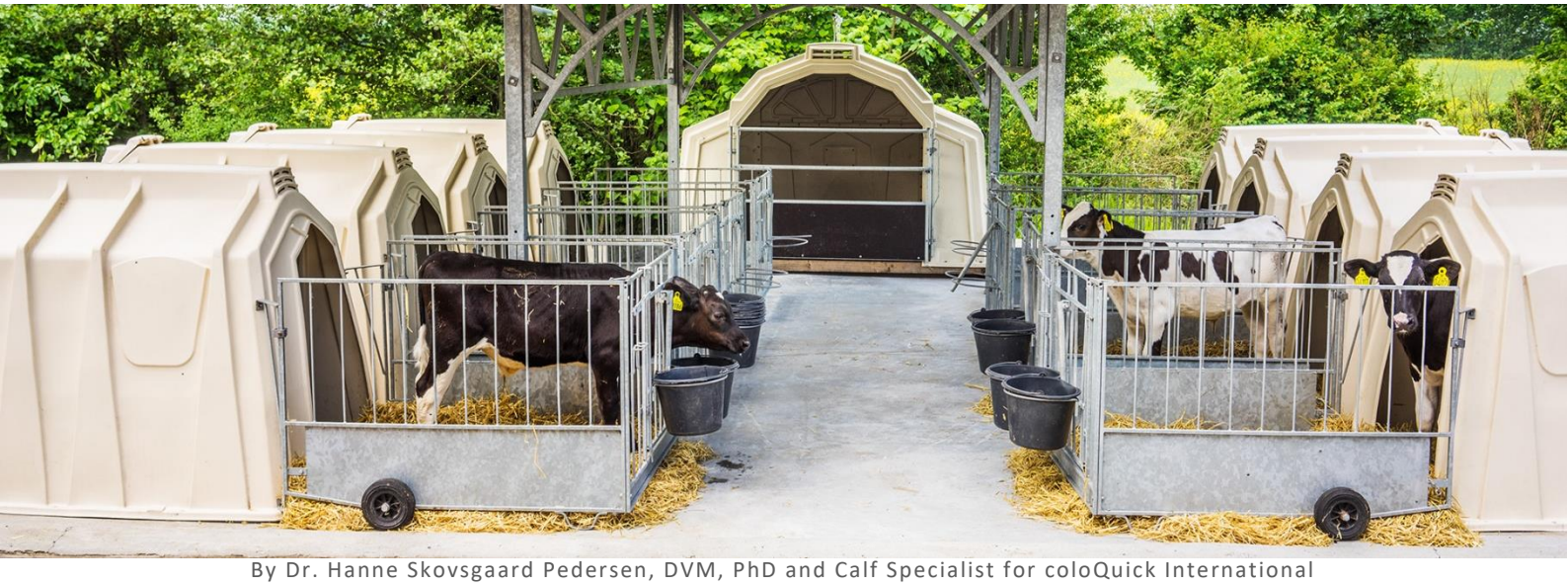


By Dr. Hanne Skovsgaard Pedersen, DVM, PhD and Calf Specialist for coloQuick International

Heat treatment of colostrum:
coloQuick Pasteur as a tool against Mycobacterium avium ssp. paratuberculosis

Facts about the disease

Paratuberculosis or Johne's disease is a contagious and chronic infection in ruminants. It is caused by the bacterium Mycobacterium avium subspecies paratuberculosis (MAP). The main signs of paratuberculosis are diarrhea and wasting. Young calves are most susceptible to infection, while clinical disease is seen in older animals.

Only a minority of the animals in a herd develops clinical signs; most animals either eliminate the infection or become asymptomatic carriers.

Disease transmission

The level of MAP in feces is high (105-108 bacteria/g feces), and fecal-oral transmission from contaminated environments is the most important source of exposure of young calves to MAP (Figure, point 1-4) [1, 2].

In contrast, the level of MAP in milk is low (1-100 bacteria/ml) and feeding colostrum and milk represents only a negligible risk of infection (Figure, point 7-8) [2-5].

Heat treatment of colostrum using coloQuick Pasteur

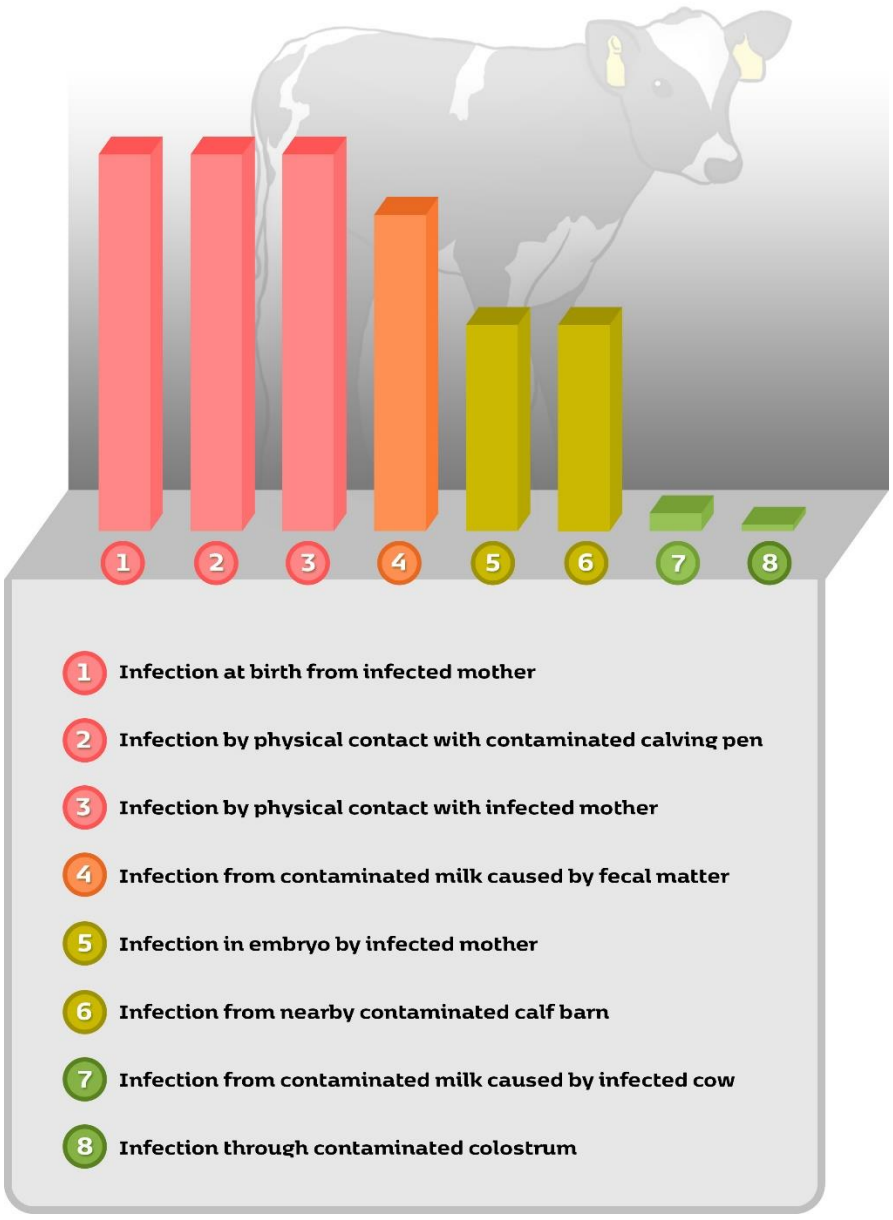
ColoQuick Pasteur has a precise temperature setting and regulation. This feature, in combination with a gentle stirring of the colostrum, ensures that the whole batch of colostrum reaches the temperature and time needed to eliminate MAP.

Conclusion

coloQuick International A/S guarantees that heat-treatment of colostrum using coloQuick Pasteur according to the instructions, prevents paratuberculosis in young calves caused by colostrum feeding.

Implementation of colostrum heat treatment using coloQuick Pasteur, is an important part of the eradication strategy for paratuberculosis in a herd.

Paratuberculosis (MAP) risk factors



coloQuick International was established in 2015 and is an innovative business, focusing on dairy calf nutrition. We provide natural methods to increase productivity and reduction of antibiotics through focusing on the first hour of the calf's life.

Hanne Skovsgaard Pedersen is a veterinarian and holds a PhD. She has experience from clinical practice and 10 years as a scientist. Her focus is on research and development of documentation about calf biology

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