
Quantification of Thermotolerant *Campylobacter* spp. in Frozen Chicken Carcasses

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Resumo

Campylobacteriosis, zoonosis caused mainly by thermotolerant *Campylobacter* spp., is one of the foodborne diseases more frequent in the world and chicken meat is the most important vehicle of transmission. In this context, we evaluated comparatively the performance of culture media in quantifying this microbial genus in chicken meat. From this, were collected in retail stores from city of Campinas, SP, 30 samples of whole frozen chicken carcasses, of different commercial brands, under sanitary inspection and in the adequate shelf life. The samples were weighed and superficial cleaned (internal and external) for two minutes, being used Buffered Peptone Water (BPW) as diluent, at a ratio of 4g of sample per mL of diluent. The colony counting was conducted according to ISO 10272-2:2006 methodology, with surface plating in two different culture media, Charcoal Cefoperazone Deoxycholate Modified Agar (mCCDA) as a reference medium and the chromogenic CampyFood Agar (CFA), both in duplicate with 250 μ L inoculum, volume equivalent to 1g of sample. Subsequently the morphology and motility were verified and oxidase production tests performed, growth at 41.5°C in aerobic and 25°C in microaerobic for confirmation of thermotolerant *Campylobacter* spp. The mCCDA detected the presence of the bacteria in four samples (13%) with count ranging from 0,3logCFU/g to 0,9logCFU/g. The CFA has detected the presence in eight samples (27%) with count ranging from

Referência:

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0,04logCFU/g to 2,1logCFU/g. The CFA chromogenic medium was more effective in isolation. The results also showed that these microorganisms survive in frozen chicken carcasses. Due to the importance of this microbial group for global public health, the contamination found in food kept under freezing evidences the need for constant monitoring of these food products.

Palavras-Chave: chicken meat, Campylobacter, culture media, mCCDA, CFA

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