

**RUMEN CONTENT COLLECTION FROM FISTULATED COW****1. PURPOSE**

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To describe the procedure for collecting rumen contents from a fistulated cow.

**2. RESPONSIBILITY**

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Trained and Qualified staff

**3. MATERIALS**

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- 3.1 Shoulder-length breeding gloves
- 3.2 Eye protection (e.g., safety glasses, visor)
- 3.3 Nitrile or latex gloves
- 3.4 Coveralls or lab coat
- 3.5 60cc syringe or small plastic cup
- 3.6 Paper towel
- 3.7 Pail with warm water and antimicrobial soap (e.g., Endure 400®)

**4. PROCEDURE**

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- 4.1 Remove any jewelry or items, which may fall into the rumen during collection.
- 4.2 Don latex gloves, coveralls/ lab coat and eye protection (e.g. safety glasses, visor).
- 4.3 Fill a bucket with antimicrobial soap (e.g. Endure 400®)
- 4.4 Restrain the cow:
  - 4.4.1 Box stall: restrain cow with a halter.
  - 4.4.2 Tie stall: ensure trainers are unplugged.
- 4.5 Gently unplug the cannula by pushing the plug inside the rumen and then pulling it out.
- 4.6 Place plug in the pail.
- 4.7 Don shoulder-length breeding glove on the arm reaching inside the rumen.
- 4.8 Collect the necessary contents
  - 4.8.1 Fluid content: Collect using a 60cc syringe or small plastic cup.
  - 4.8.2 Solid content: Collect with shoulder-length gloves.
- 4.9 Ensure not to leave any foreign objects in the rumen (e.g.,, gloves, paper towels, extraction equipment, etc.). Insert the plug back into the cannula, ensuring correct placement behind the outer flap Note: If incorrectly placed, the plug may leak or may fall into the rumen or onto the floor.
- 4.10 Using the soapy water and paper towel, wash, then dry the exterior of the cannula, and the side of the cow if she has been soiled.
- 4.11 Remove any debris from beneath the outer flap of the cannula.
- 4.12 Report to a technician any blood or signs of infection present around the parameter of the fistula.
- 4.13 Remove any soiled bedding from the stall.
- 4.14 Plug in the trainers if the contents are collected in a tie stall

## 5. REFERENCES

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E.J. DePeters and L.W. George. (21 January 2015). *Collection of rumen fluid*. Retrieved from <https://www.progressivedairy.com/topics/herd-health/collection-of-rumen-fluid>

### Document Status and Revision History

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