

ROLE OF PROBIOTICS IN REPRODUCTIVE TRACT INFECTION

Every 1 in 4 Indian women,

in her reproductive age, will develop any one type of Reproductive Tract Infections (RTIs)¹



Every one in four Indian women, in her reproductive age, will develop any one type of reproductive tract infections (RTIs)¹

The prevalence rate of RTIs across various Indian states is nearly 19% to 71%, and the annual incidence is estimated to be around 5%.1



Vaginal infections presents as one of the most common reason for gynecological consultation²

Role of probiotics in vaginal infections

Re-establishment of a physiological vaginal microbiome²

Restore the physiologic vaginal microbiota

In obstetrics and gynaecology clinical practice, Lactobacilli species are used to²

Prevention of diarrhoea associated with antibiotics

Prevent preterm birth

The rationale for the use of oral probiotics in treating gynecological conditions is based on their ability to²

- Survive through the gastrointestinal (GI) tract
- Ascend to the vaginal tract after their excretion from the rectum

In vaginal infections, there is either reduction or depletion of lactobacilli and overgrowth of pathogenic bacteria²

Probiotics

Produce lactic and acetic acid and hydrogen peroxide²

Maintain the vaginal pH $\leq 4.5^{2}$

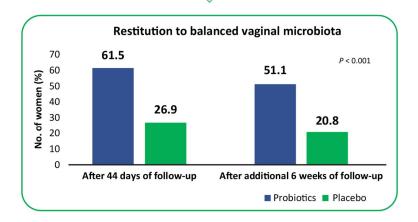
Hamper growth of pathogenic bacteria and Candida albicans²

Offer protective role against vaginal infections²

Women of reproductive age show increased use of probiotics

Clinical evidences on probiotics use in vaginal infections

A randomized, double-blind, multicentric, placebo-controlled trial was carried out in 544 women with bacterial vaginosis to study the efficacy of oral probiotics versus placebo, administered once/day over a period of 6 weeks.³

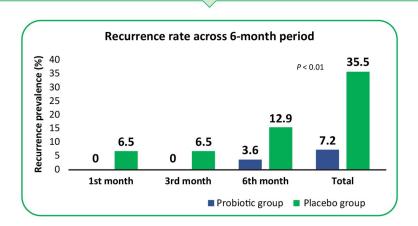


Normal vaginal microbiota was reported in only one-fifth of women on placebo, as compared to over half in those on probiotics.³

Use of probiotics either alone or in combination with antimicrobials is known to⁴:

- Positively alter the vaginal microflora
- Prevent vaginal infections
- More effective in clinical cure
- Recurrence prevention

A randomized, double-blind, clinical/comparative trial studied the rate of recurrence of vaginal candidiasis after initial treatment with an antimicrobial agent in patients who were undergoing prophylactic management with a probiotic and placebo for 6 months.⁵



Use of probiotics resulted in lower recurrence rate of vaginal infections.⁵

Probiotics have shown to **improve the therapeutic outcome in women with vaginal infections** by maintaining vaginal environment more protective from harmful pathogens and preventing recurrences.^{4,5}

Prebiotics

Prebiotics offer a therapeutic approach in vaginal infection control⁴:

Stimulates the growth of indigenous lactobacilli

Inhibits the growth of pathogens

Hampers the adhesion of pathogens to the vaginal epithelial cells

Probiotics and prebiotics carry potential to optimize, maintain and restore the ecology of the vaginal ecosystem⁶



Bact-DS

Synergistic combination of Pre & Probiotic



Prebiotic:

Genetically Modified Bacillus Mesentericus (GMBM)



Probiotic:

Streptococcus Faecalis



Probiotic:

Clostridium Butyricum



Probiotic:

Lactobacillus Sporogenes



Benefits of Vibact DS

- Can withstand gastric acid pH as low as 1.2⁷
- Promotes the growth of Bifidobacterium species⁸
- Improves stool consistency and frequency in diarrhea9
- Stimulates the mucosal immunity¹⁰

References: 1. Durai V, Varadharajan S, Muthuthandavan AR. Reproductive tract infections in rural India – A population-based study. J Family Med Prim Care. 2019 Nov;8(11):3578–83. 2. Buggio L, Somigliana E, Borghi A, Vercellini P, Probiotics and vaginal microecology: fact or fancy? BMC Womens Health. 2019;19:25. 3. Vujic G, Knez AJ, Stefanovic VD, Vrbanovic VK. Efficacy of orally applied probiotic capsules for bacterial vaginosis and other vaginal infections: a double-blind, randomized, placebo-controlled study. Eur J Obstet Gynecol Reprod Biol. 2013 May;168(1):75–9. 4. Kim JM, Park YJ. Probiotics in the Prevention and Treatment of Postmenopausal Vaginal Infections: Review Article. J Menopausal Med. 2017 Dec; 23(3):139–45. 5. Davar R, Nokhostin F, Eftekhar M, Sekhavat L, Zadeh MB, Shamsi F. Comparing the Recurrence of Vulvovaginal Candidiasis in Patients Undergoing Prophylactic Treatment with Probiotic and Placebo During the 6 Months. Probiotics Antimicrob Proteins. 2016 Sep;8(3):130-3. 6. Alpharage FH, Tester RF. Biotherapeutic agents and vaginal health. J Appl Microbiol. 2016. Jul;121(1):18–27. 7. Br. J Nutr (1998) 80 Suppl S 147-S171 8. Microbios. 2000;101 (399):105-14 9. Scientific Reports | (2008) 8:2964 | DOI:10.1038/s41598-018-21241-z 10. CRITICAL REVIEWS IN FOOD SCIENCE AND NUTRITION 2018, VOL. 58, NO. 10, 1660-1670

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