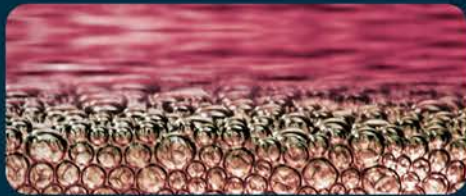


Cancer Treatment & the Vaginal Microbiome

Women who undergo cancer treatment may experience symptoms such as vaginal pain, painful sex, and vaginal dryness. Restoring the health of the vaginal microbiome is key to fixing these persistent symptoms.



The Need to Restore the Vaginal Microbiome

The presence and persistence of symptoms are often inversely correlated with microbiome stability and *Lactobacillus* abundance, highlighting the need for formulations that can both support microbiota restoration and protect fragile tissue.



The Effects of Varying Cancer Treatments & Medicines

Chemotherapy

Women receiving chemotherapy may develop vulvar and vaginal burning secondary to mucosal inflammation.¹

Aromatase Inhibitors & Tamoxifen

Aromatase Inhibitors and Tamoxifen induce profound estrogen depletion, which diminishes vaginal glycogen production and epithelial hydration, and impairs tissue elasticity¹

Radiotherapy

Radiotherapy is associated with chronic vaginal toxicities including fibrosis, inflammation, hemorrhage, dryness, and painful sex. Radiation induces epithelial thinning, reduced collagen and hyaluronic acid levels, and altered mucosal repair.²

After cancer treatment, microbiome profiles often shift to high-diversity states lacking *Lactobacillus*, associated with elevated pH, tissue inflammation, and microbial translocation.^{2,3,4}

Persistent Symptoms Impacting Quality of Life

Cancer treatments targeting the reproductive system often cause profound and lasting changes to the vaginal and vulvar environment - changes that compromise both tissue integrity and microbial balance, leading to persistent symptoms greatly impacting quality of life.^{2,3,4}

Longitudinal studies show cancer patients have significantly less microbial stability and resilience than healthy controls, correlating strongly with persistent symptoms such as vaginal dryness, burning, and pain.^{2,3,4}

80% of patients have vaginal pain after completing radiotherapy⁵



50% of patients report a lack of lubrication⁵



30% of patients report frequent or consistent symptoms including vaginal dryness and inflammation⁵



¹<https://www.menopause.org.au/health-info/fact-sheets/vaginal-health-after-breast-cancer-a-guide-for-patients> (meds)

²<https://doi.org/10.3389/fcimb.2021.680038>

³<https://doi.org/10.1016/j.clbc.2017.05.008>

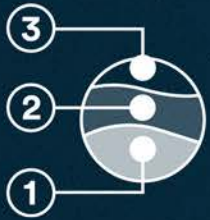
⁴<https://doi.org/10.1016/j.maturitas.2022.08.013>

⁵<https://pmc.ncbi.nlm.nih.gov/articles/PMC8580013/>



The Institute for
Vaginal Health

Bio-Match®: Restoring the Vaginal Microbiome



Bio-Match®

Unlike conventional vaginal products that may worsen dysbiosis through irritants, preservatives, high pH, or inappropriate osmolality, Bio-Match® technology protects tissue barrier function and supports microbial balance.

Bio-Match® is a patented, evidence-based technology designed to mimic the osmolality, pH, and biochemical profile of healthy vaginal fluid.

Bio-Match® is:

3 Iso-osmolar

Formulations match the osmolality of vaginal fluid (370+₋40 mOsm/kg), avoiding the epithelial tissue damage seen with hyperosmolar products (which draw water out of cells and induce shedding).

2 Low pH (~4.2.)

Supports the growth of *Lactobacillus* species and inhibits overgrowth of BV-associated and other inflammatory microbes.

1 Proprietary lactic acid blend

The D- and L- lactic acid blend enhances compatibility with the vaginal microenvironment, promoting microbiome resilience and epithelial recovery.

Balance Moisturizing Wash

Contains 60% organic aloe vera and lactic acid in a Bio-Match® base. Gently moisturizes, cleanses, and soothes sensitive vulvar tissue post radiation. In clinical studies, aloe was found effective in improving symptoms of acute radiation inflammation in patients receiving radiotherapy.⁶



Rehydrate Ultra Moisturizing Vaginal Gel with Hyaluronic Acid

Formulated with Bio-Match® technology to support natural vaginal moisture and lasting comfort. In clinical trials, hyaluronic acid suppositories were shown to significantly improve symptoms like dryness and urinary discomfort in women post-breast cancer treatment.⁴



Relief Vaginal Itch & Pain Gel with Lidocaine 4%

Delivers maximum-strength, OTC lidocaine (4%) for fast-acting relief of vulvovaginal pain, itch, irritation and discomfort. Bio-Match® technology allows effective pain relief with tissue compatibility.



Post-Treatment Intimacy Tips with IVH Founder, Wendy Strgar:



- Use a vaginal moisturizer that supports a healthy microbiome
- Use iso-osmolar lubricants to stabilize the vaginal epithelium
- Be gentle with yourself and partner - let curiosity be your teacher
- Realize there's more to intimacy than intercourse
- Find scents that awaken your libido

