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