

More About Dairy 2

## Maximizing Milk Letdown

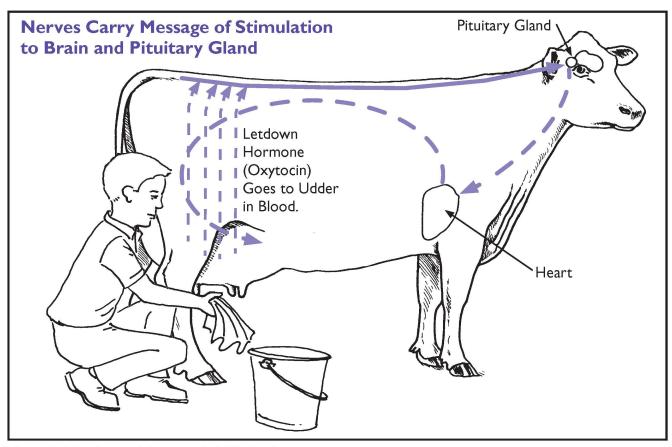


Figure 7-3. Pathway of Oxytocin in Milk Letdown.

Happy, comfortable, healthy cows give the most milk. An environment that is quiet, relaxed, and routine helps our cow(s) may produce at their best!

Milk letdown occurs when the pituitary gland in the cow's brain releases a hormone called oxytocin. Oxytocin travels through the bloodstream to the mammary gland, stimulating the contraction of tiny muscles that begin the milk letdown process from the alveoli all the way through the teat canal. This milk letdown increases the pressure in the mammary gland, allowing the cow to release her milk more easily. Oxytocin and mammary pressure are at their highest two minutes after initial stimulation of the mammary gland. This is why a routine is so important to maximize milk letdown. Cows that become scared or are under stress can produce an adverse (negative) hormone called adrenaline.







## College of Food, Agricultural, and Environmental Sciences

Circle the best practice for maximizing milk letdown in your milk procedures/processes.

- 1. Loud music playing in parlor vs. quiet or no music playing in parlor
- 2. Milking at the same time every day vs. milking at different times each day.
- 3. Milking frequency (two times, three times, etc.) is consistently maintained vs. milking frequency changes on the weekends
- 4. Keeping a routine udder prep (dip, strip, wipe, attach, etc.) or changing up the udder prep routine.
- 5. Gently encouraging cows to enter parlor vs. yelling and smacking cows to enter the parlor.
- 6. Allowing equipment to age without inspection vs. examining equipment regularly
- 7. Allowing slow cows/injured cows to enter vs. observing cows for health concerns (mastitis, lameness, etc.)

