New methods of detecting Salmonella in pork meat processing
24 July 2014

Furthermore, a method based on concentration and sequencing of parts of the genome for all microorganisms present in e.g. a water sample was also tested, enabling researchers to find not only the microorganisms they are specifically looking for. This method was tested on B. cereus in water samples and can be used for discovering bacterial contamination in e.g. foodborne outbreaks where the contamination source is unknown.

Provided by Technical University of Denmark

Salmonella

Infections caused by foodborne microorganisms are an increasing public health burden. In a PhD project at the National Food Institute, Technical University of Denmark, new methods of characterising and detecting foodborne illness-causing Salmonella in pork meat processing and in bacteria in water, feed and food samples were studied.

Traditional methods of characterising and detecting bacteria are often slow and time-consuming. Therefore, development of new methods of characterising and detecting illness-causing microorganisms is very important for improving food safety.

Trine Hansen, PhD student at the National Food Institute, has studied new methods of characterising Salmonella in pork meat processing and detecting unknown bacteria in water, feed and food samples.

The research project has given a better understanding of which factors in pork meat processing may contribute to the development of more appropriate processing environments, which can limit the occurrence of Salmonella.