

**Cold Weather Calf Feeding Tips**

As cold weather approaches, remember to increase feeding rates of milk/milk replacer powder to wet calves. Maintenance energy requirements (no growth) for a 100# calf are met by feeding 16oz per day of a 20:20 milk replacer powder at 68°F. When the temperature drops to 32°F, this requirement increases to 21oz of milk replacer powder per day. In order to adequately provide enough calories for maintenance and growth at 32°F, 29oz of 20:20 milk replacer powder must be fed daily. To avoid osmotic induced diarrhea, total solids feeding rate must not exceed 17.5% (calculated by dividing the weight of the powder by the weight of the water.)

For example: 10oz of milk replacer powder in 2qts of water = 10/64 = 15.6% Total Solids (TS).  
 16oz of milk replacer powder in 3qts of water = 16/96 = 16.6% TS solution.

**7 Common Mistakes**

1. Increasing volume of water fed without increasing the amount of powder.
2. Mixing temperature too cold – less than 110-120°F
3. Feeding temperature too cold – temps (of milk replacer/ milk) below 95°F will markedly slow GI motility and cause hypothermia
4. Inadequate mixing – all of the powder must go into solution – no chunks, no settling
5. The cup included in milk replacer bags is a measure of volume, not weight. The actual weight of the powder can differ significantly depending on how tightly the powder is packed – more air = less powder. And, each person’s idea of a full cup also will differ. There is no replacement for scales to measure the actual weight.
6. Diluting powder to a volume mark (eg. 2qts) in a pail instead of adding the correct amount of water. The resulting solution may be too concentrated.
7. Inappropriate feeding intervals. Calves fed twice daily at 10 & 14hr, or even, 8 & 16hr intervals are at an increased risk for hypothermia. This is especially dangerous because the longest duration without milk is during the coldest hours.



**Amount of Milk Replacer/Milk Dry Matter Required to Meet Maintenance Requirements [with no Gain Dry conditions, no wind]**

		Temperature, °F						
		68	50	32	15	5	-5	-20
Bodyweight, lb.	60	0.6	0.8	0.9	1.0	1.1	1.2	1.4
	80	0.8	0.9	1.1	1.3	1.4	1.5	1.7
	100	1.0	1.1	1.3	1.6	1.7	1.8	2.0
	120	1.1	1.3	1.5	1.7	1.9	2.0	2.3

Milk Replacer/Milk Dry Matter, lb.

**Amount of Milk Replacer/Milk Dry Matter Required to Meet Maintenance Requirements and Gain One Pound per Day [Dry conditions, no wind]**

		Temperature, °F						
		68	50	32	15	5	-5	-20
Bodyweight, lb.	60	1.1	1.2	1.4	1.5	1.6	1.7	1.8
	80	1.2	1.4	1.6	1.7	1.9	2.0	2.2
	100	1.4	1.6	1.8	2.0	2.2	2.3	2.5
	120	1.6	1.8	2.1	2.2	2.5	2.6	2.8

Milk Replacer/Milk Dry Matter, lb.

2009 Land O'Lakes Purina Feed Dairy Veterinary Nutrition Conference—Dr. Van Amburgh p.16

**D-Lactic Acidosis: An Emerging Problem in Wet Calves**

D-Lactate causes severe acidosis. Clinically, these calves may demonstrate –

1. Marked depression
2. Abnormal posture, ataxia, seizures
3. Normal suckle reflex, but difficulty drinking
4. Calf has a slow or absent pupillary light reflex (pupil does not constrict when bright light is shown) and menace response (not blinking in response to an object approaching the open eye)

Causes –

1. Diarrhea may predispose: high levels of D-lactate are produced in the large colon as a complication of malabsorption/maldigestion from rota/corona virus or cryptosporidium infection
2. D-lactate can be produced in the rumen as a complication from tube feeding milk.

Treatment – correct underlying acidosis

1. Oral electrolyte solutions containing bicarbonate and glucose
2. If severely depressed, IV fluids PSS, Normosol with bicarbonate and glucose added
3. Never use LRS (Lactated Ringers Solution) as this contains equal amounts of D/L lactate

Prevention – do not tube feed calves milk or milk replacer after they are 3 days old.

**FACT: The FDA has stepped up enforcement on drug residues.**

**FACT: Each week, the FSIS is publishing first time residue violators on their website.**

<http://www.fsis.usda.gov/science/chemistry/index.asp>

**FACT: There is a withhold time for sulfanomides (Albon, etc.)**

**FACT: There is a withdrawal for flunixin meglumine (Banamine, etc.) This is ONLY approved for IV use in cattle.**

**FACT: Penicillin Procaine G is labeled for use in cattle, but is ineffective as a treatment at the label dosage. Most people use PenG at a dosage that is greater than the approved level and/or inject more than 10cc per injection site. This causes substantially extended withholding times.**

**Things you need to consider with regard to your on-farm drug inventory and liability:**

\* **Is everything properly labeled and stored?**

\* **Do you follow standardized treatment protocols, as recommended by your vet, that include the drugs you have ?**

\* **Are you following approved doses, duration of treatment and administration routes?**

\* **Are your treatment records accurate, up to date, easily accessible and understandable to anyone making milk and/or meat shipping decisions?**

**THERE IS NO SUBSTITUTE FOR A GOOD RELATIONSHIP WITH YOUR VETERINARIAN, ITS THE LAW**

**A valid Veterinarian-Client-Patient Relationship is one in which:**

(1) A veterinarian has assumed the responsibility for making medical judgments regarding the health of (an) animal(s) and the need for medical treatment, and the client (the owner of the animal or animals or other caretaker) has agreed to follow the instructions of the veterinarian;

(2) There is sufficient knowledge of the animal(s) by the veterinarian to initiate at least a general or preliminary diagnosis of the medical condition of the animal(s); and

(3) The practicing veterinarian is readily available for followup in case of adverse reactions or failure of the regimen of therapy. Such a relationship can exist only when the veterinarian has recently seen and is personally acquainted with the keeping and care of the animal(s) by virtue of examination of the animal(s), and/or by medically appropriate and timely visits to the premises where the animal(s) are kept.

## Wyoming County Dairy Institute Offers QuickBooks® for Dairy Accounting

An accurate accounting for production costs and revenues is critical to informed decision making for dairies. With the industry experiencing more ups and downs due to price risk, both of milk and major inputs, farm managers want access to up-to-the-minute financial information about their operations as they make choices about investments and management strategies. Quickbooks for Dairy Accounting will provide a hands-on opportunity for farm bookkeepers and managers to learn a proven system for organizing farm financial information. The Wyoming County Dairy Institute scheduled January 4 – 8, 2010 as the course dates to prepare participants to start the new year with a strong underpinning in financial concepts and mechanics of farm business record keeping using Quickbooks.

Participants will learn how to effectively use QuickBooks to organize their accounting systems to provide the information needed for making sound management decisions. A standardized chart of accounts (COA) designed specifically for dairy businesses will be provided to all participants.

Instructors will teach the class how to:

- Restore a standardized COA to their computer;
- Personalize the COA for their operation;
- Set up new accounts within the standardized COA;
- Make deposits and write checks;
- Implement an accrual accounting system through accounts payable and receivable features;
- Reconcile accounts;
- Search for specific transactions;
- Evaluate the accuracy of their system using key reports; and
- Generate reports for business analysis

Since the course is hands on at the computer, the number of participants is limited. Location and fee for the course will be announced. For more information or to register, please contact the Wyoming County Dairy Institute at Cornell University Cooperative Extension of Wyoming County, by e-mail, [ccwyoming@cornell.edu](mailto:ccwyoming@cornell.edu), or phone, 585-786-2251.

**Thank You!!!**

**To Everyone Who Attended Dairy  
Producer Appreciation Day  
You made it a Great Day!**

**Wishing you and yours a  
safe and happy holiday  
season**

**A copy of all newsletters are posted at: [www.perryvet.com](http://www.perryvet.com)**

**To place a farm supply order:**

**Phone: (585)969-9120 Fax: (585)237-5544**

**Farm Store Hours: Mon-Fri 7am - 5pm Sat 7am - Noon**

**Closed: New Years Day, Memorial Day, July 4th, Labor Day,  
Thanksgiving and Christmas**

**NEW—Current Clients—Place your farm supply order by email:  
[orders@perryvet.com](mailto:orders@perryvet.com)**

**You will receive a confirmation email from Farm Store staff.  
Please include a contact name and phone number. (And, allow  
time for delivery.)**

