

## Setting Up the Newborn Calf for Success

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## Take Home Points

- Colostrum is the most important meal in a calf's life
- Many factors influence the success the transfer of colostrum immunity
- Proactive management can have a large impact on the transfer of colostrum immunity



## The Importance of Colostrum

- Calves are born with a functioning immune system but no antibody
- Colostrum contains the antibodies that a calf needs while it builds its own immunity
- Colostrum also contains many other vital nutrients that will not be available until the calf is eating forage

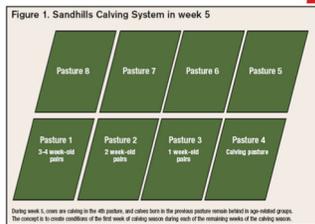
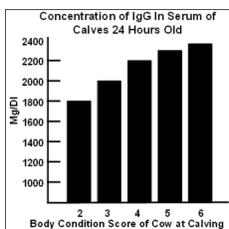


## Colostrum Transfer and Failure

1. Colostrogenesis
  - Low antibody
2. Suckling
  - Dystocia
  - Acidemia
  - Hypothermia
3. Absorption
  - Gut Closure
  - Absorption of Pathogens
  - Absorptive Capacity (Fetal Programming)



## Managing the Cow



Odde, K.G. 1974. Effect of precalving nutrition, and improving calf survival. Proc. Bovine Connection, pg. 860-092.

## Managing Calving

- Cows with BCS<5 are more than 2 times as likely to experience calving difficulty (Waldner et al. 2014)
- Calving assistance was associated with large increase in failure of calves to nurse prior to 4 hours of age (Homerovsky et al. 2017)



Photo: Elizabeth Homerovsky



### Managing Absorption

- BCS 5 or better cows
- Manage calving to avoid hypothermia
- Aim to have calves nurse within 4 hours of birth



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### A Plan for When Colostral Transfer Goes Wrong

1. Calf nurses from dam ★
2. Milk dam and bottle feed calf
3. Milk dam and tube calf
4. Bottle feed colostrum replacer
5. Tube colostrum replacer
6. ~~Bottle feed colostrum supplement~~
7. ~~Tube feed colostrum supplement~~



Read Labels:  
Make Sure Product  
Contains Dried Colostrum

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### Contact

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