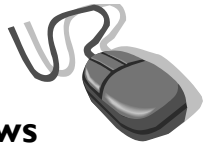
Net Update



ODAIRY: Drying-off Cows

ODAIRY, the email discussion list created and maintained by one of our NODPA members, has been a resource for producers and industry people covering topics on animal health & crops, posting calendar events, job listings, and livestock and feed for sale. If you haven't jointed this list yet, we encourage you to give it a try. To join or read previous postings, go to: groups.yahoo.com/group/Odairy

Following is a recent set of posts on ODAIRY

What are the different methods of drying a cow up before calving and for what period of time?

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If a cow is down to about 20 lbs. milk per day, I just pull her grain and stop milking her 45 to 60 days before calving. If she's still milking 40 lbs., I'll pull her grain and milk her once a day for a few days, then stop. In my experience Jersey's show greater resistance to drying up than Holsteins do.

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Post by Richard J. Holliday, DVM, IMPRO Technical Services, Iowa: Drying-off is a critical time for udder health and any extra care given at this time will pay big dividends throughout the next lactation. Prepare the cow for the stressful transition from lactating to non-lactating by using your favorite herbs, homeopathy preparation, colostrum products, acupuncture, or others to boost her immune system and help relieve stress.

After this period of preparation, just quit milking her. She must have a tight udder for about five days for her hormonal system to get the message to quit producing milk. Milking her out to relieve the pressure and discomfort before this time is up only prolongs the process.

After about five or six days, when the udder swelling begins to recede, sanitize the teats and milk out some milk. Normal appearing milk indicates a healthy udder. If this is the case, completely milk-out the udder, sanitize the teats,

Occasionally at this time the milk will show abnormalities such as chunks, clots, watery, slimy, bloody streaks or anything that does not look like normal milk. In that event, milk out the udder, and begin your treatment of choice. Continue the treatment, check the milk and strip out the udder every few days for as long as necessary to clear up the problem. If you let her go completely dry while she has an infection, she will almost certainly have the same problem when she freshens.

If drying-off was accomplished successfully, the next critical time for the udder begins about two weeks before freshening and continues until a week or so afterwards. When the cow begins to "bag-up" and has a tight udder, sanitize her teats, milk out some milk and examine it. Early in the "bagging-up" phase, normal secretion will usually resemble a clear amber fluid somewhat like honey and progress from that to regular milk as she gets closer to kidding.

If the secretion is not normal & chunks, clots, stringy, slimy or bloody, milk her out completely and begin your favorite treatment. Continue to milk her twice a day until she freshens. This "Pre-milking" procedure will save many udders that would normally be lost if the infection was allowed to go unchecked all the way to kidding.

Colostrum is produced shortly before calving. Save the milk right before and after calving and give it to the calf. It will provide all the protection they need even though the volume will be less.

These procedures provide a way to check the status of the udder at key periods during the dry period and allow you to begin remedial action if and when a problem occurs. If you follow these procedures you will know 100 percent more about udder health than those that only treat at dry-off and then wait until freshening to see if it worked or not.

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From another point of view, if the udder appears otherwise healthy, it may not be advisable to tamper with it during the dry period as the teat ends develop a tight seal that protects from infection. If this is broken prematurely, infection could occur.

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Dr. Holliday post: I appreciate your comments! You are absolutely right! The main indications for checking the udder at bag-up would be excessive edema and/or an uneven udder which could indicate infection in one or more quarters.

From another point of view, I know of many dairymen who routinely pre-milk every cow. Some have reported individual production as high as 35 to 45 lbs of milk before calving. Most animals calve easier and milk. Pre-milking was researched at Cornell and found to reduce mastitis about 50% and also to reduce milk fever by about 50 %. It's not for everyone, but those that learn how to utilize this procedure find it very beneficial.

(Continued on page 16)

(Continued from ODAIRY, page 15)

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We have often fed rubbed sage [a small handful, twice a day, mixed with the grain] to a cow for 7-10 days before dry off. Sage helps to decrease milk flow and they dry up quickly. Then we just stop milking them. Sage is available at any bulk food store or where ever you buy cooking herbs. I would suggest buying it in bulk from Frontier Herbs, an organic food wholesaler. Their quality is very good and very reasonable in price.

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I've noticed that when I give a cow 20cc of Vit. C IM she drops in production quite a bit. I've done that when drying up cows at times. It also fights disease.

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Post by Linda L. Garrison-Tikofsky, DVM, Quality Milk Promotion Services, Cornell:

I'll chime in and second what others have contributed. The dry period is essential for the health of the cow and for continued milk production. This period of 'rest' allows the udder to rejuvenate the milk producing tissue. Those of you that have cell counts done will notice them rise slightly at the end of lactation due to programmed cell death in the udder. Milk producing cells have exhausted themselves and are shed into the milk. Dry periods of 45 to 60 days are considered the most appropriate. The body's immune system also concentrates natural antibacterial substances (lactoferrin, antibodies etc) in the udder at this time so that existing infections can be killed. Dry periods less than 45 days don't allow enough time for rejuvenation or for the body's immune substances to accumulate. Dry periods longer than 60 days have no added benefit and may be detrimental in terms of post-calving ketosis if the cow continues to put on body condition.

Abrupt dry off for cows producing less than 40 lbs is recommended for the reasons Dr. Holliday mentions since it creates the back pressure necessary to stop milk production. The inside of the teat end has a keratin layer which serves a couple of functions-- it is 'sticky' so bacteria attempting to enter the teat canal get 'stuck' and the sticky properties help the teat ends seal faster and produce the plug. Keratin also has some additional antibacterial properties as well. When we milk we remove the keratin in the teat end and it needs to form again. The sooner we get the plug, the better for the cow. That said, it takes about 2 weeks for the plug to form and ~20% of teats don't form one at all. This two week period is a risky time for new mastitis to develop. If you can, continue dipping cows with your post dip for two weeks after milking and check the udder (visually) for signs of mastitis. Dipping again when the udder is bagging up is also a good idea since teats are apt to become leaky at that point and the milk in the udder is a good place for bacteria to grow. If you notice clinical mastitis (swelling, redness, and pain) I would certainly considering stripping out that quarter until the symptoms resolve. If there isn't a problem with edema or leaking, I wouldn't pre-milk.

If cows are producing more than 40 lbs, removing grain and feeding dry hay will reduce production pretty quickly, as will other 'stressors' such as changes in the barn or vaccination (if you do that).

Don't forget about keeping the dry cow and maternity areas clean and dry. Mastitis is directly related to the number of bacteria assaulting the teat end. Nutrition for the dry cow is also important (especially selenium, vitamin E and other trace minerals).