



DISEASES AROUND CALVING TIME

AIM: TO HELP FARMERS KEEP DAIRY CATTLE HEALTHY BEFORE AND AFTER CALVING

Importance of good feeding during the last months of pregnancy

- Cattle are pregnant for around 283 days (around 10 months).
- The pregnancy is divided into three periods (trimesters).
- Most (75%) of the calf's total weight gain and growth takes place in the last trimester (final 3 months). This is also when the calf's lungs develop.
- It is **very important** to feed cows well in the **last 2 months before calving**. The cow needs energy to keep herself healthy and to help the calf grow.
- Energy requirements for growth of the foetus during these last 2 months of development are similar to the cow producing 2 litres of milk per day!

Diseases affecting dairy cows before and after calving

- The following diseases can occur in dairy cows around calving time (mainly 2-3 weeks before and after calving).
- This is due to a mis-match between the energy and minerals from food and the energy and minerals used to keep the cow healthy, support the growth of the calf (pre-calving) and the production of milk (post-calving).
 - ❖ **Milk fever** (Hypocalcemia) – due to low calcium in the blood after calving
 - ❖ **Ketosis** (Acetonaemia) - due to Negative energy balance (more energy used than is being eaten)
 - ❖ **Grass tetany** (Hypomagnesaemia) – due to low magnesium in the blood.
 - ❖ **Fatty liver syndrome** - excess fat in the liver.

How do I know if my animal has one of these diseases?

- The cow will seem different from normal (see **H01 Are your cattle healthy?** for signs of a normal, healthy cow);
- The timing of disease (before or after calving);
- Changes in behaviour and milk production:
 - **Milk fever:** Muscle tremors, lying down and not wanting to get up, characteristic S shape, impacted rectum.
 - **Ketosis:** Poor appetite, refusal to eat concentrate, reduced milk production, dull / depressed. Smell of ketones around cow's head.
 - **Grass tetany:** Excitability and frightened look in the eyes, overfat cows, reduced milk production.
 - **Fatty liver syndrome:** Too fat at calving, rapid loss of body condition, drop in production, poor appetite, relapsing milk fever.



Cow with milk fever – lying down, not wanting to get up. S shape to the neck

REMEMBER to look out for **reproductive diseases** after calving (*see next page*).



DISEASES AROUND CALVING TIME

Why are these diseases important?

1. Cows that suffer from production diseases are more susceptible to other early lactation conditions such as **retained placenta**, **mastitis** and **metritis**.
2. They **affect fertility** meaning it can take longer to get cows in calf.
3. Treatment costs (vet fees, medicines, labour, etc) are expensive.

What can I do to prevent these diseases?

1. Feeding

- ✓ Ensure your cow is in good enough body condition (score 3 – *see next page*) 2 months before calving. If your cow is milking, this is also the time for 'drying off' the cow.
- ✓ Feed cows according to their production stage, this may mean separating cows into groups (e.g. heifers, milkers, dry cows, etc).
- ✓ Cows should always have roughage (silage, hay, grass) available to keep the cow's stomach working. This includes **during the night!**
- ✓ Feed your cow well throughout her pregnancy. For more information on
 - ☺ Feeding heifers see *F05 Heifer feeding*
 - ☺ Feeding milking animals see *F02 Feeding concentrates*
 - ☺ Annual feeding see *F06 and F06A Feed planning for milk production*
- ✓ Feed in a trough / rack to reduce feed wastage. Feed dairy meal separate to each cow.
- ✓ Ensure feed is well stored and of good quality so its tasty (palatable) for cows to eat.

REMEMBER to ensure cows **ALWAYS** have clean water to drink!

2. Housing

- ✓ Make sure cows are in a clean and dry place 2-3 days before and after calving – this will help to reduce the risk of infection of the uterus.

3. Management

- ✓ Check cows every day for signs of ill health – see *H01 Are your cattle healthy?*
 - ✓ Look at cow body condition every month and adjust feed accordingly.
 - ✓ Cows at calving should be **fit but not fat**, with body condition score about 3.0 (see *H07A* for more information).
- ! Pay special attention to cows in late-stage pregnancy / soon after calving.
- For further information on calf feeding see *Fact Sheet F04*.

*If you have concerns about your cow's health, contact your **local veterinary officer**.*

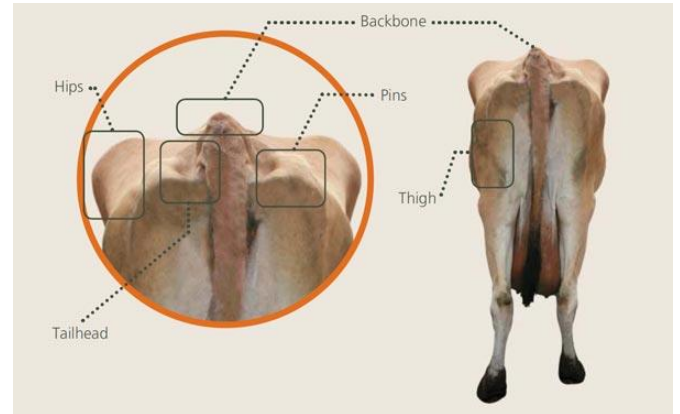
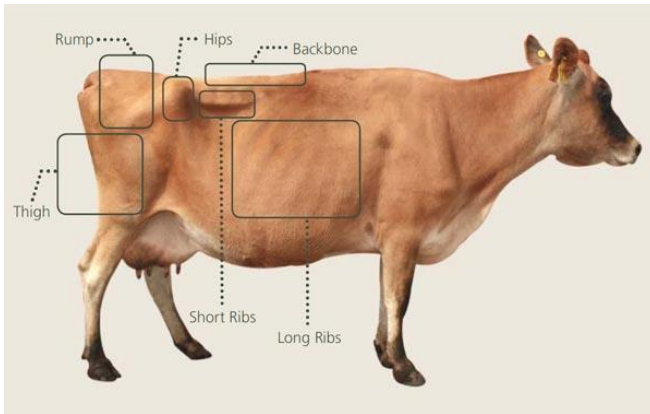
The ZDTP is focused on supporting dairy farmers to improve their productivity, milk quality and linkages to urban markets. The views expressed in this publication are those of the implementers of the programme and do not necessarily reflect those of the New Zealand Government. For further information, please contact ZDTP Country Manager Tania Thomson on tania@primeconsultants.net or +260 96 456 4206.



AID TO BODY CONDITION SCORING

Key areas for assessing body condition score

Photos from <https://www.dairynz.co.nz/animal/body-condition-scoring/how-to-bcs/>



Examples of cows in different body conditions

Photos from <https://www.uaex.edu/publications/pdf/fsa-4008.pdf>

Cattle around score 3 are in the best condition for calving

BCS 1 – The cow is very thin. There is very little or no fat between the skin and the bones.

BCS 2 – The cow is thin.

BCS 3 – The cow is in good condition.

BCS 4 – The cow is fat

BCS 5 – The cow is too fat.

BCS = 1

Deep cavity around tailhead. Bones of pelvis and short ribs sharp and easily felt. No fatty tissue in pelvic or loin area. Deep depression in loin.

BCS = 2

Shallow cavity around tailhead with some fatty tissue lining it and covering pin bones. Pelvis easily felt. Ends of short ribs feel rounded and upper surfaces can be felt with slight pressure. Depression visible in loin area.

BCS = 3

No cavity around tailhead and fatty tissue easily felt over whole area. Pelvis can be felt with slight pressure. Thick layer of tissue covering top of short ribs which can still be felt with pressure. Slight depression in loin area.

BCS = 4

Folds of fatty tissue are seen around tailhead with patches of fat covering pin bones. Pelvis can be felt with firm pressure. Short ribs can no longer be felt. No depression in loin area.

BCS = 5

Tailhead is buried in thick layer of fatty tissue. Pelvic bones cannot be felt even with firm pressure. Short ribs covered with thick layer of fatty tissue.

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