

## ABSTRAK

### EVALUASI KANDUNGAN TOTAL KALORI PADA *MILK REPLACER* UNTUK ANAK ANJING YANG TERSEDIA SECARA KOMERSIAL

Nurul Zahra Armina  
20/461922/KH/10757

Kalori merupakan energi yang diperlukan oleh tubuh untuk menjalankan fungsi dan aktivitasnya. Kalori berasal dari perpaduan antara karbohidrat, protein, dan lemak. Penelitian ini bertujuan untuk menganalisis kandungan kalori pada *milk replacer* yang tersedia secara komersial serta memberikan informasi yang akurat kepada pemilik anjing dan dokter hewan mengenai nilai gizinya. Sampel *milk replacer* diperoleh dari beberapa *pet shop* di Yogyakarta. Kandungan kalori dianalisis menggunakan uji bom kalorimeter di Laboratorium Pusat Studi Pangan dan Gizi (PSPG) Universitas Gadjah Mada dengan menggunakan sampel yang berasal dari susu sapi dan susu kambing. Hasil penelitian menunjukkan bahwa kandungan kalori dari lima sampel *milk replacer* yang terbuat dari susu sapi memiliki rata-rata 4,65 kcal/g  $\pm$  5,98 kcal/g, dengan rentang 4,55 kcal/g – 4,76 kcal/g, sementara yang berasal dari susu kambing memiliki rata-rata 4,89 kcal/g  $\pm$  6,51 kcal/g, dengan rentang 4,38 kcal/g – 5,63 kcal/g. Hasil *single mean t-test* didapatkan *p-value* sebesar 0,657 ( $>0,05$ ), menunjukkan bahwa tidak ada perbedaan signifikan antara *milk replacer* yang terbuat dari susu sapi dan susu kambing. Berdasarkan hasil penelitian ini, kandungan kalori pada lima sampel *milk replacer* lebih tinggi dibandingkan dengan susu alami induk anjing.

**Kata kunci:** *milk replacer*, kalori, susu sapi, susu kambing, *single mean t-test*

## **ABSTRACT**

### **EVALUATION OF TOTAL CALORIE CONTENT IN COMMERCIALLY AVAILABLE MILK REPLACERS FOR PUPPIES**

**Nurul Zahra Armina**  
**20/461922/KH/10757**

Calories represent the energy required by the body to perform its functions and activities, derived from a combination of carbohydrates, protein, and fat. The purpose of this research was to analyze the calorie content of commercially available milk replacers and provide accurate information to dog owners and veterinarians regarding their nutritional value. Milk replacer samples were obtained by purchasing directly from several pet shops around Yogyakarta. The calorie content was analyzed using a bomb calorimeter test at the Central Laboratory for Food and Nutrition Studies (PSPG), Universitas Gadjah Mada, using samples derived from cow's milk and goat's milk. The results of the research showed that the calorie content of the five milk replacer samples had a mean of  $4.65 \text{ kcal/g} \pm 5.98 \text{ kcal/g}$ , with a range of  $4.55 \text{ kcal/g} - 4.76 \text{ kcal/g}$  for those derived from cow's milk, and a mean of  $4.89 \text{ kcal/g} \pm 6.51 \text{ kcal/g}$ , with a range of  $4.38 \text{ kcal/g} - 5.63 \text{ kcal/g}$  for those derived from goat's milk. The single mean t-test results showed a p-value of 0.657 ( $>0.05$ ), indicating no significant difference between milk replacers made from cow's milk and those made from goat's milk. Based on these findings, the calorie content in the five milk replacer samples was higher compared to natural dog milk.

**Keywords:** milk replacer, calories, cow's milk, goat's milk, single mean t-test