Within the diet of confined animals, corn and soybean meal are generally the most expensive ingredients. Due to the high costs of production, alternatives that can substitute the most expensive food sources of the concentrate, which, consequently, decrease the price of diet of cattle in confinement, such as coproducts, deserve to be studied. Then, the objective of this study was to evaluate the performance of heifers finished with different inclusions of palm kernel cake on the diet. The experiment was conducted in the municipality of Ribeirão do Largo, Bahia. It was used 48 crossbred heifers, which 28 were aneloradas and 20 crossbred girolando, with a mean initial weight of 274 kg and an average age of 24 months. It was used 12 animals per treatment in a randomized block design. Each group was distributed to the treatments, which consisted of four levels of palm kernel cake (0, 10, 20, 30%) inclusion on the total diet. The animals were allocated in a confinement area of 400 m², divided into four proportional bays. Heifers were weighed every 14 days to follow the growth curve. The animal performance was determined by the difference between the initial and final body weights, divided by the number of days of the experimental period. The results were statistically interpreted through analysis of variance and regression, with a probability of error of 0.05. With the use of palm kernel cake in the diet of heifers finished in confinement, a satisfactory microbial efficiency (228 g kg⁻¹) was obtained, guaranteeing nitrogen retention, regardless of the level of inclusion of the cake applied to the evaluated one, cake provided the growing linear effect (P<0.05) for food efficiency, and it was estimated for each 1% of palm kernel cake inclusion, which resulted in an approximate improvement of 0.09 kg kg⁻¹ efficiency. Probably this result was due to the reason bulky:concentrate (30:70, respectively), due to the fact that most of the diet contained concentrate, and that it had good ruminal degradability, which favored the positive synchrony for the digestion of the microbial flora. Certainly, due to the improvement of the food efficiency with the increase of the coproduct levels, no significant difference (P>0.05) was observed for the average daily gain, presenting a mean of 1.017 kg day⁻¹. Therefore, the inclusion up to 30% of palm kernel cake in confinement termination systems, does not affect the performance of heifers.

Keywords: cattle, confinement, coproduct, efficiency, weight