COST EFFECTIVE UTILIZATION OF POULTRY BY PRODUCT AND CASSAVA POWDER AS A RAW MATERIAL TO DEVELOP A DRY PET FOOD FOR DOG

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ABSTRACT

The number of pets in the world has increased. At the same time, more attention has been paid to their nutrition and health. Making pet food at home has more cost. Therefore, this research aims to create a low-cost pet food. For this, offal meal, which are waste products from the poultry industry, and cassava were used. The waste products of the poultry meat industry include heads, blood, legs, feathers, and intestines. These ingredients contain many nutritional components such as protein, mineral, vitamin, and fiber. Cassava is growing quickly and abundantly in Sri Lanka. It also has a lot of nutritional components such as fiber, carbohydrate, vitamin and minerals. To develop pet food with the incorporation of poultry offal meal and cassava flour evaluate the nutritive composition and self-life of the prepared product. The proximate composition of the pet food Maxies as feed basis for moisture, crude protein, crude fiber, crude fat, total ash were 6%, 34.42%, 2.30%, 78.18%, 93.90% respectively. The proximate composition of the pet food Pedigree as feed basis for moisture, crude protein, crude fiber, crude fat, total ash was 5%, 20%, 5%, 10%, 94.83% respectively. A sensory evaluation was conducted using a 6-point hedonic scale to assess the appearance, texture, smell, and size of the formulated Maxie's dog food. This research shows that locally sourced poultry by-products and cassava flour can be effectively used to create high-quality, affordable dry dog food. The findings not only meet nutritional and safety standards but also present new opportunities for local production, waste reduction, and economic growth within Sri Lanka's pet food industry.

Key words: Cassava powder, Dog, Maxies, Offal meal, Pet food

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