

Comparative study on the growth of weaning laboratory rats (Wistar strain) using different formulated diet feed

Htay Yee¹, Aye Win Oo², Sandar Lin¹, San San Aye¹, Nyunt Nyunt¹, ThetHtar Hlaing¹,
Kyawt Kyawt Khaing², Thida², Win Aung²

Myanmar Health Sciences Research Journal, Vol. 30,N0. 2,2018(Short Report)

Summary

Rattus norvegicus seems to be the first species of mammals to be systematically domesticated for scientific purposes. Nutrition not only affect the well-being of the animal, but also the outcome of experiments. The composition of the diet and feeding practice has a great influence on the health status, performance and metabolism of experimental animals. The intent of standardization of test diets for laboratory animals was to reduce the variation inherent in cereal-based or natural ingredient-based diets and to facilitate in terpretation of results among experiments and laboratories. The outcome of the committee's deliberations was the now well-known AIN-76 rodent diet. Detailed compositional analysis of this diet and the vitamin and mineral mixes can be found in AIN (1977)(*PHILIP G. REEVES & et. al.*). The present study investigated growth of weaning laboratory rats (Wistar strain) using different formulated diet feed. This study also aimed to analyze the nutritive values of different diets. Twenty fifth day old thirty males and twenty females of laboratory rats (Wistar strain) from DMR (mean body weight of male or female = 45-50g) were selected. Divided into five groups.Each group had six males and four females using two separated cages. Five different diets were formulated and fed to the five groups of animals from 25 days old age to 70 day of their age. Measure the body weight gain weekly during the experiment. For the group (1), weight gain (average female 81.45 and male 112.97)g individually; for the group (2), weight gain (average female 98.43and male 147.43)g individually; the group (3), weight gain (average female 97.79and male 115.8)g individually; the group (4), weight gain (average female 104.13and male 105.32)g individually; the group (5), weight gain (average female 97.28and male 102.22)g individually were recorded. According to data as above, diet for group (2) was achieved better growth rate than other four groups. Thus should be used this diet for laboratory rat weaning feed as well as their growing well.