Abstract

In order to define consumer acceptance by texture analysis, the variables that affect quality of beef cuts for canning are analyzed by instrumental and sensory methods. Five beef cuts, commonly used by consumers, are selected, characterized and evaluated, so as to subject them to cooking, mincing and canning in tin containers, then, commercial sterilization in two levels of thermal treatment (F0=8 and F0=20), to 121°C and 20 pounds of pressure, with 5 repetitions, is carried out. This procedure is aimed to determinate which of the five cuts offer a better response regarding to texture, costs and yield. The cuts used are: Muscle Romboides or 'Huevo de Solomo', Cutaneous of Trunk or Sobrebarriga, Supraespinoso or Sabaleta, Biceps Femoral or Posta, Dorsal Broad or Great Dorsal, its commercial name is 'Punta de Espaldilla'. All beef cuts are analyzed by expert and non-trained judges in the Sensorial Analysis of Food Laboratory at the University of Antioquia. A Texturometer is used to measure the applied force upon beef cuts. Additionally, costs, yield of cuts, microbiological quality and the test of commercial sterility are also evaluated in tins incubated at 37°C and 55°C, for the defined F0 values. The statistical correlation among the Sensorial and Instrumental Analysis shows that the best cut for mincing and sterilizing corresponds to 'Espaldilla' following a thermal treatment of 16 minutes to 121°C, and 20 pounds of pressure, since it offers a lower cost and a better texture and yield.

Keywords

Conservation, texture, sterilization, beef cuts.