Risk-based meat inspection of fattening pigs without incision

BfR Opinion No. 001/2012 of 14 April 2011

Risk-based meat examination is a new scientific and practical approach to improve the traditional veterinarian meat inspection procedures at the abattoir within the scope of the overall food chain-orientated concept of meat production. The objective of the concept is to ensure the safety of meat as a food along the entire production and distribution chain by introducing suitable measures, such as animal housing hygiene, livestock health monitoring at the farm, hygienic transport and slaughtering conditions etc. With risk-based meat inspection, there is no obligation any more to cut the tonsils and larynx of the animal carcase. This is because the currently significant risks for human health cannot be recognized with the classical anatomical-pathological incision method. The infection or colonization of livestock or contamination of animal carcases with certain zoonotic pathogens relevant to humans, such as Salmonella, Campylobacter and other bacteria, cannot be recognized by incision. Nor can risks caused by contaminants in feeds or residues of veterinary medicinal products identified by cutting certain lymphnodes.

By law the risk-based examination of slaughter pigs is only allowed if the animals were grown up under controlled conditions and in integrated production systems. In the opinion of the Federal Institute for Risk Assessment (BfR), the microbial and serological methods of diagnosis of relevant zoonotic pathogens in livestock herds and in the abattoir cannot be disregarded with in the concept of risk-based meat examination. A number of zoonotic pathogens have been identified as relevant hazards, including in particular Salmonella spp., Mycobacteria, Yersinia, Campylobacter spp., Listeria monocytogenes, Staphylococcus aureus and coagulase-positive Staphylococcus (including MRSA), VTEC, Hepatitis-E Viruses, Ascarids, Echinococcus spp., Cryptosporidium, Taenia solium, Trichinella, Toxoplasma and the possible antibiotic resistance of the pathogens mentioned.

In the opinion of the BfR, it is essential that in addition to visual inspection, fattening pig stocks also be subjected in particular to serological and/or microbial examinations for Salmonella spp., Mycobacteria, Yersinia, Campylobacter spp., Trichinella and Toxoplasma within the scope of the prescribed meat inspection. The remaining micro-organisms and parasites mentioned above are either of less significance or the data situation is at the present time not sufficient for evaluation. Validated methods are currently only available for examinations for Trichinella and Salmonella, however, and more will have to be developed for the other relevant pathogens.

The full version of this BfR Information is available in German on http://vm-webextern7r-master.bfr.bund.de/cm/343/risikobasierte-fleischuntersuchung-ohne-anschnitte-bei-mastschweinen.pdf