Game meat hygiene in focus
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Microbiology, epidemiology, risk analysis and quality assurance

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Game meat is consumed world-wide. In most regions, it contributes only a small part to the overall meat and food supply, but for reasons of animal welfare and sustainability it is sometimes considered an alternative for meat from farmed animals. Despite differences in game species, ante mortem conditions (free-range or fenced; wild or semi-domesticated), hunting or harvesting procedures and further handling of the carcass, there are common requirements as regards meat safety and quality. Whereas meat safety and shelf life have been an issue in game meat for export/import for a long time, primary production, domestic supply and direct supply to the consumer have recently been addressed by legislation and these sectors still present unresolved questions and challenges.

‘Hygiene’ is commonly defined as all measures that promote and preserve health. It is often tacitly assumed that hygiene deals with the management of biological, chemical and physical hazards. However, considering that ‘health’ is ‘a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity’ (WHO, 1948), or, in a more recent definition ‘... a resource for everyday life ...’ and ‘ ... a positive concept emphasizing social and personal resources, as well as physical capacities’ (WHO, 1986), it seems entirely justified to include under ‘hygiene’ also aspects of sensory meat quality, ethics and sustainable production, as these contribute to ‘social well-being’.

Having regard of the above-mentioned considerations, a consortium of food hygienists has established a forum that provides a platform for all questions of game meat hygiene, safety and quality, consequently termed ‘International Research Forum on Game Meat Hygiene’, IRFGMH. A major task of this forum is to promote research in all fields of game meat hygiene, quality and safety, and allow exchange of information in the form of biannual international conferences and by means of electronic communication.

The first conference of the IRFGMH was held at Brno, Czech Republic, in June 2009. The hospitality and professionalism of the local organizers, the University of Veterinary and Pharmaceutical Sciences in Brno, and, in particular, the Central European Institute for Wildlife Ecology, substantially contributed to the success of this conference.

This book includes chapters authored by key contributors and synopses of other contributions by participants. Based on their conference presentations, contributors were invited to update their contributions where necessary and their papers have gone through an extensive review process. The content is grouped into 4 main sections, viz. ‘hygiene and microbiology’, ‘epidemiology’, ‘risk assessment and management’ and ‘muscle biology and meat quality’. The contributions represent research outputs, opinions and experiences of experts from 8 European countries, as well as from South Africa, a major game meat exporter.
This volume is the first of a book series on safety and quality assurance along the game meat chain, following an approach ‘from forest to fork’ and is targeted at scientists in academia and industry, graduate students as well as at governmental officials in veterinary public health and food safety.

Last but not least, we would like to acknowledge the ‘Verein Grünes Kreuz’, Austria for their financial support which made this publication possible.

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The editors
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