EVALUATION OF MICROBIOLOGICAL QUALITY OF DESALTING OF JERKED BEEF AS A FOOD SAFETY PRACTICE

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Today, jerked beef is widely consumed in Brazil. Desalting of this product is a critical step in the process of preparation of dishes, as it increases its moisture content. Small business restaurants sometimes lack of refrigeration equipment, which increases the risk of foodborne diseases, if desalting is carried out at room temperature. The objective was to compare microbiologically three desalting methods: at room temperature (DRT); refrigerated (DRF) and boiling after room temperature desalting (DTB) at zero, 12 and 24 hours of desalting (n=27). Total viable counts (TVC), Staphylococcus aureus (SA), total (TC) and fecal (FC) coliforms and Salmonella spp were evaluated in triplicate. TVC mean counts (log CFU.g⁻¹) range from 3.47 to 5.82; 3.51 to 3.03 and 3.69 to 2.07 for DRT, DRF and DTB, respectively. Differences (p<0.05) were observed among treatments at 24 h of desalting. SA mean counts at zero hour were about 3 log CFU.g⁻¹, for all treatments. At 24 h of desalting, an increase in SA counts was observed for DRT (5.52 log CFU.g⁻¹), but mean counts (p>0.05) decreased for the others (1.23 and < 2.00 log CFU.g⁻¹ for DRF and DTB, respectively). Also, increases in TC and FC counts were observed only for DRT. Salmonella spp were not detected. SA mean counts for DRT exceed Brazilian microbiological standards (3.70 log CFU.g⁻¹). DTB proved to be a safe method, as it was similar in counts as DRF, and can be used as an alternative desalting method for food services with lack of refrigeration equipment.