BLOOD GLUCOSE REDUCTION IN MICE (Mus musculus) RESULTING FROM THE ADMINISTRATION OF PARE (Momordica charantia) FRUIT FLESH JUICE
(Jessica Htetama Jaya, Achmad Basori, Sudarno)

EFFECT OF REPROCESSING CELLULOSE DIALYZER SUBSTITUTED WITH THE PRODUCT P-HYDROGEN PEROXIDE TO CLEARANCE UREA DIALYZER IN CHRONIC HEMODIALYSIS PATIENT
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SOOT PARTICULATE EXPOSURE INCREASES CD54/INTERCELLULAR ADHESION MOLECULE-1 (ICAM-1) EXPRESSION IN CARDIOVASCULAR DISORDER
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RED YEAST RICE (Monascus purpureus) EXTRACT INCREASES INTERLEUKIN-2 LEVEL IN DENGUE INFECTION PATIENTS
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HEATING THERAPY LOWERS BLOOD GLUCOSE LEVEL IN MICE (Mus musculus)
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HEATING THERAPY LOWERS BLOOD GLUCOSE LEVEL IN MICE (Mus musculus)

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Abstract

Diabetes Mellitus is a metabolic disease that has become one of the urgent diseases in Indonesia. Even in epidemiology, it is estimated that by 2030 the prevalence of Diabetes Mellitus (DM) in Indonesia reached 21.3 million people. The objective of this study was to know the heating effectiveness of therapy in lowering blood glucose levels. The research was conducted for one day. With the number of samples of mice (Mus musculus) males weight was 20grams. Mice were divided into four treatment groups, and each group consist of 7 mice. K1 groups of mice were treated temperature of 20°C (room temperature AC); K2 groups of mice were treated 28°C temperature (room temperature); K3 groups of mice were treated 37°C; and K4 groups of mice treated 40°C temperature. The mice has been fasted for 16 hours, then fasting blood sugar is measured. Then the mice was given pure glucose 0,2 gram each mice and 30 minutes later mice were re-measured blood sugar. After that, mice incorporated into the heating therapy box and were treated for 30 minutes. And blood sugar levels after mice were re-measured. Results: From the research, found that the heating therapy provides a significant effect on reducing blood glucose levels. In this experiment, be obtained that at 37°C (group K3) differ significantly with treatment at a temperature of 20°C (group K1) and 28°C (group K2), but not significantly different from treatment at a temperature of 40°C (group 4). However, the results of the analysis, these experiments provide heating to the conclusion that effective therapy performed at 37°C-40°C. But the effective temperature is 37°C. This gives the conclusion that the effective reduction in glucose levels obtained at a temperature not exceeding the normal human body temperature. It is suspected that the body temperature reaches 40°C has almost reached exhaustion and hyperthermia temperature and duration of endurance will decrease. Conclusions: According the results of research it can be concluded that the heating therapy in 37°C-40°C can reduce blood glucose of mice (Mus musculus). It needs to do further research on effective duration and about the side effects of heating therapy. (FMI 2012;48:84-89)

Keyword : heating, therapy, blood, glucose, level, diabetes, mellitus, metabolic, diseases,

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