EFFECT OF SODIUM NITRITE (NaNO2) TO ERITHROCYTE AND HEMOGLOBIN PROFILE IN WHITE RAT
(Rattus norvegicus)
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SYNTHESIS OF BETAFERTILIN PROTEIN POLYCLONAL ANTIBODY OF HUMAN SPERM MEMBRANE
AS A CANDIDATE FOR IMMUNOCONTRACEPTIVE MATERIAL
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Abstract

Sodium Nitrite (NaNO2) is a food preservative that tend to be misused. Poisoning from Sodium Nitrite that often occurs reduces hemoglobin ability to bind oxygen and the formation reactive oxygen species (ROS) that can changes erythrocyte count and hemoglobin level. This was an experimental laboratories study using Post Test Control Group Design to identify the effect of Sodium Nitrite administration on the profile of erythrocytes, including erythrocytes count, and hemoglobin levels in white rat. Samples comprised 33 male rats (Rattus norvegicus) weight 175 -200 grams, divided into 3 groups, each consisting of 11 rats. Group 1 was the control group, group 2 received Sodium Nitrite of 0.5 mg/200 grams BW rats and group 3 received Sodium Nitrite of 1.5 mg/200 gram BW rats for 30 days. Results of research showed that there was a high difference in means p=0.000 (p<0.05) on erythrocytes count and hemoglobin level. The Sodium Nitrite of 0.5 mg/200gram BW for white rat, which was a safe dose, has already changed erythrocytes count, and Sodium Nitrite of 1.5 mg/200gram BW showed higher changes either in erythrocytes count and hemoglobin level. In conclusion, Sodium Nitrite administration of 0.5 mg/200gram BW/white rat, and 1.5 mg/200gram BW rats can decrease erythrocytes count and hemoglobin level of male white rats.(FMI 2012;48:1-5)

Keyword : Sodium, Nitrite, erythrocyte, hemoglobin, ,

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