

Getting the Biggest Bang for Your Calf Recommendations!

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Getting the Biggest Bang for Your Calf Recommendations!

Four-State Dairy Nutrition and Management Conference
 June 13 & 14, 2018

Adding Value to Product/Service

- Compare performance to standards – national and/or farm-specific
- **Identify areas of risk for low performance – (1) calving area, (2) colostrum management, (3) housing environment, (4) nutrition**

[Calf Risk Assessment Checklist – click [HERE](#) or go to this URL <http://atticacows.com/library/newsletters/RiskAssessPrewanedCalvesChecklistR1899.pdf>]

- Suggest practical alternatives and solutions

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Calving Area This is Where it Starts NO MANURE MEALS!!!



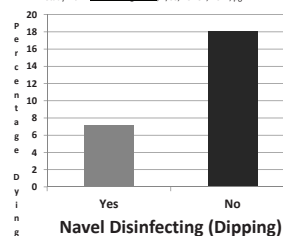
Compare performance to standards – national and/or farm-specific

- **I. Mortality** Prewaned target rates is **less than 5%**
- **II. Morbidity**
- **Scours** preweaned target treatment rate **less than 25%**
- **Pneumonia** preweaned target treatment rate **less than 10 %**
- **III. Growth rate** double weight by 56 days

Next Step: Stop Navel Infections

Disinfecting Calf Navels: Mortality Rates

Source: Table 2. Effect of disinfecting vs. not disinfecting navels on calf mortality and health. University of Wisconsin, Calf Survival Study. As in *Feed Management* 2/00, Vol. 51, No. 2, pg. 22.



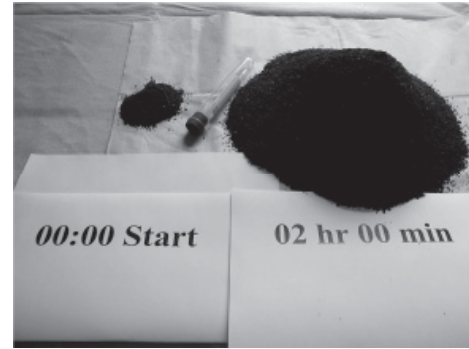
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The Problem: Coliform bacteria in colostrum double every 20 minutes at cow's 102F

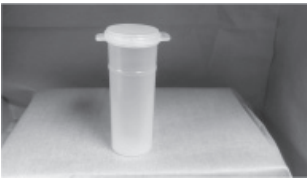


Feed Clean Colostrum

See www.calfacts.com, "Bacteria Quality Control: Collecting colostrum samples."

60cc Vial [\$.25]– Sampling Protocol
@www.calfacts.com

Pack of 5 Sample Vials + Sampling Protocol [\$1.50]



Feed Clean Colostrum

Milk/Feed or Chill to 60F within 30 minutes

Ice bath for chilling colostrum

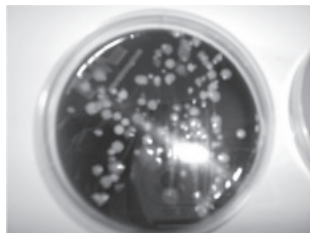


Ice in colostrum to chill



Feed Clean Colostrum

- 45 percent samples had more than 100,000 cfu/ml bacteria.
- Culturing is the only way to monitor this.
- Vet Lab will speciate and quantify (NOT a milk plant)



• Morrill, K.M. "Nationwide evaluation of quality and composition of colostrum on dairy farms in US" JDS 95:3997-4005 July 2012

• See www.calfacts.com, "Bacteria Quality Control: Collecting colostrum samples."

Feed Clean Colostrum Use an Effective Cleaning Protocol

- 1. Rinse with warm water.
- 2. Wash with hot chlorinated detergent solution by BRUSHING all surfaces.
- 3. Rinse with warm acid solution
- 4. Dry.

Source: click [HERE](#) or use this URL

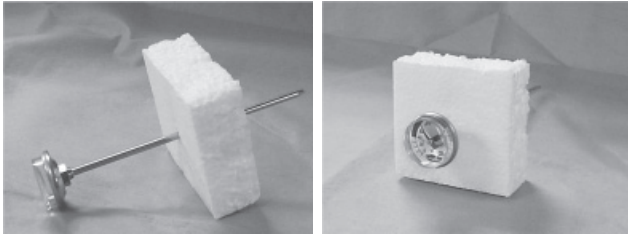
<http://atticacows.com/library/newsletters/WashMilkContProtocolR1815.pdf>

Feed Clean Colostrum

Instant Read Pocket Thermometer <\$6

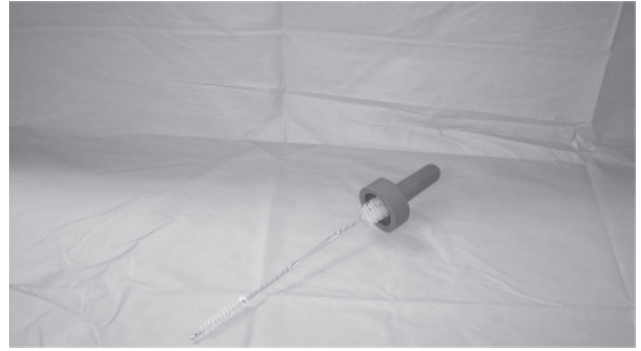
Monitor wash water temp.

Just read the dial – wash water always above 120F



Works like a charm.

@\$3



Right brush for cleaning the inside of this bottle. @\$18-19



Error-Free Bottle Feeding of Colostrum

- **Starting clean by using good sanitation practices** ["Washing Milk Containers Checklist" www.calffacts.com]
- **Feeding it calf body temperature (103F)** [Beware of warm too long > bacteria counts]
- **Maintaining low stress conditions** [Find or make a corner, reward patience]
- **Monitoring drinking** [NO coughing and/or choking, always provide alternative nipple sizes]

It goes in both ends for a clean tube feeder @\$3



Error-Free Tube Feeding of Colostrum

["Colostrum: 4 Rules for Tube Feeding" at www.calffacts.com]

- **Starting clean by using good sanitation practices** ["Washing Milk Containers Checklist" www.calffacts.com]
- **Feeding it warm** [Beware of warm too long > bacteria counts]
- **Passing tube properly** [no colostrum in tube as it goes in and comes out, always feel for ball in esophagus]
- **Positioning her body correctly** [Always upright]
- **Monitoring rate of flow** [NO coughing and/or choking, limiting rate of flow to prevent back flow in esophagus]

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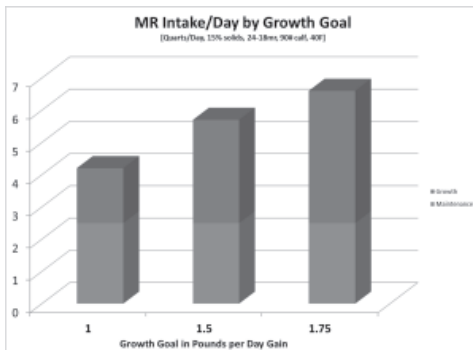
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Feeding More Milk without Scours

- **Feed plenty of clean, high antibody colostrum ASAP after birth.**
- **Check for successful passive transfer rates.**
- **Feed climate-appropriate rates of milk to double birth weight in 60 days.**
- See www.calffacts.com, “Feed More Milk without Scours” for a 10-point checklist and a list of 5 key skills needed for successful intensive feeding.

Dry Matter Intake Drives Growth

Goal = Double Weight in 2 months



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- Website is www.calffacts.com.
- Blog, Google the title, “Calves with Sam”

But, Every time I Feed More Milk My Calves Have Scours!!!!!!!!!!!!!!



Feed More Milk without Scours

Cold weather arrives. You decide to feed more milk/milk replacer. Soon after making the change your treatable scours rate goes up too much to be acceptable.

What are the differences among farms that have this problem and those that feed milk/milk replacer at higher volumes without diarrhea issues among young calves?

The most common differences

Low Scours Rate	High Scours Rate
1. Milks fresh cows as soon as possible after calving, nearly all of them within 6 hours post-calving.	1. Milks fresh cows next regularly scheduled milking.
2. Checks colostrum quality and uses highest quality for first feeding.	2. Does not check colostrum quality.
3. Feeds colostrum as soon as possible after birth, always within first 4 hours.	3. Feeds colostrum at next regular calf feeding time.
4. Feed 3.5-4 quarts colostrum (large breeds)	4. Feeds 1.5-2 quarts of colostrum.
5. Checks colostrum cleanliness with regular culturing.	5. Does not check colostrum for bacteria content.
6. Checks for successful passive transfer of immunity on a regular basis.	6. Checks for successful passive transfer of immunity only if there is a "problem."
7. Cleans colostrum and milk handling equipment after every use following an accepted cleaning protocol that is written and posted.	7. Cleans colostrum and milk handling equipment as convenient with no regular protocol.
8. Checks milk or milk replacer cleanliness with regular culturing.	8. Does not check milk or milk replacer for bacteria content.
9. Feeds preweaned calves enough milk or milk replacer to support at least 1 pound a day gain all seasons of the year.	9. Feeds preweaned calves milk or milk replacer at a rate such that calves do not gain weight some seasons of the year.
10. Keeps calf housing clean.	10. Houses calves in a high bacteria environment.

How Realistic is it to try Feeding at a Higher Volume?

Following all the practices in the left-hand column above does not guarantee that none of your calves will have scours. In contrast, the chances for scours do go up as your practices look more and more like the ones in the right-hand column.

Feeding calves is always like walking a tight-rope. You are trying to maintain a balance. As you increase milk or milk replacer feeding volumes the chances of losing your balance go up. That is, the calves have diarrhea. This requires better management skills.

Key Skills:

- Be able to feed different volumes of milk to calves – not every calf receives the same amount. While there are a few exceptions most calf feeding programs that feed more than the traditional 2 quarts twice daily increase volume as calves grow. Lots of folks mark individual or groups of pens to receive a specific amount per feeding.
- Be able to feed consistent volumes of milk. This means delivering each feeding within 1 cup of the intended volume. For example, when feeding 3 quarts at 1 feeding the actual amount delivered does not vary more than 2.75 to 3.25 quarts.
- Be able to deliver milk replacer mixed at the same concentration at every feeding. A significant step in achieving this consistency is having an accurate set of scales that are used all the time to measure milk replacer powder.
- Be able to deliver milk or milk replacer at the same temperature at every feeding. My goal is to achieve delivery temperatures in the range of 100-105 F. In cold weather conditions this may mean delivering liquid feeds in multiple batches.
- Be able to observe and diagnose scours in calves. Prompt diagnosis and treatment is always important. Equally important is watching a group of calves the first few days after their ration has been bumped up in volume.

Many folks have observed that it is a good practice to temporarily drop back volume fed for a few days when a calf scours after a ration increase. My personal experience suggests that at least 1 out of 20 calves will experience what is often called “nutritional” scouring even when volume increases are as small as 0.5 quart per feeding.

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For Calves with Sam blog go to dairycalfcare.blogspot.com
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