AN EXPERT GUIDE TO

## **Probiotics** and Reproductive Health









## Welcome to your guide on the microbiome.

"All disease begins in the gut," Hippocrates, the father of medicine, said more than 2,000 years ago - and we're now beginning to realize how true this really is. Research over the last few decades has revealed that the well-being of your gut has a huge impact on your overall health. In addition to its primary role in digesting the food we consume, absorbing the nutrients and eliminating the waste, the gut is also the gateway to the health of your vagina! May not have heard that one before...but stick with us.

In this guide, we'll go over how your gut directly impacts your vaginal microbiome, which is key to your reproductive health.









# What exactly is the gut microbiome?

It's the miniature world made up of approximately 100 trillion microscopic organisms that flourish within your gastrointestinal tract. That large number is hard to wrap our heads around, so to give you some perspective, this microbial ecosystem weighs a little over two pounds!

The micro-organisms that live in your gut are called gut flora and these organisms have a profound impact on your overall health, governing how you look, feel, and think!

The beneficial gut flora perform many important tasks in the body, such as:

- · Absorbing nutrients from the food you eat
- Producing vitamins and enzymes
- Managing your appetite (and cravings!)
- Controlling your metabolism
- Determining the amount of calories you extract from food
- Helping balance your blood sugar
- Regulating your hormones
- · Reducing inflammation
- Protecting you from harmful pathogens
- Playing a big role in mental function



## What affects gut bacteria?

Unhealthy diet, stress, medications, environmental toxins, etc. (basically the Western lifestyle!) can decrease good bacteria, promote proliferation of bad bacteria, and create "dysbiosis" which is gut flora imbalance. Dysbiosis can lead to various health issues such as:

- Chronic inflammation
- Bloating
- Gas
- Diarrhea
- Constipation
- Acne
- Weight gain

- Hormonal problems
- Fertility challenges
- Anxiety
- Depression
- Brain fog
- Impaired immune function

Specifically for women, dysbiosis can throw off the microbial ecosystem in your vagina. It is crucial to address gut health as part of fertility and preconception care as it has a role in your ability to become pregnant. Having healthy vaginal flora maintains an environment that is conducive to the survival of sperm. An imbalance in the vaginal ecosystem can interfere with conception by creating an inhospitable environment for sperm and preventing egg fertilization. The best way to support a healthy vaginal ecosystem is to maintain balanced and diverse intestinal bacteria, as the two microbial populations are intricately connected.



## Taking care of your gut and vaginal health

CONSIDER A PROBIOTIC: We recommend that all women who are trying to conceive or already pregnant consider a probiotic before, during, and after pregnancy (while breastfeeding). Probiotics directly affect the gut microbes of your fetus and will lay down the foundation for your child to have a strong and healthy gut. Infant guts were previously though to be sterile; however, newer research shows there is bacteria in amniotic fluid, umbilical cord blood, and the placenta. Bacterial colonization of a fetus' gut begins in the womb and this early inoculation of good microbes is important for the long-term health of babies. In particular, research demonstrates that mothers receiving a probiotic in the 3rd trimester have babies with lower rates of atopic conditions (specifically, eczema and allergies).





#### PROBIOTICS AND THE PILL

If you are currently, or have a history of, taking the birth control pill, taking a daily probiotic supplement is especially important! The pill acts like an antibiotic in your gut, decreasing the strength of your immune system and destroying the balance of good bacteria, leaving you vulnerable to dysbiosis not only in the gut but also in the vagina. This is also important if you have a history of yeast infections, bacterial vaginosis (BV) or chronic UTIs!

CHOOSING A PROBIOTIC: There are so many different probiotics on the market, so it can be overwhelming trying to choose the right one. At Binto, we suggest choosing a high-quality probiotic that contains a wide variety of Lactobacillus and Bifidobacterium species. More specifically, choose a supplement that contains Lactobacillus rhamnosus and Lactobacillus reuteri, such as Binto's powerhouse synbiotic supplement.

**ELIMINATE INFLAMMATORY FOODS FROM YOUR DIET:** Try limiting or removing gluten, dairy, processed carbs (white flour products, baked goods, etc.), refined sugar, and hydrogenate oils from your diet for at least three months.

**AVOID UNNECESSARY ANTIBIOTICS:** In some cases, antibiotics are medically necessary, but not always! Antibiotics kill bacteria, both good and bad. Overuse of antibiotics will harm your microbiome and increase your risk for gut dysbiosis. If you have to take an antibiotic at any stage before/during/after pregnancy, make sure you take a probiotic along with it!

FEED YOUR GUT GOOD FLORA: Eat prebiotic foods which are indigestible fibers that nourish the good bacteria in your gut, such as leeks, onions, dandelion greens, jicama, Jerusalem artichokes, and asparagus. Also make sure you are eating plenty of probiotic foods which are rich in beneficial bacteria like lacto-fermented veggies, such as kimchi and sauerkraut.

DON'T OVER-SANITIZE: Our society's obsession with hygiene, cleanliness, and anti-bacterial everything is compromising the bacterial diversity in our gut. Consider switching to mild soaps (like pure castile soap) and using non-toxic household cleaning, personal care, and makeup products.

SOURCES: This e-book was originally written by Stephanie Morish, a Certified Holistic Nutrition Consultant and Natural Foods Chef. She currently lives in Denver, CO, where she runs her nutrition consulting practice.