
















## Vaginal Microbiome Profile

Vaginal pH.

4.5

3.5 - 4.5



Opportunistic Bacteria	Result	Range	Units	
Enterococcus faecalis:	<DL	< 1.0	x10 <sup>5</sup> CFU/ml	
Escherichia coli:	0.90	< 1.00	x10 <sup>5</sup> CFU/g	
Klebsiella pneumoniae:	<DL	< 1.00	x10 <sup>5</sup> CFU/ml	
Proteus mirabilis:	<DL	< 1.00	x10 <sup>5</sup> CFU/ml	
Pseudomonas aeruginosa:	<DL	< 1.00	x10 <sup>5</sup> CFU/ml	
Streptococcus agalactiae:	<DL	< 1.00	x10 <sup>5</sup> CFU/ml	
Staphylococcus aureus:	<DL	< 1.00	x10 <sup>5</sup> CFU/ml	
Gardnerella vaginalis:	<DL	< 1.00	x10 <sup>5</sup> CFU/ml	
Atopobium vaginae:	0.01	< 1.00	x10 <sup>5</sup> CFU/ml	
Prevotella species:	<DL	< 1.00	x10 <sup>5</sup> CFU/ml	
Megasphaera species:	<DL	< 1.00	x10 <sup>5</sup> CFU/ml	
Ureaplasma species	26.56 *H	< 1.00	x10 <sup>6</sup> CFU/ml	
Mycoplasma species	<DL	< 1.00	x10 <sup>6</sup> CFU/ml	






### Sexually Transmitted Infections

Trichomonas vaginalis:	Not Detected
Chlamydia trachomatis:	Not Detected
Neisseria gonorrhoeae:	Not Detected
Herpes Simplex Virus-1:	Not Detected
Herpes Simplex Virus-2:	Not Detected









#### COMMENT:

Not Detected results indicate the absence of detectable DNA in this sample. A negative result does not completely exclude infection.

### Opportunistic Fungal pathogens

Candida albicans:	<DL	< 1.00	x10 <sup>5</sup> CFU/ml	
Candida glabrata:	<DL	< 1.00	x10 <sup>5</sup> CFU/ml	
Candida krusei:	<DL	< 1.00	x10 <sup>5</sup> CFU/ml	
Candida parapsilosis:	<DL	< 1.00	x10 <sup>5</sup> CFU/ml	
Candida tropicalis:	<DL	< 1.00	x10 <sup>5</sup> CFU/ml	

### Beneficial Bacteria:

Total Lactobacillus:	1.20	> 1.00	x10 <sup>6</sup> CFU/ml	
Lactobacillus crispatus:	0.10 *L	> 1.00	x10 <sup>6</sup> CFU/ml	
Lactobacillus gasseri:	1.10	> 1.00	x10 <sup>6</sup> CFU/ml	
Lactobacillus iners:	<DL *L	> 1.00	x10 <sup>6</sup> CFU/ml	
Lactobacillus jensenii:	<DL *L	> 1.00	x10 <sup>6</sup> CFU/ml	
Lactobacillus rhamnosus:	<DL *L	> 1.00	x10 <sup>6</sup> CFU/ml	
Lactobacillus salivarius:	<DL *L	> 1.00	x10 <sup>6</sup> CFU/ml	
Lactobacillus vaginalis:	<DL *L	> 1.00	x10 <sup>6</sup> CFU/ml	

### Bacterial Vaginosis:

Bacterial vaginosis	Negative
---------------------	----------



## Vaginal Microbiome Comments

### VAGINAL pH NORMAL:

The typical vaginal pH is 3.5-4.5. Prepubertal and postmenopausal pH levels are normally >5 pH. With the increase of the oestrogen levels around puberty, the genital mucosa thickens and becomes colonized with *Lactobacillus* species which produce lactic acid and hydrogen peroxide to lower the pH below 4.5.

### Mycoplasma and Ureaplasma Species

Mycoplasmas and Ureaplasmas species colonise lower genital tract of many healthy sexually active individuals. Clinically act as opportunistic bacteria, associated with mucosal infections of the respiratory and urogenital tracts. Mycoplasmas and Ureaplasma species can cause sexually transmitted infections like bacterial vaginosis (BV), cervicitis, PID, infertility in non-pregnant females and chorioamnionitis, endometritis, postpartum fever, premature birth or spontaneous abortion in pregnancy and urethritis in males. Sexual contacts should be encouraged to be tested and treated simultaneously to prevent recurrence in the patient.

Both organisms lack cell wall hence beta lactam antibiotics are not effective. Macrolides and Quinolones are effective but anti-microbial resistance is creeping.

General advice for along with above treatment as follows:

- o Regular salt or warm water only washes (no douching)
- o Good Personal Hygiene
- o Avoid irritants (soaps/perfumes)
- o Use barrier protection during sex

### LACTOBACILLUS:

Total *Lactobacillus* is within range.

*Lactobacillus* is the predominant genus in a healthy vaginal microbiota, and functions to inhibit the adhesion and proliferation of opportunistic and primary pathogens.

The presence of different *Lactobacillus* species is a major factor in the stability of the vaginal microbiome. Women with *L. iners*-dominant microbiomes are more likely to harbor *Candida* than women with *L. crispatus*-dominant microbiomes (due to higher production of lactic acid by *L. crispatus* compared to *L. iners*), leading to better anti-*Candida* activity (impeding *Candida* colonization) than *L. iners* through a greater production of lactic acid. Furthermore, *L. iners* dominance has been associated with other negative health outcomes such as increased risks of *Chlamydia trachomatis* infection, incident Bacterial Vaginosis and defects in vaginal mucus that compromise antiviral barrier function.



P: 1300 688 522  
E: info@nutripath.com.au

**-ALEXANDRA MIDDLETON**  
**6 EDWARDS BAY ROAD**  
**MOSMAN NSW 2088**

**GEMMA FITZGERALD**  
**13-Oct-1988 Female**

**110 ROBSONS ROAD**  
**KEIRAVILLE NSW 2500**

**LAB ID : 3817418**  
**UR NO. : 6605187**  
**Collection Date : 18-May-2022**  
**Received Date:24-May-2022**



**3817418**

**Sex. Transmitted Infection Comments**

TRICHOMONAS VAGINALIS – Not Detected:

This does not completely exclude the possibility of infection as is dependent on an adequate specimen collection. If you have symptoms, please consult with your healthcare practitioner.

CHLAMYDIA TRACHOMATIS – Not Detected:

This does not completely exclude the possibility of infection as is dependent on an adequate specimen collection. If you have symptoms, please consult with your healthcare practitioner.

NEISSERIA GONORRHOEAE – Not Detected:

This does not completely exclude the possibility of infection as is dependent on an adequate specimen collection. If you have symptoms, please consult with your healthcare practitioner.

HERPES SIMPLEX VIRUS Type 1 – Not Detected:

This does not completely exclude the possibility of infection as is dependent on an adequate specimen collection. If you have symptoms, please consult with your healthcare practitioner.

HERPES SIMPLEX VIRUS Type 2 – Not Detected:

This does not completely exclude the possibility of infection as is dependent on an adequate specimen collection. If you have symptoms, please consult with your healthcare practitioner.