How Does Menopause Impact the Vaginal Microbiome?

The Institute for Vaginal Health

Menopause leads to hormonal and microbiome changes driven by declining estrogen, reducing glycogen and Lactobacillus levels in the vaginal epithelium. The resulting pH shift contributes to dryness, irritation, dyspareunia, and increased risk of infections such as bacterial vaginosis and UTIs.

51 Years Old
is the average age of reaching menopause

~4,000 women
reach menopause
every day in the US

Genitourinary Syndrome of Menopause **(GSM) affects up to 84% of postmenopausal women**. Common symptoms include vulvar burning, itching, or irritation; vaginal dryness and reduced lubrication; and dyspareunia or discomfort during sexual activity.[1]

Clinical examinations show that GSM is present in up to 90% of postmenopausal women. However, **research indicates that only 7% of physicians routinely inquire** about this condition, and many women do not discuss it with their healthcare providers, often perceiving it as an unavoidable part of aging.[2]

The Phases of Menopause

Perimenopause

Duration: 4-10 years

Age: 45-55

Vaginal Microbiome Impact: As estrogen levels decline, glycogen production in the vaginal epithelium decreases, leading to a reduction in Lactobacillus populations, an increase in vaginal pH, and greater microbiome diversity, which elevates the risk of infections like bacterial vaginosis and yeast.

Menopause

Duration: 12 months

Average Age: 51

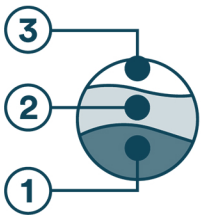
Vaginal Microbiome Impact: The marked decline in estrogen during menopause significantly reduces glycogen and Lactobacillus levels, raising vaginal pH and promoting a more diverse, less protective microbiome that favors opportunistic pathogens like Gardnerella vaginalis. These shifts contribute to dryness, epithelial thinning species like Gardnerella vaginalis, contributing to dryness, epithelial thinning, and increased risk of bacterial vaginosis.

Postmenopause

Duration: 30-40% of life

Average Age: 52

Vaginal Microbiome Impact: Ongoing estrogen deficiency in postmenopause postmenopause results in persistent atrophy and dryness and significantly reduced or depleted Lactobacillus species, and chronically elevated vaginal pH. This results in a more diverse and less protective microbiome with increased susceptibility to chronic vaginal dryness, painful sex, recurrent UTIs, BV, and yeast infections resulting in a more diverse but less protective microbiome and increased susceptibility to bacterial vaginosis, UTIs, dryness, itching, and irritation.



Bio-Match®

Powered by patented Bio-Match® technology, our products are scientifically formulated to match the natural characteristics of healthy vaginal fluid—optimal pH, iso-osmolarity, and a proprietary lactic acid blend. This biomimetic approach protects vaginal tissue, supports a Lactobacillus-dominant microbiome, and helps reduce disruptive symptoms like dryness, irritation, and imbalances. For women experiencing symptoms of Genitourinary Syndrome of Menopause (GSM), Bio-Match® products offer gentle, science-backed relief that soothes discomfort and restores balance to the vaginal environment. Unlike hyper-osmolar products that can damage tissue and the microbiome, Bio-Match® alleviates symptoms while helping maintain the natural integrity of vaginal health.

To request samples or begin offering Bio-Match® products to your patients, visit theivh.org.

[1]https://www.letstalkmenopause.org/gsmc.21871
[2]https://www.thepermanentejournal.org/doi/10.7812/TPP/20.248