

THE INFLUENCE OF LACTOBACILLI METABOLIC PRODUCTS ON CHEMOTACTIC ACTIVITY OF BOVINE PERIPHERAL BLOOD POLYMORPHONUCLEAR CELLS *IN VITRO*

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Summary. Functions of immunocompetent cells are affected by digestive microflora microorganisms and their metabolic products. The aim of this work was to investigate the effect of *Lactobacillus plantarum* and *Lactobacillus fermentum* metabolic products on the chemotactic activity of bovine peripheral blood polymorphonuclear (PMN) cells *in vitro*. PMN cells were stimulated with lactobacilli metabolic products and chemotactic activity was measured using a transmigration chamber. The chemotactic activity of PMN cells was evaluated by counting cells having migrated into the medium with chemokine IL-8. It was found that metabolic products of both lactobacilli strains tended to increase chemotactic activity of PMN cells, meanwhile, only *Lactobacillus plantarum* metabolic products were chemoattractive for PMN cells.

Keywords: Chemotaxis, Interleukin 8, lactobacilli, polymorphonuclear cells.