

Interest of probiotic fermented milk with *B. bifidum* associated with *Lb. acidophilus* in the fight antidiarrheal

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Fermented milk with *B. bifidum* associated with *Lb. acidophilus* allows a greater decrease of *E. coli* that when milk is fermented with *B. bifidum* alone or enriched with casein hydrolyzate (bifidigène factor). Indeed, changes in the number of *E. coli* in the feces of mice were given two treatments: preventive treatment (before contamination with *E. coli*) and a therapeutic treatment (after contamination with *E. coli*, showed better results when it comes to treatment preventive and an antagonistic effect significantly higher in the presence of two species together with a rate of decrease in *E. coli* 90%, and the third day of treatment. However, a reduction ratio of 23%, only, was obtained with the hydrolyzate of casein, and no decrease was observed when *B. bifidum* alone. In therapeutic treatment, a percentage decrease of 94.9% was noted after taking the milk fermented with *B. bifidum* in mixed culture. A mortality rate of 50% was noted for having received the batch *E. coli*. Results of Audit of the intestinal flora after dissection mice show the ability of both species to survive many during their gastric transit in order to exert an antagonistic effect towards the implementation of enteropathogenic *E. coli*, responsible for childhood diarrhea. This study confirms the role of milk fermented with *B. bifidum* associated with *Lb. acidophilus* in the fight antidiarrheal.

Biography

Samia Hamma has completed his Doctorat thesis at the age of 35 at the University A Mira of Bejaia in Algeria place of study of post graduation. Teacher researcher at the Laboratory of Applied Microbiology benefits from having two teams in France (food-safety laboratory in Clermont Ferrand) and has participated in several congresses international and publishes an article.

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