Suggestion for a subdivision of processed meat products on the Danish market based on their content of carcinogenic compounds

Carcinogenic effects in humans are ascribed to processed meat by organisations such as International Agency for Research on Cancer, World Cancer Research Fund and American Institute for Cancer Research. However, the term ’processed meat’ covers a heterogeneous group of products whose content of potential hazards differ considerably. To improve estimates of associations between processed meat intake and cancer risk we investigated ways to divide processed meat into subgroups that more precisely reflect its carcinogenic characteristics. We collected ingredient lists and declarations of salt content for >1000 processed meat products on the Danish market and combined the information with knowledge related to processing parameters. Some compounds that could affect the products’ carcinogenic characteristics, alone or in combination, were evaluated and compared for 12 types of processed meat products, and we suggest subgrouping of processed meat with similar level of carcinogenic potential, which could improve the understanding of the cancer risk associated with processed meat intake in scientific human studies.

General information
Publication status: Published
Organisations: National Food Institute, Division of Risk Assessment and Nutrition
Corresponding author: Mejborn, H.
Contributors: Mejborn, H., Hansen, M., Biltoft-Jensen, A. P., Christensen, T., Ygil, K. H., Olesen, P. T.
Pages: 91-99
Publication date: 2019
Peer-reviewed: Yes

Publication information
Journal: Meat Science
Volume: 147
ISSN (Print): 0309-1740
Ratings:
BFI (2019): BFI-level 2
Web of Science (2019): Indexed yes
Original language: English
Keywords: Cancer, Haem iron, Nitrite/nitrate/N-nitriso compounds, PAH, HCA, Epidemiology
Electronic versions:
1_s2.0_S0309174018301633_main.pdf. Embargo ended: 30/09/2019
DOIs: 10.1016/j.meatsci.2018.08.025
Source: FindIt
Source ID: 2438715308
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review