

Identification of meat products by shotgun spectral matching - DTU Orbit (08/11/2017)

Identification of meat products by shotgun spectral matching

A new method, based on shotgun spectral matching of peptide tandem mass spectra, was successfully applied to the identification of different food species. The method was demonstrated to work on raw as well as processed samples from 16 mammalian and 10 bird species by counting spectral matches to spectral libraries in a reference database with one spectral library per species. A phylogenetic tree could also be constructed directly from the spectra. Nearly all samples could be correctly identified at the species level, and 100% at the genus level. The method does not use any genomic information and unlike targeted methods, no prior knowledge of genetic variation within a genus or species is necessary. (c) 2016 Elsevier Ltd. All rights reserved.

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