



The Vaginal Microbiome

a unique ecosystem that is a critical determinant of female health

Vaginal Microbiome A mutualistic relationship between vaginal microbiota and its human host

The vaginal microbiome is an intricate and dynamic microecosystem that constantly undergoes fluctuations during the female menstrual cycle and a woman's entire life. The vaginal microbiota living within are a critical determinant of vaginal health with far-reaching influence across female reproductive health and fertility, protection from infection, plus they confer beneficial bacteria to newborns birthed through the vaginal canal. Unlike the gut microbiome, a healthy vaginal microbiome is manifested by a low degree of bacterial diversity and is instead dominated by the Lactobacillus species which produce various antimicrobial and anti-inflammatory factors to maintain a healthy vaginal environment. Paradoxically an Increase in diversity can be associated with dysbiosis - a bacterial imbalance - which can lead to bacterial vaginosis and infection. In women of reproductive age, physiological changes, such as monthly changes in hormone levels during menstruation, cause fluctuations in the vaginal microbiome as well as temporary changes during pregnancy. The vaginal microbiome will also differ between individuals due to differences in sexual activities, washing habits, stress and other factors.

Promotes a healthy vagina

The vaginal mucosa helps establish an anaerobic environment where the Lactobacillus species flourish and produce various antimicrobial compounds, such as lactic acid, hydrogen peroxide & bacteriocins. These keep the pH value of the habitat lower than 4.5 for a healthy vaginal microbiome and provide defence against invading pathogens.



Reduces risk of Infection

A healthy microbiome helps protect against bacterial vaginosis (BV) afflicting c. 23-29% women worldwide, and other infections characterized by the loss or sharp decline in the total number of beneficial Lactobacillus species and a corresponding 100–1000 fold increase in BVassociated bacteria (anaerobic germs that can survive and grow where there is no or little oxygen.

Diet & Nutrition

There are many ways to support the vaginal microbiome with a personalised nutrition and lifestyle approach. BANT nutrition practitioners assess and identify potential nutritional imbalances to understand how these may contribute to an individual's symptoms and health concerns and provide tailored science-based recommendations.

