

This is a provisional English translation of an excerpt from the original full report.

Risk Assessment Report

Meat and offal of cattle, sheep and goats imported from Germany to Japan (Prions)

Food Safety Commission of Japan (FSCJ)
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ABSTRACT

The FSCJ was requested by the Ministry of Health, Labour and Welfare (MHLW) to conduct a risk assessment of meat and offal of cattle, sheep, and goats imported from Germany. Referring to a list of published scientific literature as well as materials submitted by the MHLW regarding bovine spongiform encephalopathy (BSE), the FSCJ assessed the risk of BSE agents, in meat and offal of cattle, sheep, and goats imported from Germany about border measures such as age restriction of import and definition of Specific Risk Materials (SRMs). Specifically, the following risks were deliberated:

[1] Meat and offal of cattle

The risks in the case that <A> the age restriction shall be changed from the current “all ages restricted” to “no age restricted”; and that the SRM scope shall be changed from the current “all tissues from cattle of all ages (all import banned)” to “tonsils and distal ileum (limited to the portion two meters from the caecum connection) from all cattle, head (excluding tongue, cheek meat, skin and tonsils), spinal cord and vertebral column from cattle over 30 months of age”. Such SRMs must be removed upon import to Japan.

[2] Meat and offal of sheep and goats

The risk in the case that the SRM scope shall be changed from the current “all tissues from sheep and goats of all ages (all import banned)” to “head (including tonsils but excluding tongue, cheek meat and skin) and spinal cord from sheep and goats over 12 months of age; and spleen and distal ileum from all sheep and goats”. Such SRMs must be removed upon import to Japan.

Details of evaluation:

[1] Meat and offal of cattle

The number of cases of classical BSE worldwide has been decreasing, and few cases have been reported in recent years. Consequently, “risks related to the prevalence of BSE prion in living cattle” decreased significantly and contribute relatively little to BSE risk overall. In addition, the World Organisation for Animal Health (WOAH) Terrestrial Animal Health Code does not stipulate any age restriction for trading meat and other products of cattle. Given these, the FSCJ investigated the terms of import of meat and

offal of cattle from Germany, and studied whether it could be said that cases of variant Creutzfeldt-Jakob Disease (vCJD), which is associated with consumption of classical BSE prions through intake of beef and offal (excluding SRMs), could be kept at an extremely low level under the above-mentioned conditions <A> and . The FSCJ comprehensively evaluated whether inspection and risk control measures were appropriately implemented in Germany, including appropriate risk control measures for meat processing such as removal of Specified Risk Material (SRM) or ante-mortem inspection.

The results of the risk assessment are summarized below.

Classical BSE has not been identified in German cattle born since 2002. Accordingly, it is deemed that the risk control measures in Germany are significantly effective to reduce the spread of classical BSE. The FSCJ presumes that the incidence of classical BSE will be quite unlikely as long as those measures are maintained at the current level.

According to the data of prion accumulation in the classical BSE-transmitted cattle and epidemiological information on vCJD cases, only a small amount of abnormal prion protein (PrP^{Sc}) is detected in tissues except SRM. In brief, considering appropriate inspection at slaughter will be able to eliminate cattle with clinical symptoms, it is presumed that the potential intake of PrP^{Sc} through food is extremely low if SRM is removed. Thereby, the FSCJ judged that the appropriate control measures at slaughtering and meat processing are taken in Germany.

Concerning the interspecies barrier between humans and bovines¹ in addition to appropriate risk control measures, the FSCJ considers that the possibility of vCJD occurring in association with the consumption of classical BSE prions would be extremely low under the above two border measures.

Furthermore, the FSCJ conducted a risk assessment in August 2016 regarding atypical BSE countermeasures applied to domestic cattle². It concluded that the possibility of prion disease, including vCJD derived from atypical BSE prion through intake of cattle meat and offal (excluding SRMs), would be extremely low as long as the appropriate risk control measures could be taken, similar to classical BSE disease. There are no new findings affecting this view.

Given the above, the FSCJ concluded that risks to human health would be negligible under the above-mentioned conditions <A> and for import of cattle meat and offal from Germany.

¹ See “Cattle Meat and Offal Imported from the United States of America, Canada and Ireland to Japan,” January 2019
https://www.jstage.jst.go.jp/article/foodsafetyfscj/8/3/8_D-20-00019/_article/-char/en

² See “Consideration of risk variations in Japan derived from proposed revision of the current countermeasures against BSE,” August 2016
<http://www.fsc.go.jp/fsciis/attachedFile/download?retrievalId=kya20151218480&fileId=203>

[2] Meat and offal of sheep and goats

BSE has not been identified in Germany in sheep and goats. In the light of the source and route of BSE transmission, the FSCJ considers that feed regulation, surveillance, and other factors are extremely important risk control measures for sheep and goats in the same way as cattle, and presumes that the possibility of BSE occurring would be extremely low as long as the current measures are maintained.

Considering the findings obtained comprehensively, based on the same concept of “Revised countermeasures against BSE in sheep and goats January 2016” as well as the interspecies barrier between humans and bovines, the FSCJ judged that the possibility of vCJD occurring in association with the consumption of BSE prions would be extremely low, even if permitting import of SRM removed meat and offal of sheep and goats from Germany while changing the SRM scope from the current “all tissues from sheep and goats of all ages (all import banned)” to “head (including tonsils but excluding tongue, cheek meat and skin) and spinal cord from sheep and goats over 12 months of age; and spleen and distal ileum from all sheep and goats.”

Given the above, the FSCJ determined that adverse effects on human health would be negligible under the above SRM conditional import permission.

Note

The FSCJ drew this conclusion of the assessment assuming that current risk control measures are continuously implemented. Therefore, risk management organizations should continuously collect information, relating to the country’s feed regulation, surveillance, inspection at slaughter, and SRM removal regulation.