Brazil is one of the largest producers of chicken meat, however chicken feet often ends up being discarded because of low-value aggregate. An alternative to the use of this product is the calcified protein flour, an animal by-product obtained from the process of grinding and pressing chicken foot properly sanitized to reach satisfactory manufacturing practices in order to obtain a product with higher aggregate value. This study aimed to know the maximum amount of calcified protein flour to be added on chicken hamburger without sensory significant difference for Difference from Control Test. Four formulations of hamburger were prepared, a standard formulation (free calcified protein flour) and three other formulations containing 2, 3 and 4 % of calcified protein flour added, respectively.

In the final product, physical-chemical qualities (protein, fat, moisture and ash), as well as microbiologic analyzes (Coliforms at 45 °C and Salmonella sp) were evaluated. In order to determine the maximum amount of flour to be added without the consumers' perception, a sensory analysis using the Difference from Control Test was carried out. The results were submitted to ANOVA and Dunnett's test at 5 % significance level. There were distinct differences between the standard sample and the samples with 3 % and 4 % of added calcified protein flour, but not between the standard sample and the formulation with 2 % of added calcified protein flour. These results demonstrate that a maximum of 2 % of calcified protein flour can be added without any sensorial perception by the consumer.