

CALVING EASE

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Basics for Feeding More than One Pound of Milk Replacer a Day

It's difficult to go to any meeting of calf managers these days without hearing conversation about "accelerated growth." These calf raisers are talking about feeding milk replacer at rates higher than one pounds of powder per day. But, we hear too little about the basic conditions that need to be in place before feeding for accelerated growth.

NEW-BORN MANAGEMENT

Pouring extra milk replacer into a sick new-born is asking for higher mortality rates. At Noblehurst we measure the blood serum total protein on all heifer calves between 36 and 72 hours after birth as a way of estimating their immunoglobulin concentration (IgG). Over and over again we have found that calves with low IgG levels ($BSTP < 5.2$, $IgG < 1070$) are most likely to have problems with scours during the first three weeks of life. Calves born in dirty conditions or left too long with a dam having manure on her belly and flanks scour consistently regardless of IgG level. These calves are not good candidates for accelerated feeding.

Be sure your new-born management program is at least very good before considering feeding higher rates of milk replacer. That means: Calves are kept away from adult cow manure from birth to hutch. Every navel is thoroughly dipped and redipped if necessary. Adequate amounts of good quality colostrum are fed as soon as possible after birth. Adequacy of your colostrum management can be checked by having your vet obtain blood samples from 5 or 6 calves. If more than half of these samples give refractometer readings of blood serum total protein below 5.8, it's our opinion that your colostrum program need attention before starting an accelerated feeding program.

WATER

Nothing is much cheaper than water. Nothing is fed to preweaned calves much less often than water. Why? Too much work; takes too long; can't be bothered; they don't need it. We have measured the extra time involved in providing water to hutch calves at Noblehurst. As long as the water doesn't freeze we spend 1.5 minutes per day per calf to provide water. During freezing weather it takes twice as long.

Why do we feed water? For calves before they begin eating much grain, we are trying to increase their milk replacer intake. Our calves come up on full feed (two pounds of milk replacer powder daily) much more quickly with free-choice water from day one. Also, since we have a very high

rate of cryptosporidiosis, we feed water to prevent dehydration due to crypto-induced diarrhea. Water is essential for dealing with heat stress, too.

We've heard the old wives' tale about how feeding water keeps calves from drinking their milk. That's bunk! If calves have free-choice water consistently they will drink what they need. It's true that at an occasional feeding milk consumption may be down. But the general rule applies. Preweaned calves will do better with water than without it, especially calves under 3 weeks of age.

If you cannot include water feeding to calves don't even consider feeding higher rates of milk replacer (this does not apply to feeding some extra powder during very cold winter weather). In our experience in 1998 and 1999 with nearly 800 calves fed at rates of 30 ounces of milk replacer powder per day and higher, it's either feed water or don't even try rates of higher than 20 or 24 ounces of milk replacer powder per day. Why? Without free-choice water milk replacer consumption suffers. Even otherwise healthy calves suffer from diarrhea and dehydration. Stress-induced pneumonia increases as well as mortality.

BIG CALF, SMALL CALF

Big 90 to 100 pound calves that were kept away from adult cow manure and received plenty of good mature cow colostrum soon after birth can eat their little hearts out and never get sick. We have fed them nearly 3 pounds of powder daily as 8 quarts of milk replacer mix. They grow like weeds. They stay healthy.

But, 13 percent of our calves at Noblehurst are under 75 pounds at birth. Guess what? They can't be fed the same amount (3 pounds in 8 quarts of mix) as a 100 pound calf. Most small calves just won't eat that much even if offered. Frequently, they will drink all their milk replacer in the morning and nothing at the afternoon feeding. The few that do drink that much promptly scour so they have to be cut back. Also, if you depend on calves running out to eat at the afternoon feeding as a means of checking on their health, you may have to accommodate some morning-only drinkers under 21 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 accelerated feeding program. If you are definitely a "one amount for all calves" operation, forget accelerated feeding. Feeding large amounts of high-protein milk replacer to every calf regardless of her newborn care and size is a recipe for high scours rate and death loss.

COME ON, CAN'T YOU SAY SOMETHING POSITIVE?

Yes we can! Let's say you have a good newborn management program in place. IgG levels are high, navel infections are low. You are already feeding water year round to calves. Small or sick calves are receiving individual attention. Death losses are below 5 percent. Pneumonia cases are under 10 percent. Yes, an accelerated feeding program for increased growth rates might be cost effective on your operation. More on characteristics of a cost-effective program in a future letter.

Adopt an accelerated 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 accelerated growth program as frosting on a cake. Until you can bake a delicious cake don't spend time and energy making frosting.

References: While no one single source was used in preparing this letter, articles and presentations by and conversations with the following persons should receive credit for providing the groundwork upon which the author drew heavily in making his on-farm observations: Mike Fowler, Jud Heinrichs, Jim Quigley and Mike VanAmburg.

If you know of someone that doesn't currently receive Calving Ease but would like to, tell them to **WRITE** to Calving Ease, 11047 River Road, Pavilion, NY 14525 or to **CALL** either 716-591-2660 (Attica Vet Assoc office) or 716-343-8128 (Offhaus Farms office) or **FAX** (716-591-2898) or **e-mail** sleadley@servtech.com .