



DiTECT – Tracking Biological Hazards & Contaminants Across Food Chain within a EU-CHINA project (no.861915)

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In the DiTECT four pilots have been designed i.e. PILOTS; P1- maize (corn and infant foods) P2- poultry; P3 – Cattle and P4 Fish (as food), where selected microbiological hazards were monitored across food chain, using rapid, non-invasive sensors for their detection and monitoring.

To achieve this a database is created, that concerns the entire food chain covering not only the primary production but also the remaining stages of the food chain.

The contents of this database are contamination maps (prevalence, biogeography and metagenomics) of biological and chemical hazards as well as environmental contaminants on selected foods (animal origin and infant foods) and routes at retail level.

A wide range of data was collected as follows (i) Data derived from instruments based on vibrational spectroscopy e.g., FTIR/NIR/ Fluorescence/ RAMAN as well as from UV/VIS (ii) Data from convectional microbiological analyses (iii) Product characteristics/processing, distribution and storage conditions (e.g., pH, aw, atmosphere etc.).

The successful implementation of the above – mentioned database build within DiTECT project is expected to significantly reduce microbiological hazards, through means of early detection before they make their way to the final product.

Moreover, the collaboration between the EU-China food businesses and research partners will result in enhancing consumers' confidence in the safety of food traded between the two regions, throughout the farm-to-fork continuum.

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