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## Quantitative risk assessment of thermophilic *Campylobacter* related to the consumption of Doner kebab in Tlemcen, Algeria

I Benamar<sup>1</sup>, M J Nauta<sup>2</sup>, O Messaoudi<sup>1</sup>, K Hade<sup>1</sup>, K Medjahdi<sup>1</sup>, A Cherif-Antar, S Bellifa<sup>1</sup> and B Moussa Boudjemaa<sup>1</sup><sup>1</sup>Université de Tlemcen, Algeria<sup>2</sup>Technical University of Denmark, Denmark

**C**ampylobacteriosis is an emerging foodborne illness of high relevance and implication for public health and is frequently linked to the consumption of inadequately prepared poultry. The purpose of this study was to assess the effect of different mitigation strategies on the number of human cases as a first step in Tlemcen city (Algeria) associated with thermophilic *Campylobacter* spp. in Doner kebab. To estimate the human exposure to *Campylobacter* from a Doner kebab meal and the number of human cases associated with this exposure, a mathematical risk model was developed, covering the whole food pathway. The model details the spread and transfer of *Campylobacter* in Doner kebab from slaughter to consumption and the relationship between ingested dose and the probability of developing campylobacteriosis. Information and data for the development of the risk model were obtained from our. Whenever possible, the data were represented by probabilistic distributions rather than single point estimates, as they were to be integrated in a probabilistic estimation of the risk using Monte Carlo simulation. The @RISK software was used to run the simulations. We found that one person per sixty seven (01person/67) can get a campylobacteriosis by eating a Doner kebab meal. The QMRA approach allows for an overall scenario analysis. It was found that intervention during slaughter is probably more efficient to reduce *Campylobacter* health risks than intervention at the consumer stage. Furthermore, important data gaps could be identified.

### Biography

I Benamar is a PhD student from Tlemcen University. He is a skilled Microbiologist keen to prepare his PhD and very motivated to be a specialist in microbiological risk assessment. He is a member in the laboratory of Food and Environment Microbiology (LAMAABE). He is an author in four international publications.

benamar.ibrahim@yahoo.fr

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