Recurrent urinary tract infections (UTIs) are common in dogs. In women, vaginal colonization with lactic acid-producing bacteria (LAB) has been associated with decreased incidence of recurrent UTIs. LAB lower vaginal pH by producing lactic acid, which may decrease colonization by uropathogenic bacteria. This study investigated whether an oral probiotic supplement containing *Lactobacillus*, *Bifidobacterium*, and *Bacillus* spp would increase vaginal LAB in bitches. Healthy bitches were given a commercially available probiotic supplement q24h for 14 days (n = 23) or 28 days (n = 12). Sterile vaginal samples were obtained for anaerobic culture before treatment and within 24 hours of treatment cessation. In this study, there was no increase in vaginal LAB prevalence following oral probiotic supplementation. LAB were isolated from 7 dogs before the trial and 6 dogs after the trial. One initially LAB-negative dog cultured positive for LAB following probiotic administration; however, the isolated organism was *Enterococcus canintestini*, a normal commensal that was not part of the probiotic supplement. It is possible that the powdered LAB contained in the probiotic did not pass through the canine digestive system. Perhaps *E canintestini*, a LAB more commonly found in the canine vaginal vault, would be more effective at colonizing the vagina after oral administration. Alternatively, a capsule formulation might transit the intestines more effectively. Further study is warranted.

**Source**