### ADVISORY COMMITTEE ON THE MICROBIOLOGICAL SAFETY OF FOOD

### **DISCUSSION PAPER**

# *Mycobacterium avium* subspecies *paratuberculosis* (MAP) – DRAFT risk assessment in relation to food.

## Issue

The issue of MAP and the food chain has been considered by the Committee on a number of occasions and based on the evidence available at the time, it was agreed that a causative link between MAP and Crohn's disease was inconclusive. The Agency now considers it timely to revisit the issue of MAP and with a particular focus on trying to establish the level of risk via food. The Agency has prepared a draft risk assessment which concludes that, based on current evidence, it has not been possible to establish a level of risk for MAP infection via food and that there is a high degree of uncertainty associated with the assessment. The Committee is invited to review the assessment and indicate whether it is in agreement with the Agency's conclusion.

#### Background

- 1. The Committee has had an interest in MAP for many years. The interest originated from work carried out at Queen's University, Belfast indicating that MAP might be more heat resistant than had previously been thought and that heat resistance might imply that it could survive the commercial pasteurisation of milk.
- 2. As a result of this early work, the committee requested a survey of retail milk. This was carried out by the Agency over an 18 month period and the results were presented to the ACMSF in September 2000. The Committee agreed that results from this survey indicated that MAP could survive pasteurisation and was present in a very small percentage of retail milk samples (2%). However, improved detection methods since this time indicate that levels of contamination have likely been underestimated in the past. MAP has also been detected in other foods including powdered infant formula.
- 3. In 2001, the Committee noted that the risk to human health from MAP had not yet been established, and did not therefore recommend any change in the current advice regarding the consumption of milk, i.e. on the basis of the current evidence there was no need for anyone to change their dietary habits (ACM/552).
- 4. There had been on-going debate about the possible role of MAP as a cause of Crohn's disease. The evidence considered by the ACMSF at that time about the link between MAP and Crohn's disease had been

inconclusive. As it seemed unlikely that this question would be resolved in the short-term, the Committee requested the FSA to bring together stakeholders concerned with milk production to establish how and whether this organism could be removed from milk or the levels reduced. In response, the FSA held a major workshop of stakeholders in May 2001 and produced a strategy for controlling MAP in cows' milk, a draft of the strategy was presented to the Committee before being finalised (ACM/547). The published strategy is available here http://webarchive.nationalarchives.gov.uk/20100513061207/http://www.foo d.gov.uk/multimedia/pdfs/map\_strategy.pdf

5. More recently, the issue of MAP and a causal link with Crohn's disease was discussed at a meeting of the Advisory Committee on Dangerous pathogens (ACDP) in February 2015 and, based on current evidence, a conclusion could not be reached.

# The Committee is asked:

- To comment on the attached draft risk assessment; and
- To advise whether it is in agreement with the Agency's conclusion that a level of risk to human health via food cannot be assigned at present and that there is a high degree of uncertainty associated with the assessment.

Secretariat October 2016