Table of Contents

Editorial Board

For Authors

- Authors Declaration
- Instruction to Authors
- Guide for Authors
- Copyright Statement
- Submission

For Reviewers

- Guide for Reviewers
- Reviewers Login

Subscription

Czech J. Food Sci.

Slačanac V., Hardi J., Čuržik D., Pavlović H.,

Lučan M., Vlainić M.: Inhibition of the *in vitro* growth of *Salmonella enteritidis* D by goat and cow milk fermented with probiotic bacteria *Bifidobacterium longum* Bb-46

Czech J. Food Sci., 25 (2007): 351-358

This study was carried out to determine the influence of goat and cow milk fermented by *Bifidobacterium longum* Bb-46 on the pathogenic *Salmonella enteritidis* D strain. The basic hypothesis of this study was that fermented goat milk could possibly have a stronger inhibitory effect on the growth of *Salmonella enteritidis* D than fermented cow milk. The correlation between the inhibitory effect and some fermentation parameters (number of viable cells of *Bifidobacterium longum* Bb-46 and pH of fermented milk) was also analysed. *S enteritidis* D strains

were isolated directly from the faeces of an infant with diagnosed salmonellosis. The inhibitory effects of goat and cow mil fermented with *Bifidobacterium longum* Bb-46 were determined on Salmonella-Shigella agar after 0, 5, 10, 15, 20, and 25 h from the start of fermentation. *Bifidobacterium longum* Bb-46 count and pH values were also measured in samples of goat and cow milk during fermentation. The results obtained have shown a considerably higher inhibitory effect of fermented goat milk on the growth of *Salmonella enteritidis* D as compared to that of fermented cow milk. At the same time, higher acidity and CFU of *Bifidobacterium longum* Bb-46 were noted in fermented goat milk in all the phases of the fermentation process. The inhibitory effects of the fermented goat and cow milk on *Salmonella enteritidis* D growth increased rapidly with the fermentation time. The results indicated