



UNDERSTANDING YOUR VAGINAL MICROBIOME

A practical guide to vaginal health, fertility and treatment

Last updated: August 2026



This guide is for anyone trying to conceive, preparing for IVF, or experiencing recurrent miscarriage or implantation difficulties who wants to understand more about the vaginal microbiome, what testing can reveal, and when treatment may be appropriate.

What is the vaginal microbiome?

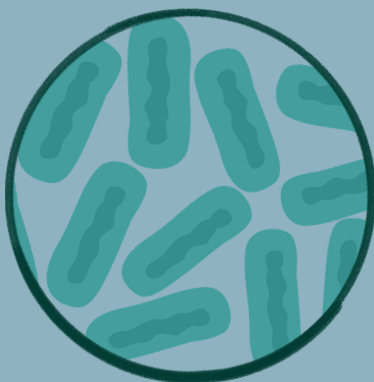
The vaginal microbiome is the community of microorganisms that naturally live within the vagina. Far from being harmful, many of these bacteria play an important protective role.

A healthy vaginal microbiome is usually dominated by *Lactobacillus* species. These beneficial bacteria produce lactic acid, helping to maintain the naturally acidic vaginal environment that makes it harder for potentially harmful organisms to thrive.

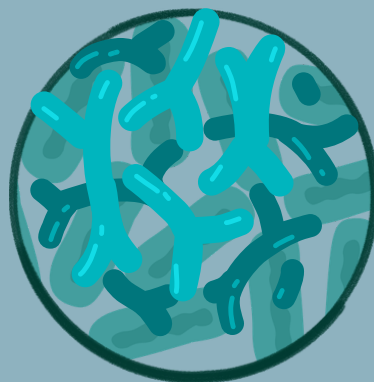
**It's not just about which bacteria are present.
The balance of bacteria matters too.**

When protective *Lactobacillus* levels fall, other bacteria can become more abundant. This is known as vaginal dysbiosis and may occur with or without obvious symptoms.

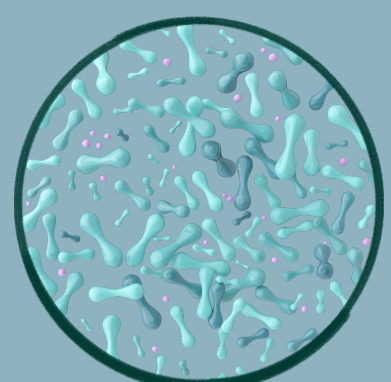
Lactobacillus
dominant



Reduced
Lactobacillus



Dysbiosis



Did you know?

You can have vaginal dysbiosis without unusual discharge, odour, irritation or other vaginal symptoms. Testing can therefore sometimes reveal changes that would otherwise go unnoticed.

Why might the vaginal microbiome matter for fertility?

Research increasingly suggests that the reproductive tract microbiome may be associated with fertility and pregnancy outcomes.

A vaginal microbiome dominated by *Lactobacillus* - particularly certain species such as *Lactobacillus crispatus* - is generally associated with a more favourable reproductive environment.

In contrast, reduced *Lactobacillus* and increased levels of bacteria associated with vaginal dysbiosis have been linked in studies with poorer reproductive outcomes.

Research has explored associations with:

- implantation and IVF outcome
- early pregnancy loss
- bacterial vaginosis
- inflammation within the reproductive tract
- some pregnancy complications

An important distinction

An association does not mean that an altered vaginal microbiome is necessarily the cause of a fertility problem or miscarriage.

Fertility is complex, and microbiome testing should be considered alongside the wider clinical picture rather than interpreted in isolation.

What can affect your vaginal microbiome?

The vaginal microbiome isn't static. Its composition can change throughout life and in response to a number of factors.

These may include:



Hormonal changes Oestrogen helps support *Lactobacillus*, so the microbiome can change across the menstrual cycle and at different stages of life.



Antibiotics While sometimes essential, antibiotics can affect beneficial bacteria as well as the organisms they are intended to treat.



Sex and semen Semen temporarily raises vaginal pH and sexual activity can influence the vaginal microbial environment.



Menstruation Blood also alters vaginal pH, meaning the microbial environment can fluctuate around menstruation.



Infections and dysbiosis Organisms associated with bacterial vaginosis and other genital tract infections can alter the balance of the microbiome.



Vaginal products Douching and fragranced soaps or intimate products can disrupt the vagina's natural environment.
The vagina does not need to be washed internally.

Why does pH matter?

A healthy vaginal environment is usually mildly acidic, at around pH 3.8–4.5. *Lactobacillus* helps maintain this acidity, making it harder for potentially harmful bacteria to thrive. When pH rises, the balance can shift, creating an environment where bacteria associated with dysbiosis and bacterial vaginosis can become more abundant.

What can vaginal microbiome testing tell you?

Vaginal microbiome testing provides a snapshot of the microorganisms present within the vagina at the time the sample is taken.

It can help identify:

- which *Lactobacillus* species are present
- how abundant protective bacteria are
- whether bacteria associated with bacterial vaginosis or dysbiosis are present
- potentially significant organisms such as *Ureaplasma* or *Mycoplasma*
- the overall diversity and balance of the vaginal microbial community

Not all microbiome tests are the same

At Truth Fertility, we use shotgun metagenomic sequencing.

Rather than looking only for a predetermined list of organisms, shotgun sequencing analyses genetic material within the sample to provide a much broader picture of the microbial community.

This allows us to look beyond simply whether an organism is “positive” or “negative” and consider the overall microbial environment.



You've got your results. What happens next?

1.

Understand your results



A microbiome result is only useful if you know what to do with it. Not every organism detected requires treatment.

What happens next depends on the bacteria identified, their abundance, your symptoms and your wider fertility history.

2.

Don't forget the partner



In fertility care, there are situations where treating both partners may be considered, particularly where organisms could be shared and reinfection is a concern.

Partner treatment isn't necessary for every finding, which is why individual interpretation matters.

3.

From result to treatment



People who arrange microbiome testing independently can be left with significant results but no clear route to treatment.

Truth Fertility provides a joined-up testing and prescribing pathway, including partner treatment where appropriate.

**No chasing multiple services.
No being left wondering what to do next.**

Want to find out more?

Visit Truth Fertility to learn more about our comprehensive vaginal microbiome testing, results support and prescribing pathway.



This guide is for general educational purposes and does not replace individual medical advice. The vaginal and reproductive microbiome is an evolving area of research, and the clinical significance of individual findings varies. Prescription treatment should only be used following appropriate clinical assessment.