

## Effect of different room temperature on body weight gain of laboratory rat( Wistar strain)

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### Summary

The *Guide for the Care and Use of Laboratory Animals* notes that researchers should take maintaining an environment for laboratory animals. Room temperatures have been linked with physiologic changes, body weight and altered estrus cycles, decreased fertility. In this study it is intended to find out the effect of the different kind of room temperatures on growth weight of Wistar strain rats at Department of Medical Research Pyin Oo Lwin Branch. The experimental devices for temperatures which air corn, thermometer, humidity, air cooler and heater in the experimental room and Mating was performed by using 1 male and 3 female in each cage. Over consecutive gestations under three kinds of different room temperatures situation. The body weight gain was measured every three day during the experiment. The following were monitored: weight of birth and weaning on 24 days. According to results, for room temperatures  $16 \pm 3^{\circ}\text{C}$  situation, birth weight gain (mean = 5gm); for room temperatures  $22 \pm 3^{\circ}\text{C}$  situation, birth

weight gain (mean = 5.2gm); for room temperature  $29 \pm 3^{\circ}\text{C}$  situation, birth weight gain (mean = 4.3gm). For room temperatures  $16 \pm 3^{\circ}\text{C}$  situation, weaning weight gain (mean = 20.6gm); for room temperatures  $22 \pm 3^{\circ}\text{C}$  situation, weaning weight gain (mean = 21.9gm); for room temperatures  $29 \pm 3^{\circ}\text{C}$  situation, weaning weight gain (mean = 18.2gm) were recorded. According to data as above, Effect of room temperature  $22 \pm 3^{\circ}\text{C}$  causes to be good growth of the Wistar strain rats in this study. Therefore their suitable room temperature ( $22 \pm 3^{\circ}\text{C}$ ) should be used for laboratory rat and their growing well.