EFFECT OF THE SUPPLEMENTATION OF α–TOCOPHEROL AND SPICES EXTRACTS IN THE CHICKENS FEED IN THE OXIDATIVE STABILITY OF THE PROCESSED MEAT.


The effect of the supplementation of α-tocopherol or herbs and condiments in the chicken feed for the oxidative stability of thigh chicken meat balls were evaluated. Proximate composition, fatty acids, TBARS values and quantity of vitamin E in the meat were analyzed. The results of proximate composition for to moisture, protein and ashes were similar to others literature but, the lipids found in this study were superior. There was no significant difference in the fatty acids during the storage period, however the control and vitamin E treatments presented a greater amount of saturated fatty acids than other treatments 32.00 – 32.55% and 31.81 – 32.62% respectively, while the unsaturated fatty acids were greater in the treatments of herbs (69.34–69.42%), condiments (69.03 – 69.80%) and herbs+condiments (68.87 – 69.42%). The mean TBARS values of chicken meat balls varied from 4.00 – 4.23 µg of malonaldehyde/kg sample by the end of 96 hours of storage. The TBARS values for control and herbs, condiments and herbs+condiments were superior to the value found for the vitamin E treatment. The supplementation of diets with vitamin E, provided a sufficient accumulation of tocopherol in the chicken meat, protecting from the formation of products of the oxidation. This study did not have positive results with the addition of condiment and the mixture of condiment and herbs in the diets, in the oxidative stability of the studied samples.