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BRANDS®

# HMF™ Women's Daily (shelf-stable)

## Shelf-stable probiotic and cranberry blend to support vaginal and urinary tract health<sup>‡</sup>

- Provides 17.6 billion CFU per capsule, plus 300 mg cranberry fruit extract
- 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>
- No refrigeration necessary
- Potency guaranteed through expiration

HMF™ Women's Daily was specifically designed to support the unique needs of women. Each shelf-stable 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 be 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* (HNO01) 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 wellbeing, HMF™ Women's Daily offers cranberry fruit extract, which helps maintain healthy urinary tract ecology and supports urinary tract health. This convenient shelf-stable format has potency guaranteed through expiration and may improve patient compliance.<sup>‡</sup>



### Supplement Facts

Serving Size 1 Capsule  
Servings per Container 25

	Amount Per Serving	% DV
<b>Probiotic Consortium</b>	17.6 billion CFU	*
<i>Lactobacillus acidophilus</i> (La-14)		
<i>Lactobacillus acidophilus</i> (CUL-60 & CUL-21)		
<i>Lactobacillus rhamnosus</i> (HNO01)		
<i>Lactobacillus gasseri</i> (CUL-09)		
<i>Bifidobacterium animalis</i> subsp. <i>lactis</i> (CUL-34)		
& <i>Bifidobacterium bifidum</i> (CUL-20)		
Cranberry ( <i>Vaccinium macrocarpon</i> )	300 mg	*
Fruit Extract (36:1)		
10.8 g Dried Equivalent		

\* Daily Value (DV) not established

Other Ingredients: Hypromellose, microcrystalline cellulose, silica

### Recommended Dose

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

### Size

25 Vegetarian Capsules

### Product Code

10664-25U



Non  
GMO



Gluten  
Free



Soy  
Free



Dairy  
Free



No  
FOS



Vegan

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## Scientific Rationale:

The human intestinal tract contains more than 400 bacterial species.<sup>1</sup> This microflora composition can be altered by a number of factors, including diet, occasional stress, certain medications, aging and travel.<sup>1</sup> When the microflora balance is affected in the intestines, common gastrointestinal complaints can occur, including mild bloating and gas.<sup>2</sup>

Probiotics are defined by the World Health Organization as “live microorganisms which when administered in adequate amounts confer a health benefit on the host”.<sup>3</sup> Probiotics have been found to support gastrointestinal health and contribute to a healthy microflora composition.<sup>1</sup> Studies have shown that they mediate microbial colonization and support the growth of beneficial bacteria in the intestines.<sup>1</sup> Probiotics accomplish this by mediating intestinal pH and strengthening the epithelial barrier.<sup>4</sup> They mediate the integrity of tight junctions and increase mucin release, which in turn regulates permeability and reduces microbial adherence to cells.<sup>4,5‡</sup>

The vaginal microbiota contains a microbial population unlike the ones found on other body sites.<sup>6</sup> 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.<sup>6</sup> 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.<sup>7‡</sup>

In healthy premenopausal women, *Lactobacilli* are the most abundant vaginal microorganisms.<sup>7</sup> They help to maintain the normal vaginal microflora by mediating microbial colonization.<sup>7</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>7‡</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>7</sup> For example, high concentrations of estrogen produced during the menstrual cycle can increase the adherence of *Lactobacilli* to epithelial cells.<sup>7</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>7</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>7‡</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>7</sup> Furthermore, a disturbance in the vaginal microflora composition can impact urinary tract health.<sup>7</sup> In addition to these findings, research suggests that the significance of *Lactobacilli* is best appreciated in connection with maternal and fetal health.<sup>7</sup> This is because *Lactobacilli* may support vaginal health during pregnancy, which has an important role in maternal and fetal well-being.<sup>7‡</sup>

Probiotic supplements can be used to help increase the *Lactobacilli* population in the vagina.<sup>7</sup> As *Lactobacilli* can ascend from the rectum to the vagina, probiotics can be delivered vaginally or orally.<sup>7</sup> However, the efficacy of orally-consumed probiotic strains first depends on their ability to survive the passage through the stomach and gut.<sup>7</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>8</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>9-17‡</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>12</sup> Similarly, an animal trial demonstrated that oral administration of these two strains (alone and in combination) supported healthy vaginal flora in mice.<sup>13‡</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.<sup>14</sup> Both strains were also detected at a significantly higher level than baseline at day 21, one week after consumption stopped.<sup>14</sup> 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*.<sup>15‡</sup>

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>18</sup> Cranberries are rich in polyphenol antioxidant compounds such as proanthocyanidins, which help to maintain healthy urinary tract ecology.<sup>19‡</sup>

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