2013-08-20-070 CGN minireviews on mycobacteria: (12) The significance of a negative USDA certified Map ELISA test
To: (04) Mycobacterial diseases; (12) Scientific Information, research and education;

CGN minireviews on mycobacteria as a public health risk. A new series, aimed at stimulating discussion on published literature dealing with the threat to public health posed by mycobacteria. Although some information of global significance has been known for decades, the risk posed by mycobacteria remains underestimated.
Prepared by the Reference Laboratory for Paratuberculosis and Avian Tuberculosis of the World Organization for Animal Health (OIE) and Biomedical Technology, Epidemiology and Food Safety Global Network operating in the Veterinary Research Institute, Brno, Czech Republic.
We believe in the One Health Initiative.
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(12) **The significance of a negative USDA certified Map ELISA test**

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Full text pdf

Abstract
The significance of a negative USDA certified Map ELISA test was assessed in three separate study designs.

Part I: The sera of seven out of nine necropsied cows with documented Johne's disease and whose feces was positive for mycobacterium DNA nested negative using the ParaChek® Map ELISA test system (Prionic, Switzerland).
Part II: Of the sera from 42 cows whose fecal specimens had been characterized by the Trek® Diagnostic System as having a significant amount of Map, 39 specimens tested negative in the ParaChek® test. When serological testing was extended for 14 additional months, 20 of the 21 animals remained sero-negative.
Part III: Comparative serological analysis done on the same serum samples from a dairy herd demonstrated that 42% of the cows test certified as having been Map-free had anti-Map antibodies.

Comment by the Editor:

There is no doubt that mycobacteria and some other bacteria are the source of bacterial triggers. The health risk of MAP, even after pasteurization or boiling, has to be officially accepted. The opinion that mycobacteria are not a risk food factor is now obsolete. Among mycobacteria, MAP plays the most important role. However, no other microorganism, which could be the source of the triggers, is allowed to be a contaminant in baby foods. The significance of a negative MAP ELISA test should be remembered, although it is well known that a positive test does not mean shedding of MAP and a negative test does not exclude shedding in the past, present or in the future. A good and permanent collaboration should be established between the herd owners, meat inspection at slaughterhouses and dairies which purchase milk from the herd. A combination of different diagnostic methods and appropriate interpretation of the results should be used to control paratuberculosis and to protect the consumers. Crohn's disease is not a single human inflammatory or autoimmune disease connected with immunological pathways affected by bacterial triggers. How long will mycobacteria be legally present in foods and water?

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