

# Effects of Dietary Dried Food Waste Addition to Broiler Diets on Growth Performance and Haematological Parameters

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## Abstract

The increasing world population in combination with the improvement of living standards has caused a raising demand for poultry products. In recent years, high cost for poultry feeding has led to demand for an alternative source of energy for poultry feeds. Food waste can be an alternative feed ingredient. Heating process and dehydration set food waste a valuable feed for monogastric animals. The aim of the present study, was to investigate the effect of adding dried food waste collected from hotels to diets of meat type chickens (broilers). Two hundred (200), male, day-old, broilers were used in total. The duration of the experiment was 42 days. There were ten (10) replicate pens of two dietary treatments. Namely control (C), which was consisted of a basal diet based on corn and soybean and treatment (T) with an inclusion of 15% dried food waste. There were ten 10 broilers per pen and 100 per treatment. Both diets were isocaloric and isonitrogenous. Broilers were weighted at the end of each growing phase, in order to calculate body weight gain, feed intake and feed conversion ratio (FCR). The carcass and breast yield were determined. At the age of 38-41 days, a digestibility trial was conducted to determine energy and nutrient digestibility. Both groups performed well, despite that those fed the treatment diet had lower body weight and feed intake. FCR did not differ between two groups. Haematological and biochemical parameters were similar for the two treatments. Carcass yield did not differ between groups. Minor differences on colour traits and shear force were observed as far as meat quality. No differences in the digestibility of nutrients were observed for two treatments. The results of the present study indicate that dried hotel food waste may be an alternative ingredient to be incorporated to poultry diets and that future studies will determine the optimum inclusion level.

**Keywords:** food waste, broilers, growth performance, meat quality, digestibility

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