

Antimicrobial substances produced by bifidobacterium and its effect on enteropathogenic bacteria

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This study was inspired by problems in the dairy industry and illustrates the importance of antimicrobial *Bifidobacterium* against the germs of alteration. About thirty eight (38) strains of bifidobacteria isolated from different origin, were isolated on MRS medium cyctein, six strains of bifidobacteria belonging to the species (*Bifidobacterium longum*, *B.Brève*, *B. bifidum*) were isolated on MRS cyctein medium. In vitro antagonism test showed that the our strains were able to produce antagonistic substances against various pathogenic microorganisms. we studied the antagonist power, *Bifidobacterium* against enteropathogenes (*Staphylococcus aureus*, *Escherichia coli*, *Pseudomonas aeruginosa*, *Salmonella. Sp*). by the agar diffusion method The activity was completely destroyed by the action of proteolytic enzymes, indicating that the biologically active portion is proteinaceous. These properties suggest that inhibitory substance is considered like substance "Bacteriocin like, these results emphasize the importance of the antimicrobial activity of *Bifidobacterium* in the dairy industry. Additional tests were needed to determine the exact nature of the inhibitors.

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