

# INCLUSION OF DIETARY HORSE RATION FOR GIANT ANTEATER (*MYRMECOPHAGA TRIDACTYLA*) CASE REPORT

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## **Abstract**

The giant anteater (*Myrmecophaga tridactyla*) is a species highly adapted to an insectivore diet in the wild (Nowak, 1999). Due to its particular ecological behavior the maintenance of captive anteater has been a challenge for many institutions (Ward *et al.*, 1995). Little is known about the nutrition requirements of the species, and feeding these animals solely on insects such as termites and ants is not possible due to the quantity required by the animal, making the natural diet impractical in captivity (Stahl *et al.*, 2012). The difficulty of maintaining a well-balanced diet often results in clinical issues making chronic loose stool a very common issue. The animal was housed in the Wild Animals Clinic at the Federal University of Lavras due to ophthalmological problems. During the internation period, the animal was fed a diet formulated using Microsoft Excel software and quantified using 83 kcal DE/kg BW<sup>0.75</sup>/d of maintenance energy and based on general recommendations and termites bromatological analysis (Gallo, 2020). The initial diet consisted of a feline dry ration. The formulated diet consisted of a mixture of feline and horse ration and soil. Dietary management transitioned the diet to reach the final proportion. For five days, it was offered a feline ration only, then a 75:25 cat and horse ration for five days, and finally, a 50:50 proportion was established. In all diets, 36% soil was added. The diet was ground and blended together then mixed with water. Two days after the establishment of the 50:50 ratio diet, outdoor walks started as a way to provide greater well-being for the animal. On the following days, it was observed that the animal lost weight, so the maintenance energy intake was adjusted to 124 kcal DE/kg BW<sup>0.75</sup>/d. During diet transition to the 50:50 ratio it observed that the animal defecated daily and presented a fecal score 5 in the Waltham feces scoring system scale. When the proportion of 50:50 plus soil was achieved the animal established a day interval between defecations and fecal score improved to 4 and 3.5. The initial weight loss could be related to increased energy expenditure due to daily walks, the maintenance energy on the diet was redefined, and the demand was successfully supplied at which point the animals started to gain weight. After the dietary management period, the animal gained weight and then flattered the weight curve, maintaining it at 40 kg. Fecal consistency improved after the inclusion of pellet horse ration and soil in the diet. Horse ration provided higher fiber levels to the diet, and soil incorporated insoluble acid ash. We concluded that soil and a higher fiber level was beneficial to the retention of digesta and better feces condition.

## **Literature cited**

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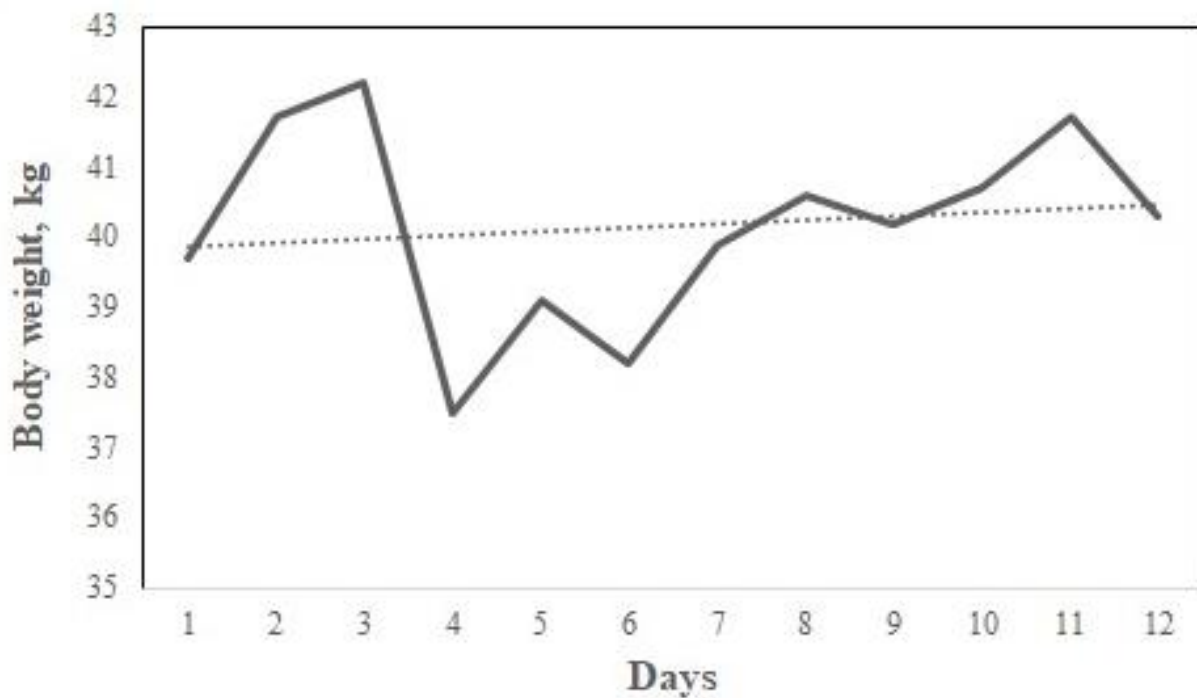
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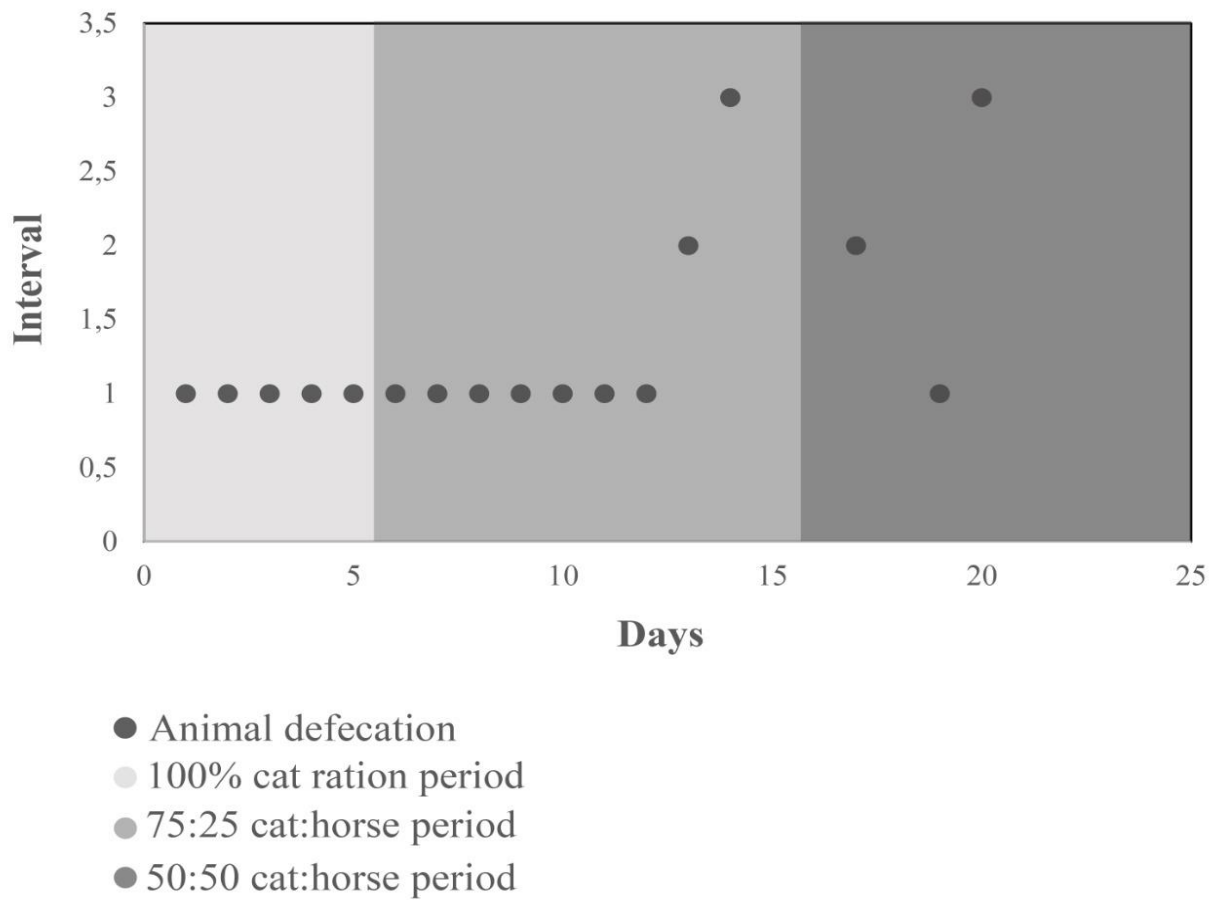
**Table 1:** Composition of the 50:50 relation diet offered to Giant anteater (*Myrmegophaga tridactyla*) at the Wild Animals Clinic at the Federal University of Lavras, 2021.

Nutrients	50:50 ratio Feline:Horse dry ration <sup>1</sup>
Crude protein, %	28
Fat, %	8
Ash, %	12.5
Starch, %	46.4
Crude fiber,%	7.7

<sup>1</sup>Nutrients are on a dry matter basis



**Figure 1.** Weight gain in anteater (*Myrmecophaga tridactyla*) at the Wild Animal Clinic at the Federal University of Lavras, 2021. Outdoor walks started at day 4.



**Figure 2.** Frequency of defecation of the giant anteater (*Myrmecophaga tridactyla*) housed in Wild Animal Clinic. Federal University of Lavras, 2021.