

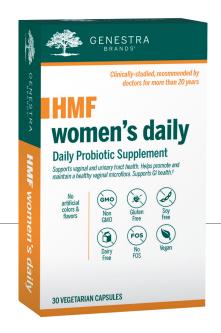
## **HMF Women's Daily**

**Daily Probiotic Supplement** 

# Probiotics and cranberry to support vaginal and urinary tract health<sup>‡</sup>

- Helps promote and maintain healthy vaginal flora<sup>‡</sup>
- Helps support urinary tract health in women<sup>‡</sup>
- Supports intestinal comfort and immune function<sup>‡</sup>
- Provides 17.6 billion CFU per capsule

HMF Women's Daily was specifically designed to support the unique needs of women. Each capsule offers 17.6 billion CFU from a combination of seven research-driven probiotic strains to help promote and maintain healthy vaginal flora. The vagina is a complex ecosystem that can by altered by many factors, including age, medication use, sexual activity, hygiene practices and hormone production. *Lactobacilli* are the dominant vaginal microorganisms in healthy women, where they help maintain the normal vaginal microflora. They compete with other microorganisms for nutrients and adherence to the vaginal epithelium; decrease the vaginal pH by producing organic acids (primarily lactic acid); and produce compounds that support microbial balance, including bacteriocins and hydrogen peroxide. In addition to providing two species of Bifidobacteria, HMF Women's Daily offers three species of Lactobacilli, selected for their natural presence in the female flora. Included in this blend are L. rhamnosus HN001 and *L. acidophilus* La-14, which provide particular support to maintain healthy vaginal flora. This probiotic combination also helps colonize both the large and small intestines to support gastrointestinal and immune health. To further contribute to overall well-being, HMF Women's Daily offers cranberry fruit extract, which helps maintain healthy urinary tract ecology and supports urinary tract health.<sup>‡</sup>



Supplement Facts Serving Size 1 Capsule Servings per Container 30		
	Amount Per Serving	%DV
Probiotic Consortium	17.6 billion CFU	*
Lactobacillus acidophilus (La-14)		
Lactobacillus acidophilus (CUL-60 &	CUL-21)	
Lactobacillus rhamnosus (HN001)		
Lactobacillus gasseri (CUL-09)		
Bifidobacterium animalis subsp. lact & Bifidobacterium bifidum (CUL-2		
Cranberry ( <i>Vaccinium macrocarpon</i> ) Fruit Extract (25-36:1) 7.5-10.8 g Dried Equivalent	300 mg	*

Other Ingredients: Cellulose, hypromellose, silica

\* Daily Value (DV) not established

#### **Recommended Dose**

Take 1 capsule daily with a meal or as recommended by your health professional.

### Size

30 Vegetarian Capsules











10385

**Product Code** 



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## **HMF Women's Daily**

### **Daily Probiotic Supplement**

#### Scientific Rationale:

The vaginal microbiota contains a microbial population unlike the ones found on other body sites. Although it does not contain the high bacterial diversity present in the mouth or colon, the vagina is a dynamic ecosystem due to the production of mucus, sloughing of glycogen-containing epithelial cells, monthly release of iron-containing endometrial tissue during menstruation, and addition of exogenous microbes from sexual activity. Homeostasis in this region depends on complex interactions between the host and microorganisms that colonize the mucosa, and has a critical role in helping to maintain good health.

In healthy premenopausal women, *Lactobacilli* are the most abundant vaginal microorganisms.<sup>2</sup> They help to maintain the normal vaginal microflora by mediating microbial colonization.<sup>2‡</sup> Specifically, they compete with other microorganisms for nutrients and adherence to the vaginal epithelium; decrease the vaginal pH by producing organic acids (primarily lactic acid); and produce compounds that support microbial balance, including bacteriocins and hydrogen peroxide.<sup>2‡</sup>

The composition of vaginal microorganisms can be affected by a variety of factors, such as age, medication use, sexual activity, hygiene practices and hormone production.<sup>2</sup> For example, high concentrations of estrogen produced during the menstrual cycle can increase the adherence of *Lactobacilli* to epithelial cells.<sup>2</sup> In contrast, low estrogen levels associated with menopause cause the vaginal epithelium to dry and atrophy, as well as lower the glycogen content in vaginal epithelial cells.<sup>2</sup> As commensal bacteria metabolize glycogen into organic acids, decreased *Lactobacilli* and glycogen levels can lead to higher vaginal pH values – culminating in an altered microbial balance.<sup>2</sup>

Low concentrations of *Lactobacilli* in the vagina have been associated with high pH, reduced activity of the vaginal fluid, and alterations in the innate immune pathways.<sup>2</sup> Furthermore, a disturbance in the vaginal microflora composition can impact urinary tract health.<sup>2</sup> However, research suggests that the significance of *Lactobacilli* is best appreciated in connection with maternal and fetal health.<sup>2</sup> This is because *Lactobacilli* may support vaginal health during pregnancy, which has an important role in maternal and fetal wellbeing.<sup>2‡</sup>

Probiotic supplements can be used to help increase the *Lactobacilli* population in the vagina. <sup>2‡</sup> As *Lactobacilli* can ascend from the rectum to the vagina, probiotics can be delivered vaginally or orally. <sup>2</sup> However, the efficacy of orally-consumed probiotic strains first depends on their ability to survive the passage through the stomach and gut. <sup>2</sup> HMF Women's Daily provides a combination of research-driven strains selected for their high quality, viability, strong epithelial adherence and naturally high tolerance to stomach acid. <sup>3‡</sup> Included in this blend are CUL-60, CUL-21, CUL-34 and CUL-20, some of the most studied cultures in the world. In addition to the clinical research demonstrating their beneficial effects on gastrointestinal and immune health, HMF Women's Daily provides select strains that have been investigated for their ability to support vaginal health. <sup>4-12‡</sup>

In vitro research has reported that *L. acidophilus* La-14 alone and in combination with *L. rhamnosus* HN001 helped to regulate the growth of bacteria associated with the vagina.<sup>7‡</sup> Similarly, an animal trial demonstrated that oral and intravaginal administration of these two strains (alone and in combination) supported healthy vaginal flora in mice.<sup>8‡</sup> Additionally, oral administration was found to be more effective than intravaginal administration.<sup>8‡</sup>

In a randomized, double-blind, placebo-controlled trial, daily consumption of a probiotic complex containing L. acidophilus La-14 and L. rhamnosus HN001 significantly increased vaginal levels of these strains after 14 days.  $^{9\ddagger}$  Both strains were also detected at a significantly higher level than baseline at day 21, one week after consumption stopped.  $^{9\ddagger}$  A recent review article also concluded that L. gasseri is normally a dominant species in the vaginal mucosa of healthy women and may help support vaginal health when combined with other Lactobacilli.  $^{10\ddagger}$ 

In addition to a unique blend of probiotics, HMF Women's Daily also provides cranberry fruit extract to support urinary tract health in women.<sup>13‡</sup> Cranberries are rich in polyphenol antioxidant compounds such as proanthocyanidins, which help to maintain healthy urinary tract ecology.<sup>14‡</sup>

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