersensitivity Through Hypothalamic-Pituitary-Adrenal Axis Modulation. *J. Neurogastroenterol. Motil.* **2018**, 24 (1), 138–146. <https://doi.org/10.5056/jnm16167>.
40. Tabatabaei, N.; Eren, A.; Barreiro, L.; Yotova, V.; Dumaine, A.; Allard, C.; Fraser, W. Vaginal Microbiome in Early Pregnancy and Subsequent Risk of Spontaneous Preterm Birth: A Case-Control Study. *BJOG Int. J. Obstet. Gynaecol.* **2019**, 126 (3), 349–358. <https://doi.org/10.1111/1471-0528.15299>.
41. Motei, D. E.; Beteri, B.; Hepsomali, P.; Tzortzis, G.; Costabile, A. Supplementation with Postbiotic from Bifidobacterium Breve BBO91109 Improves Inflammatory Status and Endocrine Function in Healthy Females: A Randomized, Double-Blind, Placebo-Controlled, Parallel-Groups Study. *Front. Microbiol.* **2023**, 14. <https://doi.org/10.3389/fmicb.2023.1273861>.