

P.48.- Studies on the detection and monitoring for the contamination of land animal protein in domestic and imported fish meals as prophylactic for BSE

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There has been a concern about the contamination of causative agents for the Bovine Spongiform Encephalopathy (BSE) from land animal protein sources into fish meal. European Union (EU) and other many countries are monitoring and limiting its use in the animal feed industry and therefore it is becoming an important issue to control the contamination. The objective of the current study was to detect the presence and contamination of land animal proteins in the domestic and imported fish meals by using enzyme linked immunosorbent assay (ELISA) and microscopic test further to be used for monitoring. There was no indication of contamination with ruminant related protein in domestic fish meal. One factory was found to be suspicious with pork related protein contamination. After continuous education and training on the importance of processing together with human health and awareness, there have been no cases for the contamination lately. However it appeared that imported fish meals from some other countries were suspicious for or detected to have a contamination with land animal protein sources. In conclusion, improved technical education and monitoring allow the factory to produce non-contaminated domestic fish meal with a land animal protein in Korea although it was rather commonly detected in the past because of contamination during the collection of ingredients. However our data suggested that a few imported fish meal from some countries were suspicious for or detected to have the contamination with land animal protein sources. Therefore it seems necessary to have continuous monitoring for all imported fish meal and to make an observation list.[]

Keywords

Enzyme-Linked ImmunoSorbent Assay, ELISA, microscopic test, Bovine Spongiform Encephalopathy, BSE, contamination, monitoring