

What's Up Doc?

A Veterinarian's
Perspective of
Large Dairy Herd
Management
and Some Areas
of Opportunity.



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POSSIBLE TOPICS?

- Fresh Cow Strategies?
- Repro Strategies?
- Vaccination Strategies?
- Cow Movement Strategies?



GOT TRANSITION PROBLEMS?



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Multifactorial!

Conception to Death

Lifetime Nutrition

- Van Amburgh et al., JDS Feb 2012

Environment/Facilities

Management/Human Decisions

PREVENTION!

- Time spent on prevention is more effective than treatment
 - Successful treatments are never 100%
 - Ex: DA survival Jan 2012 – March 2012
 - 19% (10/53) sold or dead within month
 - 64% (9/14 Mar) peaked > herd average
 - 57% (30/53) survive to next lactation
 - Ex: 10% Milk Fevers leave herd <60 Days

PREVENTION!

- Monitors
 - DM intakes
 - pHs
 - RPs
 - Milk Fevers
 - DAs
 - Left herd < 60 days
 - Milk goals
 - %SCK?
 - DOAs
 - pen fill (24 inch headlocks)
 - <80% cows
 - <90% helpers
 - regular testing feed/rations
 - predicted calvings

PREVENTION!

- Eliminate Stressors
 - Weather
 - Pen moves
 - All in/all out?
 - "Dump" pen after calving?
 - Individual calving pen?
 - Co-mingle helpers with cows?
 - Days in Dedicated Fresh Pen
 - 20% of DAs (11/53 Jan 12 – Mar 12) after pen move
 - Nordlund, Cook, Oetzel 2006 AABP Proc

PREVENTION!

- Pen space
 - Crowding
 - The inevitable surge
 - Nordlund, Cook, Oetzel 2006 AABP Proc



“Much has been learned about the underlying biology of the transition, as well as nutritional strategies to minimize health problems and promote high milk production. Feeding management during the dry period and into early lactation is one of two critical general areas in minimizing health disorders and promoting productive lactations; the other factor is minimizing stressors in the cows’ environment. Although not the focus of this paper, management to minimize stressors such as overcrowding, insufficient feeding space, uncomfortable housing, and excessive movement among groups is emerging as likely the most important determinant of transition success.”

James K. Drackley
Nutritional Management of Transition Dairy Cows
AABP Conference 2011

LARGE HERD FRESH COW PROTOCOLS

- Prevention Before Treatment!
 - Successful Fresh Cow Crew
 - The Messengers!
 - Should have an active part in prevention
 - Requires training
- Don't shoot the “trained” messenger!
 - Very Important - Milk Fevers, RPs, DAs
 - Important – Metritis, SCK, Off, FOU, Pneumonias, GIs, Feed, Manure, Mastitis, etc.

FRESH COW PROTOCOLS



FRESH COW PROTOCOLS

- Treatment Protocol Criteria
 - Quick and easy to perform
 - Not Hospital Cows!
 - High volume /cocktail drenching not easy on large herds
 - Prevention and early intervention to avoid elaborate treatments
 - Based on science and not illegal!
 - Cost and labor effective
 - Do no harm
 - Balling Guns, drenchers, intra-uterine Infusion equipment can be weapons in the wrong or hurried hands
 - Gradual changes for all protocols
 - Big changes = Big Hiccups = Back to the old way

FRESH COW PROTOCOLS

- The Large Herd Fresh Cow Check
 - A+ Program
 - 1 - 2 Techs at Milking
 - Make notes of weak, lame, mastitis
 - 2 Techs outside in dedicated fresh cow pens
 - Check cows after cleaning refusals and fresh feed
 - Front – Appetite, Attitude
 - Back – Vaginal Discharge, Rumen Fill, Udder Fill, Feet
 - Any abnormality and perform physical exam
 - Value of once a day temping?
 - (Wagner et al., 2007 AABP Proc)
 - 3rd person needed if temping
 - Ketone strips?
 - more later
 - Regular palpating of uterus without cause?

FRESH COW PROTOCOLS



FRESH COW PROTOCOLS

- Every Cow Every Day!
 - Computer record and cow record!



FRESH COW PROTOCOLS

- 10 Days Minimum
 - Dedicated Fresh Cow Ration?
 - Hepatic Oxidative Theory?
- Pen move is stressor!
 - Nordlund, Cook, Oetzel 2006 AABP Proc
 - Acidosis/GI upset, DAs, SCK
 - More time for rough transitions
- More time if pen move will be stressful
 - Moving into crowded pen
 - New introduction to free stalls
 - Hauling cattle to a new location

KETOSIS TREATMENTS!

- When to treat?
 - Prevention
 - Elevated NEFAs/BHBs and Immune Status!
 - Hammon et al. 2006 Vet Immuno
 - Decreased DMI and Uterine Issues!
 - Testing?
 - McArt, Nydam, Oetzel 2012 JDS
 - Pen Space
 - Nordlund, Cook, Oetzel 2006 AABP Proc
 - DNB Breeding Protocols
 - No fat cows /No lame cows!
 - 5 day Propylene Glycol from day of calving for high risk cows
 - Dystocia, older cows, BCS
 - McArt, Nydam, Oetzel 2012 JDS
 - Personal experience

KETOSIS TREATMENTS!

- Clinicals
 - Dex, CMPK IV, Propylene Glycol 5 days
- Subclinicals
 - Propylene Glycol 5 days, "Appetite" Pill
 - Daily physical exam until recovery
 - Maybe only secondary!



KETOSIS TREATMENTS!

- 22g ¾ inch needles
 - Decreased gore
 - Most dairies >18g



Case - 27272

4 dim, weak appetite, 88 days previous dry, 1.7 mmol/L BHB, 70 lbs,
DA 7 dim, prevent day 1?



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4 dim, weak appetite, 88 days previous dry, 1.7 mmol/L BHB, 70 lbs,
DA 7 dim, prevent day 1?



Case 17985

Weak appetite, smell ketones, 2.7 mmol/L BHB, lame 4/5, RP, thin.
Secondary Ketosis!



METRITIS

- Metritis Treatments

- Infusion
 - Science?
 - Illegal!
 - Trained?

- Why go to the hospital?

- Penicillin is not cheaper
 - Dump milk
 - Increased risk residues
 - Need script at current doses
- Another stressor
- Hospital is a cesspool!



HYPOCALCEMIA

- Prevention!

- Treat high risk cows

- Dystocia, older cows, fat cows
- Calcium Chloride/ Calcium Sulfate Pill
 - Sampson, Spain, Carstenesen, Jones Vet Ther 2009
 - Calcium chloride gels increase risk of pneumonia

- Decreased neutrophil count/lymphocyte activity

- New product to counteract
 - Injectable
 - Crutch for young cows?
 - Good for older cows?

CURRENT TRENDS ON COW VACCINATIONS

- Repro Vaccine

- MLV versus killed?
 - Works pre-breed in heifers
 - Fresh cows?
 - Immune status? Incubating?

- Coliform mastitis

- No research showing less is better!
 - 6 doses superior to 3 doses
 - Eskine et al., Oct 2007 JAVMA
- 25% of cases gram negative and very costly

QUESTIONS?


