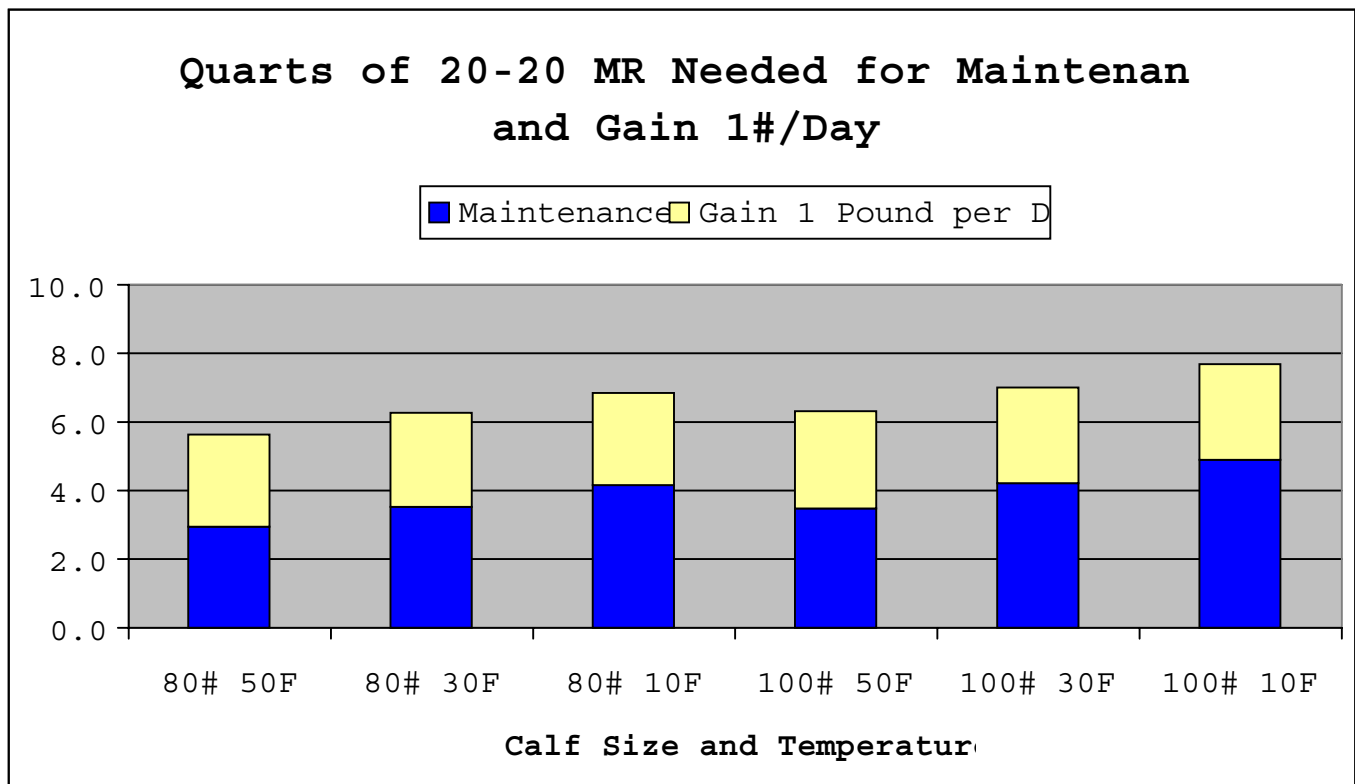


# CALVING EASE

January 2001

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## COLD WEATHER AND ENERGY FOR CALVES



This month we focus on relatively small calves that are consuming only milk or milk replacer. The chart above shows how many quarts of 20-20 milk replacer (mixed according to the manufacturer's instructions of eight ounces of powder to make two quarts of mix) are needed for maintenance and growth. We compared a smaller eighty-pound calf to a larger one weighing one hundred pounds. Three different temperatures of the surrounding air are shown as well. The dark horizontal line marks the "usual" amount fed by producers; four quarts daily usually in two feedings.

First, note that as the air temperature goes down the amount of milk replacer needed for maintenance goes up. The dark part of the bar shows how much is needed for maintenance alone. Three of the dark bars that indicate maintenance needs go above the four-quart line. When fed only four quarts a day these calves are not maintaining their weight. They are losing weight.

Second, notice that for the same air temperature the dark bars are taller for the 100-pound calf than for the 80-pound calf. This means the larger the calf the greater the amount of energy she needs to keep warm, healthy and alive. At 10° the 80-pound calf needs 4.1 quarts and the 100-pound calf needs 4.9 quarts. That's nearly an extra quart of milk replacer for the larger calf's maintenance.

Third, you also want the calf to grow. The white part of each bar represents the number of quarts of milk replacer needed to gain one pound a day. The tops of all six bars are well above the line marking four quarts daily.

### **How Can I Feed More?**

One way is to feed bulk tank milk. Holstein milk has about 25 percent more energy than does 20-20 milk replacer. Jersey milk has about 50 percent more energy. Or, save heifer colostrum and second and third milkings from fresh cows. Mix this in with your milk replacer to boost the energy inexpensively.

Another way is to mix more 20-20 milk replacer powder with the water. Adding two extra ounces of powder per feeding in the same amount of liquid will increase the energy by 25 percent. If the calves have access to water adding an extra four ounces powder per feeding will add 50 percent more energy – but do this only if the calves have free-choice water to drink in addition to their milk.

Another way is to feed more of the standard mix of milk replacer. While this option works okay with calves big enough to consume more than four quarts daily it's not as effective with small calves. Smaller calves tend to eat well one feeding and poorly the next when larger amounts are fed. Also, some producers add commercially prepared fat supplements to boost energy per quart.

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](mailto:sleadley@servtech.com). A limited number of back issues may be accessed on the Internet at [www.americanprotein.com/calf/calnotes/APCcalnotes.htm](http://www.americanprotein.com/calf/calnotes/APCcalnotes.htm) and clicking on the link, Calving Ease.