

**TUMOR NECROSIS FACTOR ALFA (TNF- α) ANALYSIS
OF VITAMIN E ANTIOXIDANT SUPPLEMENTATION
ON STRESSED RATS (*Rattus norvegicus*)**

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ABSTRACT

Stress oxidative and inflammation has important role in the development of the systemic complication and endothel disfunction. TNF- α as the inflammation cytokine will be increase on tissue injury. The aim of this study was to examine the effect of vitamin E supplementation on OD values of TNF- α in stressed rats. 21 male rats were divided into three groups and received the treatments for 14 days. TNF- α was analyzed by Indirect ELISA. The third group received dose 400 IU vitamin E orally showed decrease in TNF- α level (1,196 ng/ μ l) but there were no significantly between the treatments ($p>0,05$).

Key words : Stress, TNF- α , vitamin E, Indirect ELISA

