

Basics for Feeding More than Four Litres of Milk Replacer/Milk a Day

- **Newborn management**
- **Water**
- **Big calf, small calf**
- **Say something positive about feeding more**

It is difficult to go to any meeting of calf rearers these days without hearing conversation about “accelerated growth” or “intensive feeding programs.” These calf rearers are talking about feeding milk or milk replacer at rates higher than 100g/litre for 4 litres per day. But, we hear too little about the basic conditions that need to be in place before feeding for faster growth.

Newborn Management

Calves born in dirty conditions or left too long on a dam that has manure on her belly and flanks scour consistently regardless of their antibody (IgG) level. These calves are not good candidates for intensive feeding programs.

Be sure your newborn management program is at least very good before considering feeding higher rates of milk/milk replacer. That means:

- Calves are kept away from adult cow manure from birth.
- Adequate amounts of good quality clean colostrum are fed as soon as possible after birth.
- Adequacy of your colostrum management is checked periodically. Having your veterinary surgeon obtain blood samples from about twelve calves can do this. Blood from calves from two to seven days of age may be used. Using blood serum on a refractometer for Blood Serum Total Protein (BSTP) readings calf immunity can be measured.
- **If more than half of these samples give clinical refractometer readings of BSTP below 5.5, then it is my opinion that your colostrum program needs attention before starting an intensive feeding program.**

Water

Nothing much cheaper than water. Nothing is fed to preweaned calves much less often than water. Why? “Too much work.” “It takes too long.” “I can’t be bothered.” “The calves don’t need water, they have milk.”

I measured the extra time involved in providing water to calves housed in hutches on a 1,000 cow dairy. As long as the water didn’t freeze I spent one minute per day per calf to provide water both AM and PM. That time included loading water on a cart, dumping untouched water and refilling buckets two times daily. My calves were housed outdoors and during freezing weather I spent twice as long to provide water two times daily.

Why do we feed water? For calves before they begin eating much grain, we are trying to increase their milk replacer intake. My calves came up on full feed (0.9kg of milk replacer powder daily) much more quickly with ad lib water from day one than without water.

Also, since there was a very high rate of cryptosporidiosis infections, I fed water to prevent dehydration due to crypto-induced diarrhea. Water is essential for dealing with heat stress, too.

We have all heard the old wives tale about how feeding water keeps calves from drinking their milk. That’s rubbish! If calves have ad lib water consistently, then they will drink only what they need.

It is true that at an occasional feeding milk consumption may be down. But, the general rule applies. Preweaned calves do better with water than without it, especially calves less than three weeks of age.

If you cannot include water feeding to calves, then do not even consider feeding milk replacer at more than 0.6 or 0.7kg per day (this does not apply to feeding some extra powder during very cold weather).

Why? Without ad lib water milk replacer consumption suffers. And, even otherwise healthy calves suffer from diarrhea and dehydration. Stress-induced pneumonia increases as well as mortality.

Big calf, small calf

Big 45 to 50kg calves that are kept away from adult cow manure and receive plenty of good mature cow colostrum soon after birth can eat their little hearts out and never get sick. I have fed them nearly 1,400g of powder in 7 or 8 litres of mix daily as early as a week old. They grow like weeds. They stay healthy.

But, lots of calves are not that large. Thirteen percent of the calves at the 1,000 cow dairy mentioned above were less than 34kg at birth. Guess what? Many of them cannot be fed the same amount as a 45 to 50kg calf. This is not news to anyone that has worked with calves.

Most small calves just won't eat that much (seven litres) even if offered. Frequently, they will drink a lot in the morning and nothing in the afternoon if large volumes are offered. The few that do drink seven or eight litres promptly get so loose that they have to be cut back.

Also, if you depend on calves running up to the feeding pail at the afternoon feeding as way to check on their health, then you may have to accommodate some morning-only drinkers under twenty-one days of age.

If your feeding program can accommodate feeding different amounts of milk replacer depending on calf size and health, you may be ready to consider an intensive feeding program. **If you are definitely a “one amount for all calves” operation, then forget higher feeding rates.** Feeding large amounts of high-protein milk replacer to every calf regardless of her newborn care, size and health is a recipe for high scours rates and death loss.

Come on. Can you say something positive?

Yes, I can. Let us say you have a good newborn management program already in place. IgG levels are high and navel infections are low. You are

Sam Leadley, Calf & Heifer Management Specialist

Shirley Macmillan, United Kingdom Editor

sleadley@yahoo.com www.atticacows.com

© Attica Vet. Assoc. 2019 All Rights Reserved.

already feeding water year round to calves. Small or sick calves are receiving individual attention. Death losses are below five percent. Pneumonia cases are below ten percent. Yes, an intensive feeding program for increased growth rates might be cost effective on your operation.

Adopt an intensive feeding program as a cure for a calf-raising program that does not meet these standards? No. No. No. A thousand times, No. **Think of an intensive feeding program as icing on a cake. Until you can bake a delicious cake don't spend time and energy making icing.**