

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

Risk Assessment Report

Use of cattle-derived meat-and-bone meal (MBM) in chicken and pig fodder

(Prions)

Food Safety Commission of Japan (FSCJ) May 2024

ABSTRACT

The FSCJ conducted a risk assessment regarding the potential resuming of the use of cattle-derived meatand-bone meal ('cattle-derived MBM, etc.,¹') as raw material in fodder intended for chickens and pigs, etc.,² in response to a request by the Ministry of Agriculture, Forestry and Fisheries (MAFF). The assessment was based on findings obtained from research and discussions using a list of published scientific literature and documents submitted by MAFF on risk management measures.

A comprehensive evaluation was conducted on potential risks associated with bovine spongiform encephalopathy ('BSE') based on previous FSCJ assessments and findings from Japanese risk management measures against these risks and their outcomes. The evaluation focused on the safety of cattle-derived MBM, etc., about its use as raw material for fodder. It also focused on the potential risks of human BSE infection by feeding cattle-derived MBM, etc., to horses, pigs, or poultry. Specifically, 1. The risk of human infection with BSE via human consumption of horses, pigs or poultry fed fodder containing cattle-derived MBM, etc., as a result of cross-contamination between fodders intended for cattle, etc.,³ and fodder intended for chickens and pigs, etc.

The result of the assessment is summarized as follows.

The raw materials (cattle-derived MBM, etc.,) currently being considered for use in fodder for said animals do not include fallen stock or specified risk materials (SRM) of cattle, sheep or goats. No new findings have been confirmed that affect the FSCJ's previous evaluations of meat and offal of cattle, nor of meat and offal of sheep and goats. Based on this, the accumulation of BSE prions is considered highly

¹ 'Cattle-derived MBM, etc.,' means processed animal proteins of which are MBM, hydrolyzed protein, steamed bone meal, blood meal and plasma protein derived from cattle, sheep and goats (ruminants)

² 'Fodder intended for chickens and pigs, etc.,' means fodder intended for horses, pigs, chickens and quails (non-ruminants.) At the time of this release, the use of cattle-derived MBM etc. as raw materials for fodder intended for these four species is prohibited under the Act on Safety Assurance and Quality Improvement of Feeds.

³ 'Fodder intended for cattle, etc.,' means fodder intended for cattle, sheep, goats and deer (ruminants)

unlikely in body parts of cattle, sheep and goats currently being considered for use as raw material for fodder, provided that the risk management measures in place against BSE are abided by.

In evaluating the risk of human infection with BSE that may arise from feeding cattle-derived MBM, etc. to horses, pigs, or poultry, the susceptibility and transmissibility of prions in these animals to be potentially fed were assessed. There have been no reported cases of prion diseases among horses that have been kept outdoors to date. Furthermore, reports suggest that the structure of the prion protein in horses may play a role in their resistance to prion diseases. No scientific evidence has suggested that pigs and poultry are infected with and transmit BSE in their natural state. Additionally, results of infection experiments indicate that although pigs are susceptible to BSE, it has been believed that there is no natural infection through oral exposure. No new findings that would affect these established views have been confirmed.

Based on scientific findings on the susceptibility and transmissibility of prions in the aforementioned target animals to be potentially fed cattle-derived MBM, etc., transmission of BSE in horses, pigs, and poultry is unlikely. Factoring the safety of the raw materials also, it was considered that transmission of BSE to humans via these target animals under consideration to be fed cattle-derived MBM, etc., is highly unlikely.

In evaluating the risk of human infection with BSE via human consumption of horses, pigs, or poultry that are to be potentially fed fodder containing cattle-derived MBM, etc., the current preventative measures against cross-contamination risks and other risk management measures underwent inspection, after which it was concluded that the current risk management measures are appropriate.

As a result, it was concluded that as long as the Japanese risk management measures in place against feeding cattle-derived MBM, etc., to cattle, etc., will continue to be abided by, it is unlikely that cattlederived MBM, etc., will be fed to cattle, etc. Additionally, combined with the safety of raw materials, it was considered that the risk of human infection with BSE is highly unlikely.

Accordingly, the FSCJ concluded that even if cattle-derived MBM, etc., were to be used as raw material for fodder intended for chickens and pigs, etc., potential health effects on humans would be negligible.