



334 Research paper

**Reduction of *Mycobacterium avium* ssp. *paratuberculosis* in colostrum: Development and validation of 2 methods, one based**  
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In **Significant Impact Groups:**

Pathogen management \

Species targeted: Dairy;

Age: Young;

**Summary:**

The aim of this study was to develop and validate 2 protocols (for use on-farm and at a central location) for the reduction of *Mycobacterium avium* ssp. *Paratuberculosis* (MAP) in colostrum while preserving beneficial immunoglobulins (IgG). The on-farm protocol was based on curdling of the colostrum, where the IgG remain in the whey and the MAP bacteria are trapped in the curd. The semi-industrial protocol was based on centrifugation, which causes MAP to precipitate, while the IgG remain in the supernatant. The effect of the colostrum treatment on the nutritional value and palatability of the colostrum and the IgG transfer was assessed in calves. The treated colostrum had no negative impact on animal health, IgG uptake in the blood serum, milk, or forage uptake. Two protocols to reduce MAP in colostrum (for use on-farm or at a central location) were developed and both methods preserve the vital IgG.

*334 Research paper - Verheghe - 2017 - Reduction of Mycobacterium avium ssp. paratuberculosis in colostrum\_ Development and validation of 2 methods one based on curdling and one based on centrifugation*

**Where to find the original material:**

<https://www.sciencedirect.com/science/article/pii/S0022030217302436>; <https://doi.org/10.3168/jds.2016-12355>

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