

Narrative 15: Bovine Spongiform Encephalopathy

During a part of my postdoc stage at the University of Munich, from 2003 to 2005, I was part of a group financed as a reaction to the outbreak of BSE in Bavaria, Germany. This work provided intense experiences in the contact with farmers who had lost their cattle herds, with politicians who wanted presentable results fast, and with state officials responsible for monitoring feed and animal health who had perceptions about data sharing and procedural transparency.

Our main task was writing an unpublished report for the Bavarian government.

The main findings of our investigations were published as

Clauss et al. (2006) Investigations on potential risk factors associated with BSE cases in Bavaria, Germany. *Vet Rec* 158: 509-513

Clauss, Sauter-Louis (2006) Potential risk factors for BSE (reply to Calavas and others). *Vet Rec* 158: 744

and an important detail finding was that it was in particular the milk replacer of a specific producer that was particularly frequently associated with BSE cases (at the time we produced the result, the manufacturer had already gone bankrupt)

Clauss et al. (2006) Research into causes of BSE propagation. A case study in Bavaria. *Feed Magazine / Kraftfutter* Issue 7-8: 20-24

Early during this period I realized that important data on the contamination of cattle feed was stored at the offices for feed surveillance (and was surprised to learn the officials did not want to author or co-author its publication).

Clauss, Kienzle (2003) Zur Kreuzkontamination von Wiederkäuer-Futtermitteln in Bayern nach dem umfassenden Verfütterungsverbot.

Dt Tierärztl Wschr 110: 506-508

It appeared evident that collating such data for all German federal states could explain the differences in BSE between these federal states. I explained this to the conference of the German feed surveillance officers in Munich in 2004, and the officers refused to provide this information. The German Federal Ministry for Consumer Protection, Food and Agriculture allowed the searching of their archives for this information; adding data for another five states, the expected pattern was confirmed

Clauss et al. (2005) Is there a BSE risk due to cross contamination? *Feed Magazine / Kraftfutter* Issue 4: 26-27

Additional investigations we made led to evidence for a breed predisposition for BSE

Sauter-Louis, **Clauss et al. (2006)** Breed predisposition for BSE: epidemiological evidence in Bavarian cattle. *SAT* 148: 245-250

and, while most likely not causative for the BSE epidemic, unnecessarily high levels of manganese in cattle feed

Clauss et al. (2007) Historical copper and manganese levels in cattle feeds in Bavaria, Germany. *J Nutr Environ Med* 16: 69-74

To me, one of the surprising details in the speculations on transfer mechanisms for BSE was that colostrum production by cows and whole protein uptake from colostrum by their offspring had never been considered, neither before nor after explaining the underlying rationale

Clauss (2003) Do cows fed BSE-infected meat and bone meal in the colostrum-producing stage pass on infectious BSE agent to their calves? *Med Hypotheses* 61: 439-443