ABSTRACT

Coconut oil has been constantly receiving applause for the countless benefits it provides especially in the field of healthcare. Various forms of coconut oil, especially the Virgin Coconut Oil, are rapidly topping the charts and gaining more prestige compared to other forms of coconut oil. In this Randomized Complete Block Design (RCBD) experimental study, the research aimed to determine the effect of Coconut oil, prepared the conventional way, on the weight of adult female Sprague-Dawley (SD) rats (*Rattus norvegicus*). Specifically, it focused on the significant increase or decrease of the weight of the test specimens before and after the administration of various dosages of Home-made Coconut oil. It also took into consideration whether different treatments of the Coconut oil have an effect on the changes in weight.

Rats were divided into four treatment groups and were fed individually with home made coconut oil (T_0) , 0.06 ml (T_1) , 0.13 ml (T_2) , and 0.30 ml (T_3) using the gavage method.

Using paired t-test, the weight of the SD rats before and after the experiment was compared. Significantly, T_0 , T_1 and T_3 groups gained weight as indicated by a finding of 11.49, 3.482 and 9.831 Tratio > 2.069 Tcritical value (df= 0.05 significance level). On the other hand, the difference between treatments was established using the One-way Analysis of Variance (ANOVA) and the findings reflected no significant difference as reflected by Fratio of 0.498874 < 4.066181 Fcritical.

Based on the findings, Home-made Coconut oil has no significant effect on the weight of the test specimens.