## THE INFLUENCE OF DIFFERENT INDUCTORS ON NITRIC OXIDE PRODUCTION BY BOVINE PERIPHERAL BLOOD MONOCYTES/ MACROPHAGES *in vitro*

Juozas Pieškus, Rimantas Stakauskas

**Summary.** Most cells of the organism can produce nitric oxide (NO) but monocytes/macrophages are most potent producers. Different stimulators are needed for NO induction *in vitro*. The aim of this work was to investigate the influence of different stimuli (IFN $\gamma$ , ConA, PWM, LPS, SEB, SEA) on the production of NO by peripheral blood monocytes/macrophages after 3 and 6 days of incubation *in vitro*. The strongest effect of IFN $\gamma$  was found after 3 days of incubation. Mitogens had different effect on NO production. ConA and PWM had strong effects, meanwhile LPS was a weak NO inducer. Superantigens - *Staphylococcus aureus* enterotoxins A and B (SEA and SEB) were most potent inducers of NO production by monocytes/macrophages *in vitro* especially after 6 days of incubation. The influence of different cytokines on NO production by bovine peripheral blood monocytes/macrophages *in vitro* is discussed.

Keywords: Nitric oxide (NO), IFNy, PWM, LPS, SEB, SEA, monocytes, macrophages, cattle.