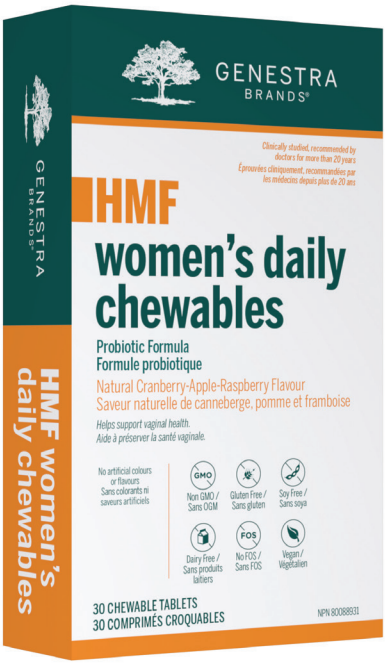
GENESTRA BRANDS®

HMF Women's Daily Chewables



Probiotics and cranberry to support vaginal and urinary tract health

- Helps restore and maintain healthy vaginal flora
- Helps prevent recurrent urinary tract infections (UTIs) in women
- Supports intestinal health
- Provides 17.6 billion CFU per chewable tablet
- Delicious natural cranberry-apple-raspberry flavour

HMF Women's Daily Chewables were specifically designed to support the unique needs of women. Each great-tasting chewable tablet offers 17.6 billion CFU from a combination of seven research-driven probiotic strains to help restore 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.[1] *Lactobacilli* are the dominant vaginal microorganisms in healthy women, helping to maintain normal vaginal microflora.[1] 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 antimicrobial compounds, including bacteriocins and hydrogen peroxide.[1] In addition to providing two species of *Bifidobacteria*, HMF Women's Daily Chewables offer three species of *Lactobacilli*, selected for their natural presence in the female flora.[2-5] Included in this blend are *L. rhamnosus* HN001 and *L. acidophilus* La-14, which specifically support healthy vaginal flora.[2-4] This probiotic combination also helps colonize both the large and small intestines to support gastrointestinal health. To further contribute to overall well-being, HMF Women's Daily Chewables offer cranberry fruit extract, which helps prevent recurrent UTIs in women.

EACH TABLET CONTAINS:

Probiotic Consortium	17.6 billion CFU
Lactobacillus acidophilus (La-14)	8 billion CFU
Lactobacillus acidophilus (CUL-60 & CUL-21)	5 billion CFU
Lactobacillus rhamnosus (HN001)	2 billion CFU
Lactobacillus gasseri (CUL-09)	1.3 billion CFU
Bifidobacterium animalis subsp. *lactis* (CUL-34) & *Bifidobacterium bifidum* (CUL-20)	1.3 billion CFU
Cranberry Fruit Extract (*Vaccinium macrocarpon*) (25-36:1)	300 mg
7.5-10.8 g Dried Equivalent	

Non-Medicinal Ingredients: Xylitol, sorbitol, natural flavours (apple, raspberry), sunflower lecithin, silica, magnesium stearate, stevia leaf extract

Recommended Dose

Adult Women: Chew 1 tablet daily or as recommended by your healthcare practitioner. For recurrent urinary tract infections (UTIs), take 2 tablets daily or as recommended by your healthcare practitioner. Take at least 2-3 hours before or after taking antibiotics. Use for a minimum of 4 weeks to see beneficial effects.

Size
30 Chewable Tablets

Product Code
10386

NPN 80088931

Non GMO · Gluten Free · Soy Free · Dairy Free · No FOS · Vegan

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Scientific Rationale:

The vaginal microbiota contains a microbial population unlike the ones found at other sites in the body.[1] 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.[1] 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.[2]

In healthy premenopausal women, *Lactobacilli* are the most abundant vaginal microorganisms.[2] They help to maintain the normal vaginal microflora by limiting the growth of pathogenic organisms.[2] 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 antimicrobial compounds, including bacteriocins and hydrogen peroxide.[2]

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.[2] For example, high concentrations of estrogen produced during the menstrual cycle can increase the adherence of *Lactobacilli* to epithelial cells.[2] 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.[2] As commensal bacteria metabolize glycogen into organic acids, decreased *Lactobacilli* and glycogen levels can lead to higher vaginal pH values – culminating in the growth of pathogenic bacteria.[2]

Low concentrations of *Lactobacilli* in the vagina have been associated with high pH and reduced antimicrobial activity of the vaginal fluid.[2] Furthermore, a disturbance in the vaginal microflora composition can impact urinary tract health.[2] However, research suggests that the significance of *Lactobacilli* is best appreciated in connection with maternal health, as *Lactobacill*i may play an important role in maternal well-being by supporting vaginal health during pregnancy.[2]

Probiotic supplements can be used to help increase the *Lactobacilli* population in the vagina.[2] As *Lactobacilli* can ascend from the rectum to the vagina, probiotics can be delivered vaginally or orally.[2] However, the efficacy of orally consumed probiotic strains first depends on their ability to survive the passage through the stomach and gut.[2] HMF Women's Daily Chewables provide a combination of research-driven strains selected for their high quality, viability, strong epithelial adherence and naturally high tolerance to stomach acid.[3] 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 health, HMF Women's Daily Chewables provide select strains that have been investigated for their ability to support vaginal health.[4-10]

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

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] Both strains were also detected at a significantly higher level than baseline at Day 21, one week after consumption stopped.[9] 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]

In addition to a unique blend of probiotics, HMF Women's Daily Chewables also provide cranberry fruit extract to help prevent recurrent urinary tract infections (UTIs) in women. Approximately 10-20% of women experience one or more incidents of urinary discomfort or UTIs each year, with recurrence rates around 20%.[11] Cranberries are rich in polyphenol antioxidant compounds such as proanthocyanidins, which reduce the adhesiveness of *E. coli* bacteria to the uroepithelial cells that line the bladder.[12] As these pathogenic cells cannot adhere to urinary epithelial cells, they are unable to infect the mucosal surface of the host's urinary tract.[13]

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