UnitedFeeds

Pre-Calver Management Programme

The Foundation for Success...

Effective management of the dairy cow during the dry period is essential, since decisions made during this period will have a large effect on milk production and animal health during the subsequent lactation.

PURPOSE OF A DRY PERIOD

- The udder requires a recovery period after a lactation. By having a dry period, the number of secretory cells in the mammary gland is increased, and so too is the production potential for the next lactation.
- Properly nourish the developing calf whilst maintaining cow body condition.
- Boost the immune system of the cow and maximise colostrum quality.
- Avoid digestive, metabolic, and infectious diseases.
- Set the cow up for her next lactation - The dry period should be seen as an ideal opportunity to carry out some routine maintenance. This may include taking time to trim and set up the cow's foot angle, dose against fluke and worms, or treat any residual mastitis infections, with the advantage of avoiding milk withdrawals.

AIMS

- An easy calving
- A healthy viable calf
- High quality colostrum
- A cow free from metabolic diseases, retained placenta etc
- A cow primed for her next lactation
- A fertile cow

TARGETS

Management of the dry cow can be split into 3 sections:

1. **Late lactation**
   Body condition score (BCS) cows 120 days before calving and adjust feed accordingly with the aim to dry cows off at a BCS of 2.75–3.0.
2. **Far off dry period** (8-4 weeks pre-calving)
   Maintain body condition throughout this period by feeding appropriate adlib forage.
3. **Close up dry period** (4-0 weeks pre-calving)
   Maximise intakes and ensure cows are in a positive energy balance. Supplement the diet with 2-3kgs of concentrate from the United Feeds Pre-Calver range.

LATE LACTATION

BCS COWS 120 DAYS BEFORE CALVING

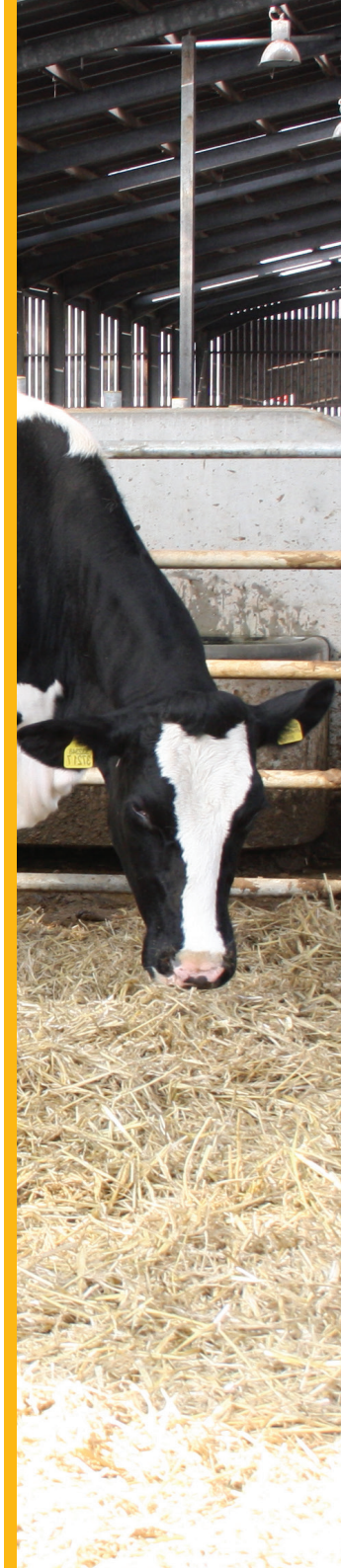
Scoring body condition 120 days before calving will allow time to adjust feeding in late lactation so as to ensure cows enter the dry period with a BCS of 2.75 – 3.0. If cows are over conditioned they should be fed a lower energy diet rather than restricting quantity. Thin cows should be fed extra concentrates to increase BCS.

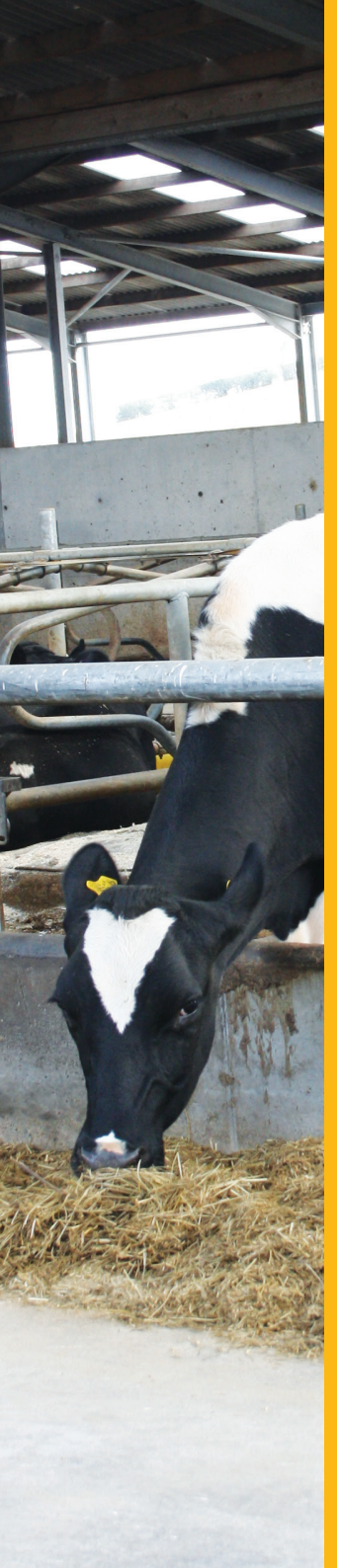
WHY IS BODY CONDITION IMPORTANT?

Research shows that over conditioned cows are more likely to have difficultly calving and are prone to ketosis and fatty liver syndrome. Under conditioned cows have lower production potential and poorer fertility.

UFact

Lactating cows utilise energy 25% more efficiently than dry cows, therefore, changes in BCS should be made during late lactation.





FAR OFF DRY PERIOD (8-4 weeks pre-calving)

MAINTAIN BCS

Cows should be dried off with a BCS of 2.75 – 3.0. The far off dry period can be used to slightly alter BCS but should not be relied upon to make major changes. Preferably, cows should enter this period at the correct condition and be maintained throughout.

Fibrous diets should be fed during this period ensuring forage is available ad lib to maximise rumen capacity.

Dry cow forages should be

- High in fibre
- Low dietary cation anion balance (DCAB) value
- Fresh and palatable
- Available ad lib

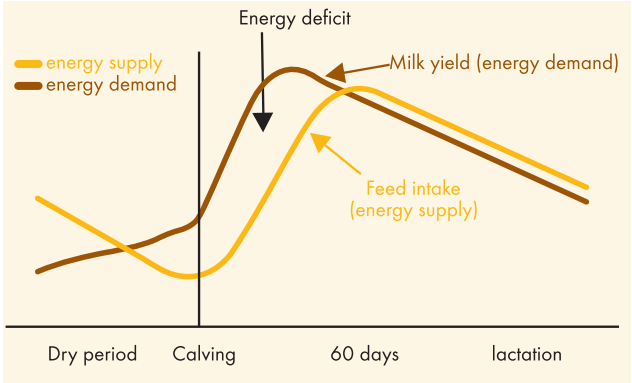
Care should be taken to avoid feeding high potassium forages such as grazed grass, early first cut and late third cut silages. High potassium levels increase the DCAB value of the diet, increasing the risk of milk fever. Ideally, to achieve low potassium silage, neither slurry nor fertiliser containing potassium (K) should be applied during the growing period.

CLOSE UP DRY PERIOD (4-0 weeks pre-calving)

PRIME COW FOR NEW LACTATION

During this period, feed intakes may be depressed limiting the cow's ability to meet energy requirements, meaning the cow enters early lactation in a negative energy balance (NEB) losing body condition. The impact this has on a cow depends on both the energy deficit and recovery rate. NEB begins before calving, as shown on the graph across, however, the consequences are seen after calving.

PRIME COW FOR NEW LACTATION

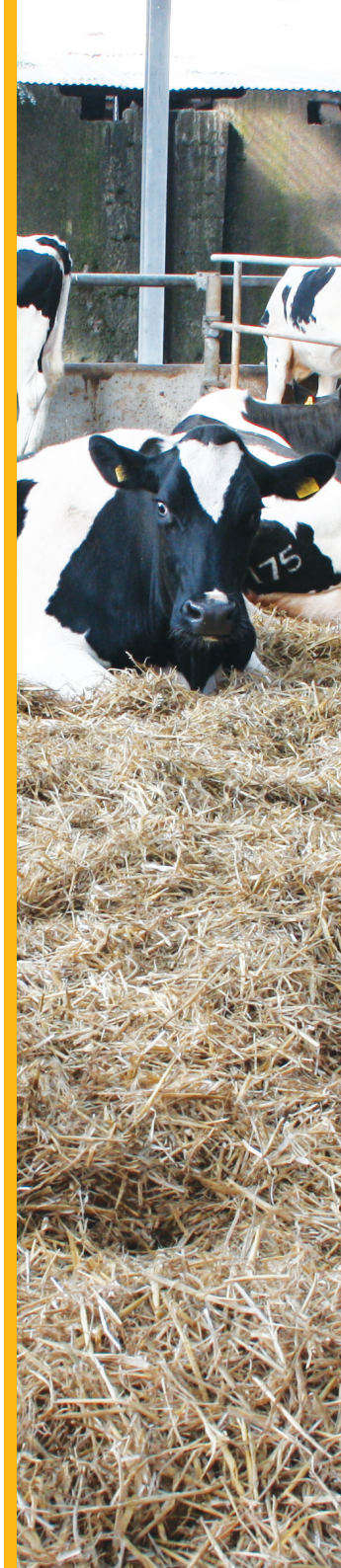


The introduction of a pre-calver concentrate during the close up dry period, such as those from the United Feeds Pre-Calver range, is fundamental for a number of reasons. Firstly, it increases the energy density of the diet so cows approach calving in a positive energy balance. Regardless of BCS, cows should always calve down in a positive energy balance, as those that do will have higher feed intakes in early lactation, with obvious benefits.

Secondly, United Feeds Pre-Calver stimulates rumen papillae to redevelop after a period of reduction, preparing the cow for high concentrate diets fed in early lactation. Furthermore, the United Feeds Pre-Calver range is fortified with the essential vitamin and mineral balance required for a successful calving and trouble-free start to lactation.

FEED SPACE IS CRUCIAL

Provide a minimum feeding space of 3 foot per close up cow. Maximising feed intake is vital throughout the dry period but particularly important in the close up stage. In addition to feed space, forage freshness, palatability and availability are all key drivers of intake.



PRE-CALVER RANGE

...THE FOUNDATION FOR SUCCESS

Our Pre-Calver range has been specifically formulated to meet the many requirements of the dry cow. It is a market leading product with numerous qualities aimed at ensuring a problem free calving and early lactation.

FEATURES

High Cereal Content

Starch in the diet stimulates the rumen papillae to re-develop after a period of rest. This helps to prepare the rumen for the type of diet which will be fed in early lactation, reducing digestive upsets.

Quality Proteins

Included at high rates to meet the demand of the growing calf and drive intakes at a period when appetite loss is common. It also helps prevent the depletion of protein reserves post-calving.

Magnesium Chloride

This anionic salt helps to reduce the DCAD of the diet, decreasing the likelihood of clinical and sub-clinical milk fever arising.

Herd Care Supplement

Supplies organic minerals, essential vitamins and antioxidants. Includes high levels of vitamin E and organic selenium to improve calving ease, reduce the risk of retained placentas and improve calf viability. Designed to optimise immune function and reduce somatic cell count in early lactation.

Yea-Sacc ®

Included to assist with rumen function by stabilising pH, helping to maximise dry matter intake.

Bio-Mos ®

Improves nutrient transfer from cow to calf thus enhances colostrum quality. It also has the ability to bind and remove pathogens such as E.coli and salmonella, reinforcing the cow and calf's natural defences.

LiFT

Supports healthy liver function allowing the cow to efficiently use energy mobilised from body fat in early lactation.

Yea-Sacc® 1026 consistently more

LIFT Liver Function Technology

BIO-MOS® Performs. Promises.

HerdCare

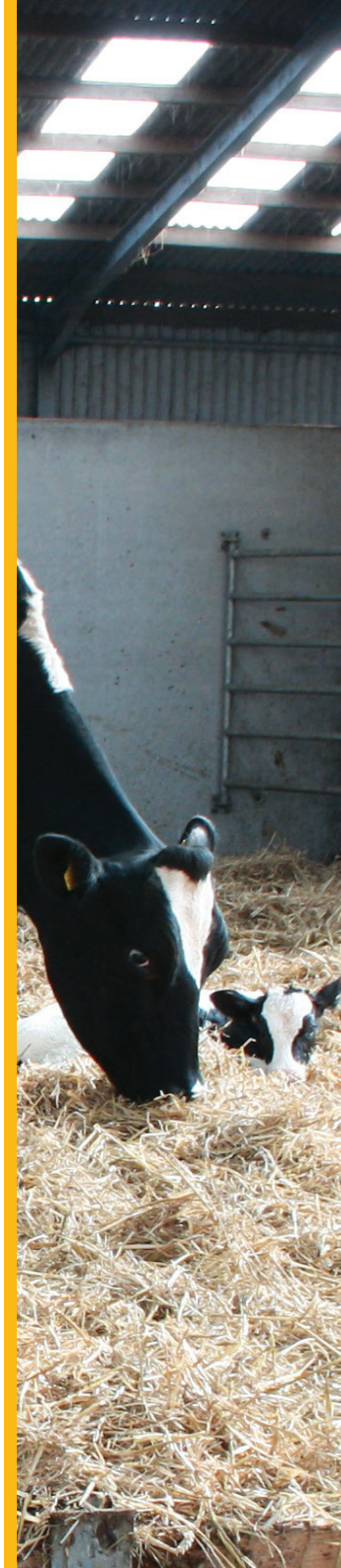
ARE YOU HAVING PROBLEMS WITH ANY OF THE FOLLOWING?

- Retained Cleansings
- Displaced Abomasum
- Ketosis
- Milk Fever

Time to talk to UNITED FEEDS about their Pre-Calver Range

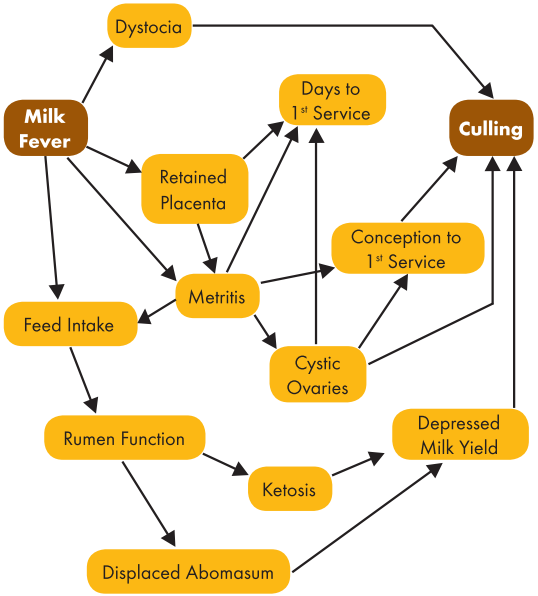
UnitedFeeds

028 9075 9000 | **www.ufeeds.com**



MILK FEVER

Milk fever is a costly condition with detrimental effects throughout the lactation. The target incidence of clinical milk fever is <5%, but even at this rate 20-40% of cows could be suffering sub-clinically. Sub-clinical cases have no visible signs but research has demonstrated that a cow suffering from sub-clinical milk fever is at an increased risk of developing other problems, as illustrated below. For example, they can be up to 9 times more likely to develop ketosis and 4 times more likely to retain cleansings. Although these problems can occur in isolation they all have associated costs and can lead to culling in the fresh calved period.



FERTILITY

Although not commonly associated, poor dry cow management can affect fertility. It takes 2-3 months for an egg to develop in the ovary, hence the egg for the next pregnancy is actually produced during the dry period. Poor management during this time or stress on the cow may affect development of the egg. As a consequence the cow may exhibit poor signs of heat, develop cysts or have poor conception rates.

YEA-SACC®

Incorporating Yea-Sacc into the diet during the dry period ensures that the rumen bacteria stay primed for action to ensure efficient digestion of total feed, preventing entry into negative energy balance. At calving, Yea-Sacc keeps the rumen pH in the effective digestion zone. This allows for greater milk production without any negative effect on the cow's body condition and thereby, aiding good fertility performance. Good rumen function is the driving force to linking profitable milk production with improved fertility.

POST CALVING

UFact

25% of culls occur within the first 60 days of lactation. Good pre-calver management has proven to greatly reduce this figure

THE FRESH CALVED COW

Minimising body condition loss should be the primary aim during the first few weeks of lactation. In order to do so, intakes must be maximised by ensuring fresh food is available at all times and there is sufficient space for all animals. The rumen can be kept healthy by ensuring good quantities of long fibre are included in the ration and that concentrates are built up gradually. Fresh cow management is farm specific, so to discuss the best approach for your farm please contact your local United Feeds Nutrition Adviser.

BODY CONDITION SCORING (BCS) USING THE PENN STATE UNIVERSITY METHOD

WHAT IS BODY CONDITION SCORING (BCS)?

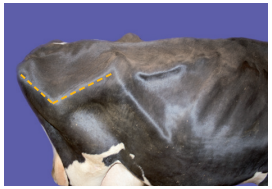
- BCS is widely accepted as a practical means of assessing energy balance.
- Scores range from 1 to 5 in increments of 0.25.
- The change in BCS is more important than the absolute value, therefore scoring should be undertaken regularly throughout lactation.

TARGETS

Stage of lactation	Target BCS
At calving	2.75 – 3.0
60 days after calving	2.5 – 2.75
120 days before calving	2.75 – 3.0
At drying off	2.75 – 3.0

For further advice on how to condition score please contact your local United Feeds Nutrition Adviser.

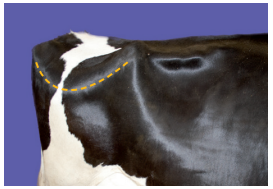
STEP 1



V - angle BCS less than or equal to 3 **follow the YELLOW steps**

Assess the angle between the hooks and pins.

- The first decision you make will divide cows into two groups: those with a BCS less than or equal to 3 and those with a BCS greater than 3.
- This decision may be the most difficult one in the BCS process, especially if the cow is near a 3.0 or 3.25 BCS.



U - angle BCS greater than 3 **follow the BROWN steps**

STEP 2 (BCS less than or equal to 3)

Standing at the rear of the cow, assess whether the hooks are rounded or angular.

Rounded Hooks
- BCS = 3.0

Angular Hooks
- BCS = 2.75 or less

STEP 2 (BCS greater than 3)

Standing at the rear of the cow, assess whether both the sacral and tailhead ligaments are fully visible.

Sacral Visible
Tailhead Visible
- Both ligaments easily seen
- BCS = 3.25

STEP 3

Refine the score '2.75 or less' by evaluating the pins.

Padded Pins
- BCS = 2.75

STEP 4

Now we need to feel the pins to assess the presence of a palpable fat pad (one that is not visible to the eye but can be felt) to refine the score of '2.5 or less'.

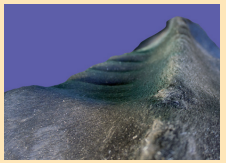
Palpable Fat Pad on Pins
- Fat pad present
- BCS = 2.5

No Fat Pad on Pins
- No fat pad
- BCS = 2.25 or less

STEP 5

Evaluate the visibility of the short ribs.

- Look for the bony ridges of the short ribs.
- Estimate the distance that these ridges are easily seen from the tip of the short ribs to the spine.
- Are the ridges visible half of the distance, three-quarters of the distance, more?



Visible ½ the distance
- Ribs visible halfway to the spine
- BCS = 2.25

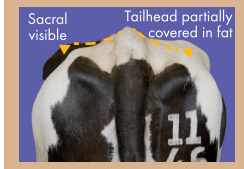
Visible ¾ the distance
- Ribs visible ¾ of the distance of the spine
- BCS = 2.0

STEP 6

Cows with sawtooth spine and ribs are severely under-conditioned and will score less than 2.0.

STEP 3

Continue to assess the visibility of the ligaments. The tailhead ligament will become covered in fat first.



Sacral Visible Tailhead Barely Visible
- Tailhead ligament partly covered in fat
- BCS = 3.50

STEP 4

The tailhead is now completely covered. Assess the visibility of the sacral ligament to determine the score of 3.75 or 4.0 or more.

Sacral Barely Visible
Tailhead Not Visible
- Neither ligament easily seen
- BCS = 3.75

Sacral Not Visible
Tailhead Not Visible
- Neither ligament visible
- Will score 4.0 or more

All bony prominences rounded and covered in fat
- Tailhead buried in fat
- Fat deposits readily seen on rump and legs
- BCS = 5

(DairyCo, 2014)

UnitedFeeds

For further information contact your local
United Feeds Ruminant Nutrition Adviser

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