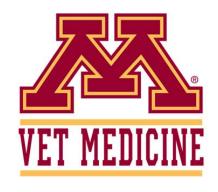
Cow Calf Health





Sara Barber, DVM Veterinary Medical Center Worthington, MN







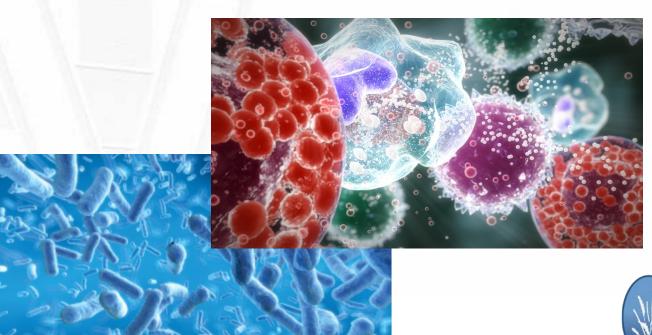






Health is a Balance

Increase Immunity Reduce Pathogens





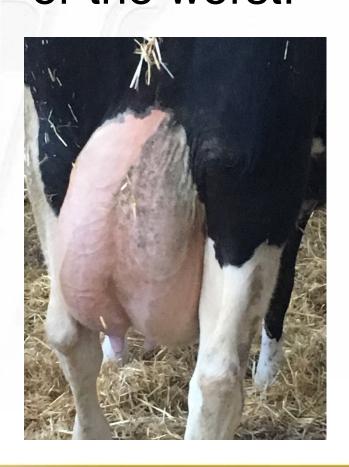


Increasing Immunity

Colostrum Colostrum Colostrum



The contents of that udder are the best thing the calf will EVER eat—or the worst!





Why colostrum?

- Calf is born with ZERO antibodies
- Antibody = Protein that recognize something foreign and binds it (send for help)
 - Scouts: Alert the rest of the army
- If there is no alert the enemy will multiply and take over

Colostrum: Gift from Mom

WHC.

- Passive: Calf doesn't too anything—just absorbed from mom
- Only last a short time (7-60 days)
- Gives calf antibodies (scouts) until the calf can make their own

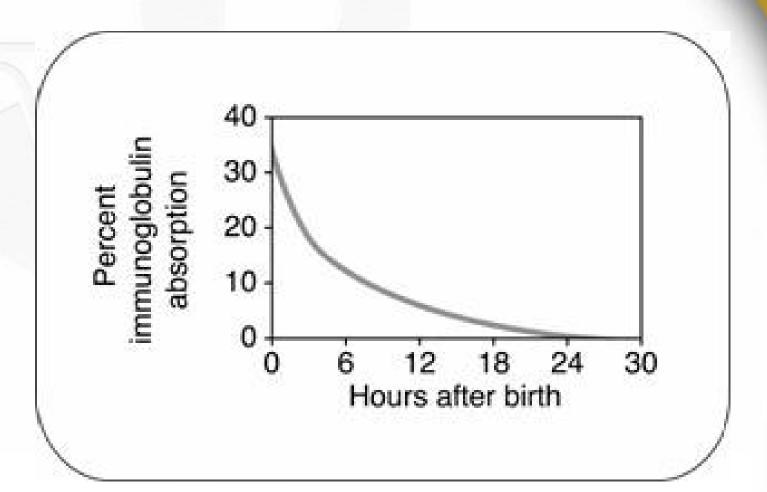
How to Maximize Colostrum



- Vaccinate cows with scour vaccines 6-10 weeks prior to calving
- Booster vaccines per label
- Good cow nutrition two months prior to calving—no major ration changes within 30 days of calving
 - Properly balanced ration (Vitamin E)

Colostrum Intake





Colostrum Intake



- Calves aggressively nursing within one hour of birth
- Pens ready to assist nursing if needed
- Not nursing by three hours
 - Tube feed colostrum REPLACEMENT product



Colostrum Quantify results

- Goal = > 90% calves above 5.5g/dL
- Measure total proteins with blood sample on calves 2-7 days old







Proper esophageal feeder use

- Esophageal feeder
 - CLEAN
 - Not scratched up
- Calf is sternal or standing
- Ensure in esophagus and not trachea
- Head in normal position
- Tilt nose down when removing







Aspiration pneumonia

- Ensure proper esophageal feeder technique
 - Nose never above eyes
 - Head in normal position
 - Standing (sternal if you have to but not recommended)
 - Ensure proper placement (feel)











Dipping Navels is Paramount to prevention!





- The number one way to prevent infections is to dip EVERY navel with strong iodine after birth!
- The dipper should be cleaned at least every 5th calf or every week, whichever is more frequent.



Calf Vaccination



- Consult your veterinarian
- DO NOT overvaccinate
- Vaccines can add stress

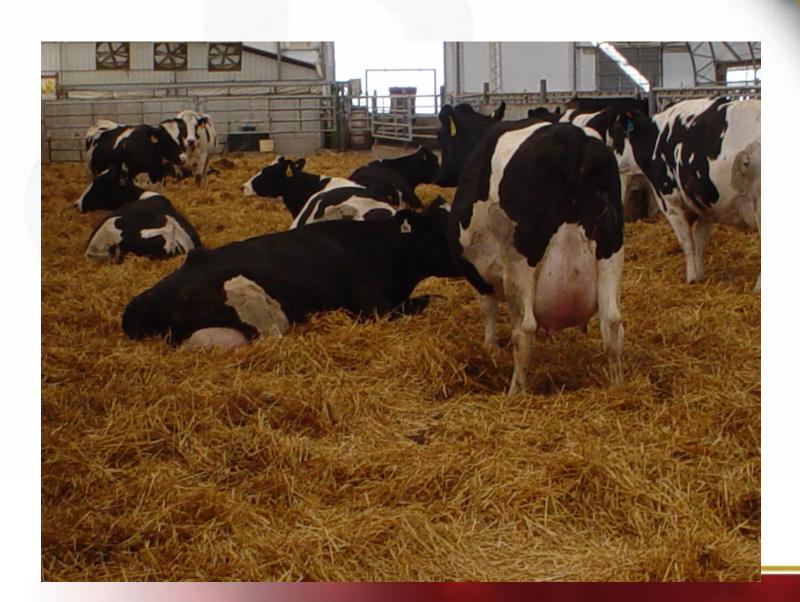
Change cannulas often





Bedding Management





Bedding



Dry knees in the calving pen



Cleanliness

- What and when to clean?
- Disinfection protocols









Standard disinfection protocol

- 1) Rinse
- 2) Wash with soap and scrub with brush
- 3) Rinse
- 4) Dry
- 5) Final disinfectant prep before use on calves





Two Sets of Supplies



- One for sick calves
- One for healthy calves

- Esophageal Feeder
- Balling Guns
- Bottles/Nipples

Animal Sources

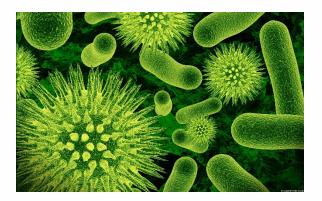


- Keep animals from different sources in separate pens
- No nose to nose contact



Calf Diarrhea

- Many causes in first 14 days of life
- Almost all caused by Fecal > oral route (eating/being exposed to feces from older calves)
- Viral
 - Corona virus
 - Rota virus
- Cryptosporidium parvum
- Bacterial
 - Salmonella
 - E. coli





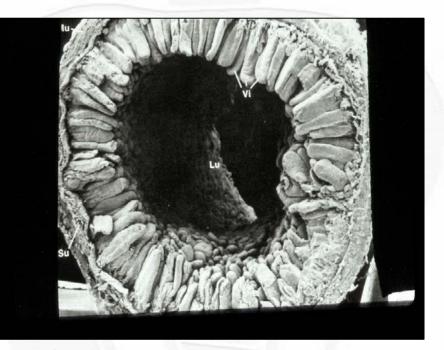


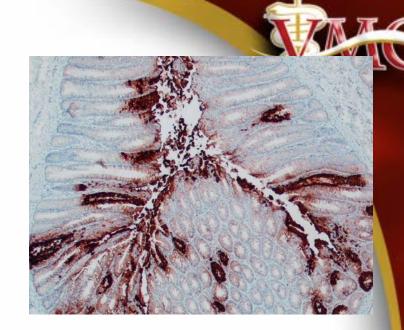
Viral causes

- Few in... many out: Calves begin to spread 10^11 (=1,000,000,000,000) viruses per GRAM of feces 3 days into the infection
- Nothing in a vet truck can "treat" a viral scour





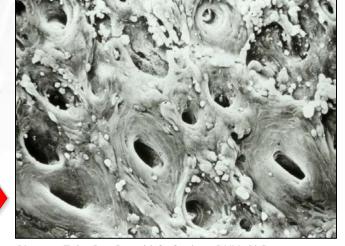






The ileum of a healthy normal calf

The ileum of a calf infected with a Corona Virus; changes in the mucosal surface, with villus atrophy, Leads to malabsorption and electrolyte imbalance, allowing infection of other viruses, bacterial, and protozoan



<u>Pictures Take By:</u> Donald C. Sockett DVM, PhD; University of Wisconsin Veterinary Diagnostic Laboratory, Madison Wisconsin

Calf Diarrhea



- DO NOT keep scouring calves in the calving pen
- Start a new calving pen at least two pens away from the pen with the sick calves
- DO NOT allow people or animals to go between these pens

Wear Gloves!



- Calf Diarrhea is VERY contagious
- Several types can infect people



Work Flow



- Separate people for sick and newborn calves
- Separate boots and coveralls

Calf Diarrhea

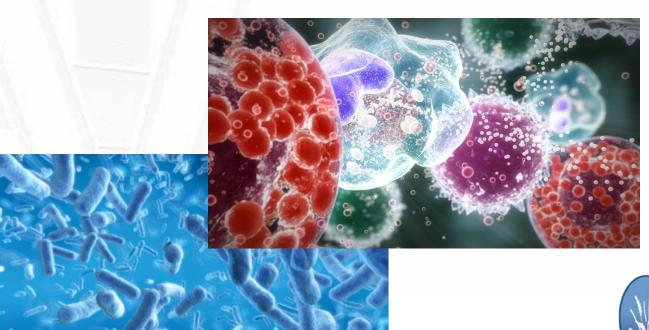


- Get your vet involved early
- Diagnostics on fecal samples
 - KNOW YOUR ENEMY
- Electrolytes
 - Oral
 - Use on every scouring calf, every day
 - Two quarts in warm water
 - Electrolyte balance, alkalizing agent, energy



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Questions?





