



Overview/description

A clinical refresher on fluid therapy for scouring calves

Neonatal calf diarrhea (i.e., scours) is one of the predominant causes of calfhood disease, death, and reduced growth. While various pathogens may cause diarrhea, clinical symptoms and case fatality are largely associated with the ensuing dehydration rather than the diarrhea itself. As such, fluid therapy is the most important aspect of treatment, and the appropriate correction of dehydration and acid-base imbalances is critical for clinical success in scours cases. During this webcast, **Dr. Claire Windeyer** will refresh some principles of fluid therapy, including reviewing practical tools for in-clinic or on-farm rehydration of calves.

Speaker's bio and credentials



Claire Windeyer, DVM, DVSc, BSc

Dr. Claire Windeyer is an associate professor at the University of Calgary's Faculty of Veterinary Medicine, where she teaches epidemiology, health management, and bovine medicine. Her research interests include pre-weaning calf health and welfare, producer perceptions and decision-making, and knowledge mobilization. She completed her BSc, DVM, and DVSc at the University of Guelph. Dr. Windeyer was raised in Nova Scotia and lives on a small farm near Dogpound, Alberta.



Questionnaire

- 1. Approximately what percentage of Canadian dairy calves are affected by neonatal calf diarrhea (i.e., scours)?**
 - 3%
 - 10%
 - 20%
 - 50%
- 2. Beef calves that survive neonatal calf diarrhea weigh on average how much less at weaning than healthy calves?**
 - 2 lbs
 - 5 lbs
 - 12 lbs
 - 24 lbs
- 3. How dehydrated is a calf with a skin tent of <1 sec?**
 - 0%
 - <5%
 - 6%-8%
 - >8%
- 4. What level of eyeball recession indicates a calf requires IV fluid therapy?**
 - >4 mm
 - >6 mm
 - >8 mm
 - >12 mm
- 5. Calves over 8 days of age usually have a larger base deficit compared to a younger calf with the same clinical signs.**
 - True
 - False
- 6. Calves being fed oral electrolyte solutions should not be fed milk.**
 - True
 - False



7. Which of the following formulas is used to calculate the amount of IV fluids needed to replace fluids that has been lost?

- 4–5 mL/kg/min
- 50–100 mL/kg/day
- Body weight x base deficit x 0.6
- Body weight x % dehydration

8. Which type of IV fluid should be avoided in calves showing signs of respiratory compromise?

- Lactated Ringer's
- Isotonic saline
- Hypertonic bicarbonate
- Hypertonic saline

9. How much baking soda is added to 1 L of sterile saline to make isotonic sodium bicarbonate solution?

- 13 g
- 23 g
- 53 g
- 130 g

10. What is the estimated base deficit of a <8-day old scouring calf who cannot stand?

- 5 mEq/L
- 10 mEq/L
- 15 mEq/L
- 20 mEq/L



COMMUNIVET™

PERSONAL INFORMATION:

First name:

Last name:

Type:

(Veterinarian, Technician)

Licence number:

Province where you practise:

Email:



COMMUNIVET™

CERTIFICATE OF COMPLETION

Educational webcast

A clinical refresher on fluid therapy for scouring calves

Presented by

Claire Windeyer, DVM, DVSc, BSc

This document confirms that

Dr. Lorem Ipsum

has viewed the above-mentioned webcast and has answered and submitted the questionnaire meant to evaluate the understanding of the content.

Date:

Province of licensure:

Licence number:

CE credit (s) earned: 1