ABSTRACT

EFFECT OF TEMPEH AGAINST TOTAL AND SPERM MOTILITY OF OBESE MICE (Mus Musculus L.)

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Obesity is excess body fat gain. Obesity is caused by positive energy balance, as a result of an imbalance between energy intake with energy expenditure, so the excess energy stored as fat tissue. Obesity is a multifactorial disease allegedly caused by the interaction between genetic factors and environmental factors. Obesity decrease the number and motility of spermatozoa due to the accumulation of fat that can inhibit spermatogenesis process. Obesity can be prevented by consuming a low glycemic foods are foods Tempe. Tempe is a traditional food that has a high protein content, especially the amino acid arginine which is expected to increase from the number and motility spermatozoa.

The research was carried out as experimental research conducted by completely randomized design (posttest control group design), consists of four groups, namely the negative control group, the positive control group and two treatment groups were given different doses tempeh for 28 days.

Test results based on comparison between the four groups with One-Way Anova showed that the average number and motility of spermatozoa in the four groups after given different treatment. significant with p = 0.000. The results showed that the decline in the number and motility of spermatozoa in the positive control group and there is an increase in the number and motility of spermatozoa in the treatment group one and two.

It was concluded that the provision of tempeh can increase the number and motility of spermatozoa of mice (Mus musculus L) obesity.

Keywords: Obesity, Spematogenesis, Tempeh