The Keys to Transition Management

To win, you have to **Create** a great start
Transition from Dry to Milking

Preparation for a successful return next lactation

Events

- Loss at death
- Loss in body condition
- Loss at breeding
- Loss at culling

Loss in production

4 Events

- Freshen
- Bred
- Dry Off
- Pregnant
It’s about Creation

- Creation of a fresh cow that milks at high volumes efficiently
- Creation of cow that stays healthy and alive
- Creation of pregnancies at the right time
- Creation of a new generation that outperforms economically the current generation

- It doesn’t happen by accident
- It takes a determined planned effort

- Where do we start this?
When a Cow Calves— the competition begins

First 60 days of Lactation

Goal

- Live cow and calf.
- Focus on feeding and condition.

Dry Period

Calving

lactating

And if she is not prepared for competition— she will not win the goal.
Training starts with the Dry Cows!

- Dry cow management is the lead in to the next lactation
  - It is about
    - Preparing the body
    - Protecting the udder

The Dry Period is the beginning of the next lactation
What is our Finish Line?

Business Goal for Transition

To ensure that cows make the transition from Dry to Milking yielding Maximize production, Perfect health ....and the best possible Reproduction
The Close up period

Protect the Udder from infection

Controlling Body Condition while maximizing Dry Matter Intake

The Fresh Transition period

Controlling Body Condition while maximizing Dry Matter Intake

Protect the body to maintain health and appetite
Both Have one item in common

The Close up period

- Protect the Udder from infection

- Controlling Body Condition while maximizing Dry Matter Intake

- Protect the body to maintain health and appetite

The Fresh Transition period
Every Dairy is a Business
Success is to make every cow succeed

Goal
Low removal rates by 60 DIM
High 1rst test milk
Growth in Production to Peak
These build to achieve great reproduction

Every Cow is a Microbusiness
We accomplish this through training the **People, Proper** facilities, a Planned **Diet**, establishing the **Protocols** and important **Measures**
Key to Training

- Physically preparing the cow for training
- Setting the training schedule
- A body that is ready to compete
- Controlling the athletes diet
- A proper place to rest
- No distractions from training
- Tests to measure progress
- Health monitoring
- Measure of the results – Winning!
Transition Cow Success

Goal Failure?
Clinical and subclinical mastitis have impacts on milk, reproduction, and culling. Reducing milk pre dry reduces mastitis. Poor feet reduce feed intake, culling and eventually Heat detection.

Preparation
- Hoof: 1-3 days pre dry
- Vaccination: 1-3 days pre dry
- Trim: Enhance colostrum
- Protect at calving
- Correct angles
- Prepare for lactation

Seal Teat
- External at dry and pre-calving
- Internal
  - Short insertion
  - Best protection

Dry Treat
- Sanitary placement

Spend
- Total Days
- Matter
- Bunk
- Space
- Body
- Condition
- Low # Pen
- Moves
- Transition Bed
- Space
- Disease
- Testing
- Effective
- Treatment
- Measure
- Success
Goal Failure?

- Short dry periods have lower milk yields
- Short close up associated with increased culling and health issues
- Correct timing helps achieve great reproduction

**Gestation**

- 277–278 days

**Dry at Days Carrying Calf**

- 215–230 days

**Days dry**

- 40–70 days
- 2% of cows calve < 40 days
- 5% > 70 days

**Days in Close up**

- 90% between 10–28 days in closeup

**Total Days**

- Carrying Calf: 215–230 days

**Days in Close up**

- By LGRP
- <10 days: 915B 232 days
- 11 to 28 days: 12120 127 days
- >28 days: 11120 140 days

**Preparation**

- Total Days
- Body Condition
- Dry Matter Intake
- Bunk Space
- Lameness
- Stillborn
- Low # Pen Moves
- Transition Bed Space
- Disease Testing
- Effective Treatment
- Measure Success
**Goal Failure?**

High removal rates for high BCS
Lower milk production for high BCS
Cow that lose weight have lowest reproduction

**Body Condition Score**

- **Target 3.25**
  - < 2.75 or > 3.25 had reduced milk yield

- **Gain or Maintain weight**
  - Loss of weight triggers "Fatty Liver"

- **Protocols for High risk cows around calving**
  - Prepare a plan—glycol and B12 driven

**Optimal Body Condition Scores**

<table>
<thead>
<tr>
<th>Stage of Lactation</th>
<th>BCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calving</td>
<td>3.25 - 3.75</td>
</tr>
<tr>
<td>Early Lactation (Peak Milk)</td>
<td>2.50 - 3.00</td>
</tr>
<tr>
<td>Mid Lactation</td>
<td>2.75 - 3.25</td>
</tr>
<tr>
<td>Late Lactation</td>
<td>3.00 - 3.50</td>
</tr>
<tr>
<td>Dry Period</td>
<td>3.00 - 3.50</td>
</tr>
</tbody>
</table>

**Measure Success**
## Effect of BCS Change during the Dry Period on Health

<table>
<thead>
<tr>
<th></th>
<th>No Change</th>
<th>Lost</th>
<th>Gained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lactations</td>
<td>2972</td>
<td>2951</td>
<td>1109</td>
</tr>
<tr>
<td>RFM, %</td>
<td>3.4(^a)</td>
<td>5.5(^b)</td>
<td>3.0(^a)</td>
</tr>
<tr>
<td>Metritis, %</td>
<td>15.9(^a)</td>
<td>23.7(^b)</td>
<td>11.8(^c)</td>
</tr>
<tr>
<td>Postpartum treatment, %</td>
<td>25.0(^a)</td>
<td>34.2(^b)</td>
<td>23.1(^a)</td>
</tr>
<tr>
<td>% Pregnant 90 DIM</td>
<td>35.1(^a)</td>
<td>31.6(^b)</td>
<td>33.9(^{a,b})</td>
</tr>
<tr>
<td>% Pregnant 150 DIM</td>
<td>63.9(^a)</td>
<td>59.3(^b)</td>
<td>62.5(^a)</td>
</tr>
</tbody>
</table>
Goal Failure?

- Low feed intake associated with health issues and lower milk production
- High 1st test milk is associated with driving feed intake post calving.
- Poor feed transition is associated with longer days open

Dry Matter Intake

60% of milking ration

- >28–30 lb cow
- >24–26 lb heifers

Refusal

- 10% daily
- Should be physically same as fresh feed

Fiber Length

- None longer than mouth width
- 10% on Shaker Box top rack–low on bottom box

Consistency!
Goal failure?

Restricted feed bunk space is biggest sin in reducing dry matter intake.
High 1st test milk and growth in production to Peak will fail in >20% of fresh.
Low first service CR and high twinning?

Bunk Space

- 4 in linear water space
- Alley that allow movement
- Feed alley - Crossover
- 13–14 ft
- 10.5 ft between stalls

Cooling
- Soaker
- 36" fan every 24 feet

Room for weakest when they want to eat.

30 in linear bunk space

Cooling

- Soaker
- 36" fan every 24 feet

Room for weakest when they want to eat.

Cooling

- Soaker
- 36" fan every 24 feet

Room for weakest when they want to eat.
Transition Cow Success

**Goal Failure?**
- Increased health issues with short close up stays
- Lower milk on animals with more moves
- Decreased DMI yields Increase day open

**Moves**

**Long Stays**
- Close up
- Room for weakest when they want to eat

**Short Stays**
- Maternity
- >2 days increases Ketosis and LDAs

**Long Stay Fresh**
- 15–20 days
- Large decrease in DMI bad for health and production

**Turmoil which Decreases DMI**
- Weekly entries into pen
- Daily entries into pen

**Steps**
- Preparation
- Total Days
- Body Condition
- Dry Matter Intake
- Bunk Space
- Lameness
- Stillborn
- Low # Pen Moves
- Transition Bed Space
- Disease Testing
- Effective Treatment
- Measure Success
Goal Failure?

- Decreased feed intake and lower milk
- Higher removal
- Increase day open – BIG (20–50 days)!

Sole Ulcers
Standing too long

Digital Dermatitis

Foot Hygiene
Treat and Prevent active lesions

All Foot Lesions increased with Lesion History in Previous Lactation

2–3 immersions per foot
Transition Cow Success

Stillborn

Effect on Reproduction
Increase in days open (88 in one study!)

Effect on Milk Production
>2 pound decrease

Effect on early culling
Mature >2x likely to leave before 14 days in milk
First lact >3x leave herd

Goal failure?
Against goal of low culling
Stillborn decreases milk production
Increased days open

Preparation
Total Days
Body Condition
Dry Matter Intake
Bunk Space
Lameness
Stillborn
Low # Pen Moves
Transition Bed Space
Disease Testing
Effective Treatment
Measure Success
Transition Cow Success

Bed Space–Stalls

Wide to fit cows
- Lunge Space
  - Easy for cows to rise 10 ft against wall
- 54 inches
- 48–50 in milking

Deep Bedded
- 110% of bed space max–but more lame
- Brisket only 4 in above bed

Cooling
- 48–52” fans over stalls every 24’

Goal?
- Increased Sole Ulcers
- Lower early milk production
- Weaker reproduction

Stalls should be designed to provide 12 hr/d lying time for each and every cow
**Transition Cow Success**

**Bed Space**
- Open Lot
- Proper space
- 120 square feet per cow
- Bedded pack
- 700 square feet open lot

**Cooling**
- Soft Sand
- Shade 250 square feet
- Fans over feed and lying area
- Water for cooling

**Goal?**
- Increased Sole Ulcers
- Lower early milk production
- Weaker reproduction

**Preparation**
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Heat Stress and Resting Behavior

Light variation changes cow behavior

Perceived cooling changes cow behavior

Work the cows behavior in your favor
Transition Cow Success

Why Failure?

Why are cows removed?
What is preventing early production?
Why is peak milk not achieved?
Can we find issues that will cause poor production and reproduction before they are visible?

Precalving
- Urine pH 5.8–6.3
- NEFA <10% over 0.4 mEq/L

Calving
- Calcium Mature cows >60%
- NEFA over 0.4 mEq/L
- CMT
- Check for scores >2

Screening
- Daily walk front and back.
- Find cow that looks different.

Post Calving
- Ketone (BHBA) at day 4 and 10
- Less than 10% > 1.2 mg/dl

Testing

Preparation
- Total Days
- Body Condition
- Dry Matter Intake
- Bunk Space
- Lameness
- Stillborn
- Low # Pen Moves
- Transition Bed Space
- Disease Testing
- Effective Treatment
- Measure Success

WWS Global Training Center
Goal Repair
Rescue problem cows
Fight to increase feed intake
Built in a functional approach

Transition Cow Success

Treatment

- Subclinical testing based
- Clinical observation based
- Treat the system—oral best
- What are signs?
- Treat to increase DMI
- Cow designed

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**Goal Measures**

- Low removal rates by 60 DIM
- High 1rst test milk and growth in production to Peak
- These build to achieve great reproduction

**Measures**

**Removal rates by 60 DIM**
- <5% 1rst lact
- <10% 2+ lact

**Clinical first test milk (10–40 DIM)**
- <20% 1 lact under 50 lbs
- <5% 2+ lact under 50 lbs

**Week 4 milks**
- 3+ lact
- 30 lbs higher milk than 1rst lact

**Peak Milk production**
- First lact 75% of 3rd
- Dim at peak
  - 1 = 75–90
  - 2 = 60–65
  - 3+ = 50–60
Why?
Success is to make every cow succeed

Goal
Low removal rates by 60 DIM
High 1rst test milk
Growth in Production to Peak
These build to achieve great reproduction

Every Cow is a Microbusiness
The Dry and Transition periods are areas we strive to prepare cows to perform well in the coming lactation.

- The focus is on improving the environment around the cow to increase milk and farm profits
  - Cow comfort, Cow Care, and Feeding

- We accomplish this through training the People, Proper facilities, a Planned Diet, establishing the Protocols and important Measures.