



ABSTRAK

EVALUASI KADAR LEMAK PADA *MILK REPLACER* UNTUK ANAK ANJING YANG TERSEDIA SECARA KOMERSIAL

Octa Rini Puspaningtyas
20/461923/KH/10758

Milk replacer merupakan campuran berbagai jenis bahan pakan yang digunakan sebagai pengganti susu induk. Penelitian ini bertujuan mengevaluasi kadar lemak *milk replacer* anjing yang tersedia secara komersial dengan kebutuhan normal lemak anak anjing. Lima sampel *milk replacer* diambil secara acak kemudian dilakukan pengukuran kadar lemak dengan metode Soxhlet dengan modifikasi Weibull. Kadar lemak dikonversi menjadi satuan g/1000 kcal ME menggunakan faktor Atwater. Data kadar lemak dibandingkan dengan standar RDA (*Recommendation Dietary Allowance*) NRC dan susu alami anjing berdasarkan studi literatur. Hasil penghitungan kadar lemak dianalisis secara statistik menggunakan analisis kuantitatif dengan uji *t-test single mean* untuk membandingkan kadar lemak *milk replacer* dengan susu alami. Berdasarkan uji *t-test single mean*, rata-rata kadar lemak *milk replacer* secara signifikan lebih rendah daripada RDA NRC dan susu alami anjing. Berdasarkan penelitian ini *milk replacer* yang tersedia secara komersial masih belum memenuhi kebutuhan normal lemak anak anjing. Oleh karena itu, formulasi ulang *milk replacer* perlu dilakukan dengan penambahan bahan seperti minyak ikan dan vitamin E untuk meningkatkan kadar lemak.

Kata kunci: *Milk replacer*, lemak, anak anjing



ABSTRACT

EVALUATION OF FAT CONTENT OF COMERCIALLY AVAILABLE MILK REPLACER FOR PUPPIES

Octa Rini Puspaningtyas
20/461923/KH/10758

Milk replacer is a mixture of various types of feed that are used as a substitute for mother's milk. This study aims to evaluate the fat content of commercially available dog milk replacer with normal fat requirements of puppies according to Recommendation Dietary Allowance (RDA) NRC. Five samples of milk replacer were collected, fat content was measured using Soxhlet method with Weibull modification. Fat content was converted into g/1000 kcal ME using the Atwater factor. Fat content was compared with RDA NRC and natural dog milk based on literature study. The data of fat content was subjected to statistical analysis using t-test single mean to determine the significance differences. The result of t-test single mean indicates that fat content of milk replacer is significantly lower than the RDA NRC and the fat content of natural dog milk. Based on this research, commercially available dog milk replacer still does not meet the normal fat requirement for puppies. Therefore, reformulation of milk replacer needs to be done by adding additional ingredients such as fish oil and vitamin E to increase the fat content.

Key words: Milk replacer, fat, puppies