

Dry Cow Management: Body Condition

Getting the best out of your dairy herd means planning ahead. The dry period is often overlooked but is a critical factor in setting your cows up for success. The plan should focus on building body condition before dry off, feed budgeting for the dry and transition period then early lactation the following year and don't forget about your young stock.

If cows are under condition at calving and have not had an adequate transition period they will be predisposed to metabolic issues, lower milk production peak, poor lactation persistence and reproductive performance.

Your aim should be to achieve a body condition score of 5 for cows and 5.5 for heifers by the end of lactation with a focus placed on heifers and lighter cows well before dry off.

These lighter cows can be approached in a number of ways.

- i. Allocating more concentrate in the bail if that is achievable with dairy technology
- ii. Milking once a day in later lactation,
- iii. Early dry off or
- iv. Running a separate herd in larger scale operations and working to build condition with more quality dry matter on offer.



Keep in mind the weight gain efficiency of a dry cow is far less than in a lactating cow (around 25%). As a general rule a lactating cow requires 34 megajoules of dietary metabolisable energy for 1 kg of weight gain and 58 megajoules of metabolisable energy for a dry cow. The conversion efficiency of dietary metabolisable energy to body tissue (weight gain) is around 75% in a lactating cow so we need to factor in additional energy. However the conversion efficiency in a dry cow is much less at 59%.

Dietary ME requirements for 1kg body condition LACTATING COW $34\text{mj}/0.75 = 45\text{ mj}$ or around 4kg quality DM compared to DRY COW $34\text{mj}/0.59 = 58\text{MJ}$ or around 5kg of quality DM.

Therefore, it is much more efficient to get the herd up to the target body condition score before dry off and then offer a maintenance diet in the far off dry period.

When focusing on body condition targets generally we always work on herd averages but keep in mind dry matter requirements will vary across some herds more than others so it is good to work on the higher end and allow more dry matter overall.

As an example there is 42kg in a body condition score of an average Holstein cow but only 26kg for a jersey. If the herd are assessed three months out from dry off and need to gain 1 body condition score (BCS) we need to work out how many megajoules of metabolisable energy is required to gain 1 BCS and add this to maintenance, walking distance, foetal energy demand and production.

For example $34\text{kg (cross bred)} \times 34\text{mj}/0.75 = 45\text{mj/me}/90\text{ days} = 17\text{mj/me}$ addition energy to gain a condition score by dry off. This is equivalent to 1.4kg of concentrate.

For more information on body condition scoring read the links provided in our resources and links section.

Speak to one of our nutritionist to see how we can help you to maximise your dry cow period

