Pengaruh vitamin C terhadap jumlah eritrosit dan kadar hemoglobin pada tikus wistar galur Sprague Dawley yang dipajakan sinar ultraviolet

The effect of vitamin C to erythrocyte number and hemoglobin level of rat Sprague dawley exposed by ultraviolet light

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ABSTRACT  Ultraviolet light was unanimously agreed that it has healthy and cavity formation effect that leads to erythrocyte membrane and the formation of free radicals. All these will disrupt erythrocyte number and hemoglobin level. Vitamin C as an anti-oxidant is believed to be able to neutralize and prevent to chain reaction of the radicals. The objective of this study is to know the effect of vitamin C to the erythrocyte number and haemoglobin level of rat Sprague Dawley exposed by ultraviolet light. A simple experimental design or post-test only control group design was used where we took 9 unmated male adult rat of Sprague Dawley, 3 months old, BW 250-300 gram with 3 different treatments. Po without ultraviolet light and vitamin C intake. P1 was exposed ultraviolet light 2 hr/day without vitamin C intake. P2 was exposed ultraviolet light 2 hr/day and fed vitamin C intake 30 mg/BW/day. The result is showed that ultraviolet light can caused catalase activity is decreased significantly, until ROS activity is increased. Increasing of ROS is caused hemoglobin level and erythrocyte number was decreased. The treatment of vitamin C caused catalase activity, hemoglobin level and erythrocyte number was increased.