

Inadequately heated pork could contain sarcocysts

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Sarcocysts are protozoans that live as parasites in cells, primarily in muscle meat, of higher animals. Humans could also act as hosts for parasite multiplication. In this case, sarcocystosis may develop a non-notifiable disease that manifests symptoms like nausea, stomach ache and diarrhoea.

The infection chain of the parasites is supported by the contamination of the environment with faeces. After infection humans excrete highly resistant, persistent forms of the parasite, sporocysts, in faeces. They are taken up by an intermediate host and multiply both in muscle meat and in the intestines. Intermediate hosts for the types of parasite of relevance for humans are pigs and cattle.

Several studies on sarcocystosis infection in pigs have shown that these animals, particularly in the case of free-range farming may be highly infected with sarcocysts. Against this backdrop the Federal Institute for Risk Assessment (BfR) has undertaken an assessment of sarcocystosis infection in pigs and the importance of sarcocystosis in humans. The results of the assessment indicate that infected pork can, in principle, constitute a source of infection for humans who consume raw meat and raw sausage products. Case studies on sarcocystosis in humans are, however, rather rare in Germany. In order to prevent infection BfR advises that meat products be sufficiently heated prior to consumption or frozen for at least three days at temperatures of at least minus 20 °C.

In order to interrupt the chain of infection in livestock like pigs, all hygiene measures should be oriented towards preventing the transmission of the sporocysts excreted by humans to pigs. They include the installation of impeccable toilets, the avoidance of feed contamination with faeces or wastewater sludge and compliance with the Sewage Sludge Ordinance.

The full version of this BfR Opinion is available in German on http://www.bfr.bund.de/cm/208/ungenuegend_erhitztes_schweinefleisch_koennte_sarkosporidien_enthalten.pdf