

THE EFFECT OF MANGOSTEEN (*Garcinia mangostana* L) PEEL INFUSE  
FOR MOTILITY, VIABILITY AND MEMBRANE INTEGRITY  
OF IN WHITE RATS (*Rattus norvegicus*) SPERMATOZOA

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**ABSTRACT**

The purpose of this research is to know the effect on mangosteen peel infuse for spermatozoa quality including the motility, viability and membrane integrity of spermatozoa. The method used for preparing the mangosteen peel infuse in this research was done by cutting the mangosteen peel in to small pieces then dried in the oven at 45°C, after that make it smoothed using a dry blender and finally boiled it at 90°C for 15 minutes. The giving administration of mangosteen peel infusion in mice was done orally as much as 2 ml appropriate with rat gastric content using 5 ml syringe attached with with canula. The concentration of mangosteen peel was 5 %, 10 % and 15 % and used vitamin C for the positive control also aquabides for the negative control. This research result was analyzed with ANOVA followed by Tukey test ( $p < 0.05$ ). The result showed that there was no significant different level between the negative and positive control group with 5% of mangosteen peel infusion level. There had very significant difference level for 10% and 15% of mangosteen peel infusion level and control group. So, the optimum concentration was 10% and the maximum concentration was 15 % of the mangosteen peel infusion level.

**Key words:** Spermatozoa, mangosteen peel infuse, motility, viability, membrane integrity