PRESERVING COLOSTRUM

FENCOVIS®
ADVANCING PROTECTION AGAINST CALF SCOUR

Background: Preserving and storing colostrum ensures availability of good quality colostrum in times of short supply.

Colostrum should be cooled and preserved as soon as possible after harvesting – bacteria will multiply and antibody concentration will decline if left at room temperature. Hygiene is critical; bacteria interfere with colostrum antibody absorption, risking failure of passive transfer. Bacteria can also cause disease directly.

Colostrum may be pasteurised before preserving. Pasteurisation of colostrum (60°C for 30-60 mins) can reduce (but not eliminate) bacterial contamination, however it will reduce the antibody concentration slightly. Therefore, it is important to ensure your colostrum quality is good.

METHOD	HOW	WHY
REFRIGERATION	• At 4°C - monitor fridge temperature using a fridge thermometer. • Store in 2L flat containers • Clean up any spills promptly • Store for 24-48 hrs	• Bacterial growth is slowed at low temperatures • Storage in small volumes in flat containers facilitates rapid cooling and defrosting • Microwaving or overheating damages antibodies
FREEZING	• At -20°C • Store in 2L flat containers • Store up to one year • Defrost in warm water bath, no hotter than 50°C • Do not microwave	
CHEMICAL (E.G. POTASSIUM SORBATE)[2]	• Potassium Sorbate can be added to colostrum at 0.5% wt/vol • Mix accurately • Use in conjunction with refrigeration • Store for 2-5 days	• Useful for extending the life of refrigerated colostrum • Potassium sorbate overdose may cause toxicity in calves

Reference:
1. Hyde, R.M., et al, 2020. Quantitative Analysis of Colostrum Bacteriology on British Dairy Farms. Frontiers in Veterinary Science, 7 (December), 1–12.
2. Stewart, S. et al., 2005. Preventing bacterial contamination and proliferation during the harvest, storage, and feeding of fresh bovine colostrum. Journal of Dairy Science, 88 (7), 2571–2578.

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