

Lacticaseibacillus rhamnosus CA15

# Your intimate support

The imbalance of the vaginal microbiota is associated with vaginal infections, such as bacterial vaginosis (BV), vulvovaginal candidiasis (VVC), and mixed vaginitis [1-3].

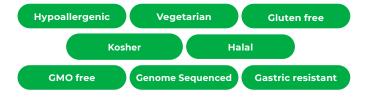
BV affects between 23-29% of women of reproductive age [4,5].It is estimated that more than 75% of women experience at least one episodes of VVC in their lifetime and that repeated episodes are very common [6].

Antibiotics and antifungal drugs are not always effective, since microorganisms responsible for BV and VCC can be resistant to the drugs through biofilm formation or acquisition of genes conferring resistance.

In addition, antibiotics may not be selective against pathogens, thus affecting the endogenous lactobacilli and even causing BV and VVC recurrence [7-9].

CA15 is a scientifically proven probiotic that can treat different forms of vaginal dysbiosis.

CA15 is a safe and effective solution to restore and maintain a balanced vaginal microbiota, helping to reduce vaginal discomfort.







# CultureScience

# How CA15 supports women's health

The probiotic Lacticaseibacillus rhamnosus CA15 (DSM 33960) has been shown to inhibit the adhesion and proliferation of a broad spectrum of pathogens, including fungi (i.e.: Candida spp.) and bacteria.

This is possible thanks to its strong capabilities to produce hydrogen peroxide (H2O2) and large amount of lactic acid, which reduces the vaginal pH to the physiological value of 4.5.

Furthermore, CA15 can inhibit biofilm formation by Candida spp. through displacement and competition for nutrients.

To guarantee CA15 reaches the vaginal tract, this strain has been tested in the laboratory and has shown to survive to the GI tract passage and adheres to intestinal mucus, vaginal (VK2/E6E7), and intestinal (Caco-2) cell lines [10].

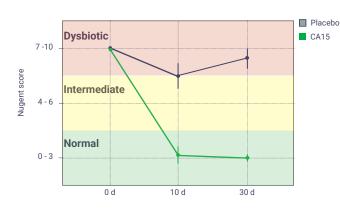
Other benefits of CA15 to women's health include its anti-inflammatory and antioxidant activities. CA15 reduces the pro-inflammatory cytokine IL-6 and and increases the adaptive immunity cytokine IL-2.

## CA15 clinical evidence

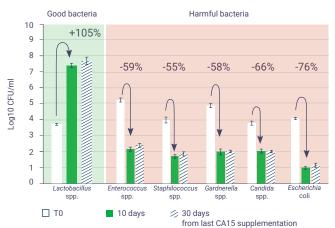
**Women with vaginal** dvsbiosis

Randomized, double blinded,

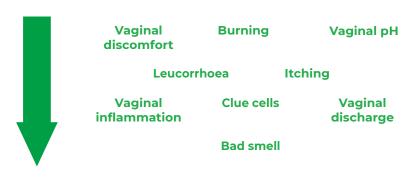
### Restore health vaginal flora



### Contrast harmful bacteria and yeasts



### Improves symptoms



[11]

### CA15 facts

- CA15 is a patented probiotic solution to support women's health
- CA15 supplementation can alleviate signs and symptoms of BV and VVC
- CA15 carries out its probiotic activity through multiple mechanisms of action
- When taken orally, after only 10 days, CA15 restored vaginal health and improved women's quality of life



345(6198):760-5 (2014) | [4] Allsworth JE et al. Obstet Gynecol, 109(1):114-20 (2007). | [5] Peebles K et al. Sex Transm Dis, 46(5):304-11 (2019) | [6] Blostein F et al. Ann Epidemiol, 27(9):575-582.e3 (2017) | [7] Swidsinski A et al. Arch Gynecol Obstet 291(3):605-9 (2015) | [8] Bhattacharya S et al. Antibiotics, 9(6):312 (2020)| [9] Chen R et al. Reprod Health., 19(1):137 (2022) | [10] Pino A et al. Nutrients, 19;14(22):4902 (2022) | [11] Rapisarda AMC et al. Front Surg, 9:1075612 (2023).



