

## STUDY REGARDING THE ACCURACY OF THE CHEMICAL COMPOSITION OF COMMERCIAL DIETS FOR DOGS

PLOTUNA ANA-MARIA, HOTEA IONELA\*, SÎRBU CĂTĂLIN, BADEA CORINA, MEDERLE NARCISA, GHILEAN BIANCA, MORARU FLORINA, TÎRZIU EMIL

University of Life Sciences "King Mihai I" from Timisoara

\*corresponding author: ionelahothea@gmail.com

**Abstract:** The aim of this study was to compare the accuracy of the chemical composition of dry dog food with the nutritional values printed on their labels. To conduct this study, five diets were randomly selected from each type of commercial diets: economy, basic and premium class. The results showed an increased in the dry matter content, compared to the values written on the labels. For all three categories of commercial diets analysed, the crude protein content showed values below those registered on the labels by 1-4%. The fiber content was higher, especially for the economy class and the ether extract showed higher values in 3 premium class diets, varying by 1.18%.

### • Introduction

Considering the increasing number of dogs as pets, more and more owners decide to feed their animals only commercial food, because it is economical and does not require prior preparation.

### • Material and method

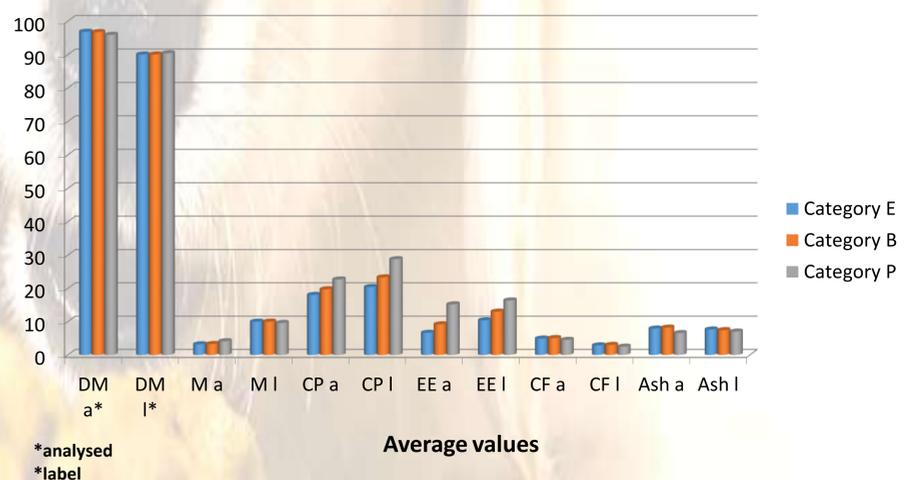
For this study, five diets were randomly selected from each type of commercial diets: economy (E), basic (B) and premium (P) class. In total, there were 15 commercial diets analysed. The selected diets were for adult dogs with moderate physical activity, which represent the most marketed category of dog food.

To determine the proximate chemical composition of the diets, the following parameters were analysed: dry matter (DM), moisture (M), crude protein (CP), ether extract (EE), crude fiber (CF) and ash. Using these data, the parameters were compared to the values registered on the labels by the producers.

### • Results and discussions

The results obtained from the analysis of the chemical composition of the commercial dry food were not in accordance with the data registered on the labels. The dry matter content was higher, with an average value of 96,47% compared to the label value of 90%. The moisture of the analyzed samples was significantly lower than the label value of 10%.

For the crude protein, all the values were below those written on the label by 1-4%. The fiber content was higher for all three categories of commercial diets analyzed. The result also showed increased values for the ether extract in 3 of the 5 premium class diets, with a variation of 1,18%. The ash content showed different values compared to those written on the labels, not having a statistical significance.



The nutritional and energetic value of the commercial diets analysed, were different compared to those registered on the labels.

Knowing the precise chemical composition of commercial diets is very important for preventing various nutritional and metabolic pathologies.



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