LARGE ANIMAL NEWS LETTER – MAY 2001

MASTITIS IN LACTATING COWS: In the past two months our newsletter has concentrated on controlling mastitis and SCC in dry cows and cows at calving. The third area of mastitis control is the lactating cow.

To review, mastitis is simply bacteria entering a cow's quarter through the teat opening. An infection is established which irritates and damages the udder tissue causing reduced milk production, abnormal milk, and an elevated SCC. To avoid these infections in lactating cows you need to concentrate on three key areas, ***the cow's environment, the equipment used to milk the cow, and the method you use to milk the cow***.

ENVIRONMENT: Overwhelming exposure to bacteria can defeat udder defenses and allow bacteria to gain entry through the teat. To grow in the environment, bacteria need heat, moisture, and a food. Therefore, to minimize bacterial growth, keep cows as clean and dry as possible through frequent scraping of stalls. Stalls must be appropriately sized so that waste doesn't pool in the stall. Bed the stalls with dry bedding frequently.

Sand is the best as it allows moisture to drain and it doesn't provide organic matter needed to support bacterial growth. Sand stalls must be maintained at least 2-3 times per WEEK to insure adequate bedding and proper stall use by the cows. Wood shavings are good for bedding, but must be kiln dried. Straw also makes good bedding. Whichever material you use, the stalls need to be scraped clean at least twice a day to allow moisture and manure levels to drop and stalls to dry. Putting barn lime at the rear of the stall can help by improving drying and changing the local pH.

MILKING EQUIPMENT: Milking equipment is the most heavily used equipment on a dairy. It must be maintained appropriately to insure proper function. Improperly functioning equipment can damage teats or cause vacuum irregularities, which will result in bacteria being forced into the teats causing mastitis. Inflations need to be changed at regular intervals to insure good teat massage and milk-out.

Your milking system should be **thoroughly** evaluated at a minimum of once a year. This evaluation is not simply a glossing over peek at the regulator to make sure that it is still present. This evaluation should be a complete check of the system, including measurement of vacuum levels during milk flow, testing of regulator function and testing for proper pulsator function. Preventing problems through good maintenance will more than pay for the cost of such an evaluation.

MILKING TECHNIQUE: Techniques vary dramatically among farms. There is no one perfect method. What you need to insure when you milk cows is that you observe two points. First, your cows need to be properly stimulated to allow good milk let down. Second your cows must not be over-milked.

We recommend fore stripping and pre-dipping cows prior to milking. **Fore stripping is the best stimulus of milk let down**. Time from fore stripping until unit

attachment, should be between 40 and 90 seconds. Pre-dip solutions are meant to kill bacteria on the teat, and **require a minimum of 30 seconds contact time** with the teat to be effective. After that time the teat, including the teat end, must be thoroughly wiped dry prior to unit attachment. Remember, a milking unit is a great vacuum cleaner. Any dirt or bacteria you leave on the teat will get sucked up and may cause mastitis. Iodine is still the best dip. All other dips manufactured are compared to iodine for effectiveness.

If you don't have automatic take-offs, watch that cows don't get over-milked. With good prep, most cows will milk out in 4-5 minutes and that time passes fast. Over-milking is a major contributor to mastitis and happens quite frequently in conventional stall barns. **Post-dip the cow**. This is the best defense we have against mastitis.

These procedures are designed to reduce your incidence of mastitis and your SCC. The goal is to decrease your production costs and increase your premiums. If you have concerns about mastitis on your farm or would like help implementing a prevention protocol, please do not hesitate to speak with one of our veterinarians!

GRASSLAND VETERINARY SERVICE STAFF

Mike Strobush DVM	Al Harmening DVM	Jeff Engrav DVM
Kevin Ratka DVM	Jean Liljegren DVM	Jeannette Bymers Off. Mgr.
Tammy Zickert Recept.	Wendy Lindner CVT	Ginny Mesar VA
Tara Kranz VA		