Risiken erkennen – Gesundheit schützen

Q fever: transmission of *Coxiella burnetii* through the consumption of foods of animal origin unlikely

BfR Opinion Nr. 018/2010, 15 March 2010

Q fever is a disease that can be transmitted from animals to humans. This zoonotic disease is caused by the bacterium *Coxiella (C.) burnetii*. Signs of the disease may appear as slight flu-like symptoms, but also as high fever, accompanied by strong head and muscle aches. It can also occur as pneumonia and other severe disease processes. In the Netherlands, coinciding with infection in dairy goat herds an increase of Q fever cases in humans was reported.

The causative agent, *Coxiella (C.) burnetii*, was not only found in animals such as goats, sheep and cattle, but also in foods of animal origin such as raw milk, raw milk cheese, butter from raw milk and the meat of infected animals. The risk for humans to contract Q-fever from contaminated food, was estimated in a previously published preliminary opinion from the Federal Institute for Risk Assessment (BfR) of June 17th 2003. Humans are infected with *Coxiella (C.) burnetii* primarily by inhaling dust and droplets through the respiratory tract. This assumption is also confirmed by more recent publications. The risk of contracting a food-borne infection with Q fever is still assessed as low. However, infection from food sources is not completely ruled out and still under discussion.

The causative agent of Q fever is now well detected using molecular biological methods such as PCR from raw milk samples as template. However, these methods do not differentiate between viable and dead pathogens present in the food matrices. For other matrices such as cheese or meat, there is still no routine detection method available.

As preventive measure, BfR generally recommends a heat treatment of milk obtained from infected herds. Raw milk and raw milk products from such holdings should not be given to the consumers, according to the opinion of BfR.

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