

## Tube Feeding Colostrum: 4 Rules

Our goals for colostrum feeding are:

- (1) Use clean wholesome colostrum;
- (2) Use colostrum high in antibodies;
- (3) Feed it as soon after birth as possible; and,
- (4) Feed four quarts within the first six hours.

But, some calves won't suckle at all. Others will only nurse just small amounts from a bottle. So, we end up using an esophageal tube feeder.

### Remember these four tube feeding rules.

**First**, only use a CLEAN feeder. Tube feeders should always be washed completely after each use.

- After using remember to rinse with lukewarm water. Rinsing with very hot water only ensures that milk proteins will stick to the inside. These proteins form an excellent growth layer for bacteria. Not good!
- Then scrub with a brush in hot soapy water with some bleach added to it. Get a pulsator or inflation brush with a small end that will fit into the tube to clean it after each use.
- An acid rinse in warm water will extend the time before bacteria being to grow again.
- Be sure to hang the parts up so they will dry completely.
- If the tube feeder is used frequently, consider replacing it regularly to prevent milk solids buildup on the inside surfaces.

If there is any doubt about cleanliness, use a hot water + bleach sanitizing rinse just before each use. Using household bleach, add about one fluid ounce or thirty ml of bleach to a water-filled two-quart tube feeder. The longer the rinse is allowed to remain in the tube feeder the higher the bacteria kill rate. Use the feeder immediately after sanitizing.

**Second**, feed body-temperature colostrum.

- We often tube feed after the calf has failed to nurse. That means the colostrum probably has cooled a lot. Warm it as needed to bring the temperature back up to 102-105 degrees before tubing.

- Placing the filled feeder in a ten-quart pail of warm water before tubing the calf will maintain a constant temperature. This is especially important in cold barns or outdoor conditions less than 50 degrees.

**Third**, always keep liquid out of the tube while it is being inserted into the throat (esophagus).

- Remember that the openings of the throat and windpipe are right next to each other in the back of the mouth. Keeping liquid out of the tube prevents accidental release of colostrum in the back of the mouth that could run into the windpipe (trachea).

**Fourth**, always allow all liquid to drain from the tube before removing it from the esophagus.

- Small amounts of colostrum running from the tube as it is pulled out can easily spill into the trachea. Even tiny amounts of colostrum in the trachea cause persistent irritation and can cause pneumonia.

For additional resources on tube feeding see:

[www.calfnotes.com](http://www.calfnotes.com), click on “All Calf Notes in Order” and scroll down to Calf Note #83  
Using an esophageal feeder to administer colostrum