

EFEK PEMBERIAN VITAMIN E TERHADAP JUMLAH ERYTROSIT DAN AKTIVITAS ENZIM KATALASE TIKUS AKIBAT PAPARAN SINAR ULTRAVIOLET

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ABSTRACT

Ultraviolet (UV) in addition to have a positive impact on health, can also endanger your health. UV negative impact is felt by the people who are exposed to UV light for long periods, such as fishermen and farmers. UV radiation levels are causing skin redness (erythema), whereas high levels can cause bleeding in the skin. This study aims to determine the effect. These are experimental studies using rats as an animal, which conducted the Biochemistry Laboratory of the Faculty of Medicine University of Newcastle from September - December 2008. Population is 20 strains of Wistar rats, age \pm 2 months and weight 200-250 grams. Samples were taken at random (simple random sampling) of the population and divided into two groups: control group (group UV irradiated 6 hours/day for 3 weeks without vitamin E) and the treatment group (group UV irradiated 6 hours/day for 3 weeks with doses of vitamin E 0:45 IU/Kg BB/kali/hari). The results showed in the control group declines erytrosit and catalase enzyme activity due to exposure to UV. Declining sum was much less after vitamin E. The effect vitamin E can inhibit the decrease in the number erytrosit and catalase enzyme activities of rats exposed to ultraviolet light of vitamin E on the number of erytrosit and catalase enzyme activities of rats by exposure to ultraviolet light.

Keywords: *Vitamin E, Erytrosit, Katalase*

DAFTAR PUSTAKA

1. S. Eko, Fujiati, dan P. Roselina, Pengaruh Vitamin C terhadap Jumlah Eritrosit dan Kadar Hemoglobin pada Tikus Wistar Galur *Sprague Dawley* yang dipajan Sinar Ultraviolet, *Jurnal Kedokteran YARSI*, 1: 12, (2004).
2. F. Supari, Radikal Bebas dan Patofisiologi Beberapa Penyakit, *Prosiding Seminar Senyawa Radikal dan Pangan: Reaksi Biomolekular, Dampak terhadap Kesehatan dan Penangkalan*, 1996.
3. L. Jansen, Radikal Bebas pada Eritrosit dan Leukosit. *Cermin Dunia Kedokteran*, (116), (1997).
4. Sri L Wihardi, Pengaruh Radikal Bebas Terhadap Penuaan Kulit dan Penatalaksanaannya. Naskah Lengkap *Simposium Pengaruh Radikal Bebas terhadap Penuaan dalam Rangka Lustrum IX FKUA*, 1955-2000, 7 September 2000.
5. Maralee McVean, Kim Kramer-Stickland, and Daniel C. Liebler, *Oxidants and Antioxidants in Ultraviolet-Induced Non-melanoma Skin Cancer*, 1999.
6. Halliwell B. and Guttridge J.M., *Free Radical in Biology and Medicine*, Clarendone Press, Oxford, 1999.
7. P. Suryohudoyo,. Oksidan, Antioksidan, dan Radikal Bebas. Buku Naskah Lengkap *Simposium Pengaruh Radikal Bebas terhadap Penuaan dalam Rangka Lustrum IX FKUA* 1955 – 2000, 7 September 2000.
8. S. Syahbudin, Peran Radikal Bebas dan Antioksidan pada Proses Penuaan pada Diabetes Melitus. Buku Naskah Lengkap *Simposium Pengaruh Radikal Bebas terhadap Penuaan dalam Rangka Lustrum IX FKUA*, 1955-2000, 7 September 2000.
9. S. Tuminah, Radikal Bebas dan Antioksidan – Kaitannya dengan Nutrisi dan Penyakit Kronis. *Cermin Dunia Kedokteran*, (128), (2000)
10. Lukman H., Efek Antioksidan Vitamin E dan Vitamin C pada Cedera Trauma Kepala Berat. *Medika Kartika Majalah Ilmiah Kedokteran Fakultas Kedokteran Ahmad Yani*, 3(1), (2003).

11. Mayes , Peter, A., *Struktur & Fungsi Vitamin Larut Air dalam Biokimia Harper,*

Edisi 24, Editor Murray K , dkk. EGC Jakarta. 1999.