

Effect of different dietary crude protein on gain weight and blood chemistry of Lanyu Minipigs ⁽¹⁾

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Abstract

The purpose of this study was to evaluate the feeding effect on Gottingen miniature pig with USDA feed and increased or decreased 10% nutrient in concentration to feed 30 heads Lanyu Minipigs of average bodyweight at 8 kg. The Minipigs were divide into 3 groups, each with 15 male and 15 female. A total of 5 trial stages that were 0 (starting day) - 2, 3-6, 7-10, 11-12 and 13-16 weeks and fed with 5 kinds of daily feed amount of 240, 300, 340, 380 and 420 g per pig respectively until their average body weight reached 25 kg. The results showed that the fixed daily feeding amount of diets from 240 to 340 g while body weight of the Lanyu Minipigs was between 8 and 16 kg, fed with USDA 1160 feed formula or increased/decreased 10% nutrient concentration of diets did not have a significant difference on their body weight and weight gain. The body weight of Lanyu Minipigs between 16 and 25 kg or between 8 and 25 kg (the whole of the period) had a higher body weight and gain weight fed with diet that increased 10% nutrition concentration of USDA 1160 than fed with diet decreased 10% nutrition concentration of USDA 1160. Yet it did not Showed difference significantly when fed with both of USDA 1160 and increased 10% nutrition concentration of diets. In the blood traits, there were no significant difference among these three kinds of diets, but had a lower concentrations of total cholesterol and triglyceride compared to blood Chemistry of Lanyu Minipigs. Therefore, from the previous results showed that when the Lanyu Minipigs bodyweight between 8 and 16 kg fixed with the daily feeding amount, fed with those of diets prepared by USDA 1160 or by increased/ decreased 10% nutrient concentration of USDA 1160 could apply to feed Lanyu pig, but when considering the cost of feed could apply decreased 10% nutrient concentration of USDA 1160 of diet to feed them. The body weight was between 16 and 25 kg or 8 and 25 kg and fixed with daily feeding amount, fed with the nutrient concentration UDSA 1160 or increase 10% the nutrient concentration USDA 1160 of diets would have a higher bodyweight and gain weight. But considering the cost of feed applying USDA 1160 of diet to feed Lanyu pigs, should match the nutritional requirement for their growth and did not have any impact on blood chemistry of Lanyu Minipigs.

Key words: Lanyu Minipigs, Gain weight, Blood Chemistry, Experimental animal.

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