

Dry Cow Management: Dry Period Planning

Are you giving your dry cows a long enough break? It is recommended to give cows a dry period of 6 - 8 weeks to allow adequate rest and mammary gland secretory tissue break down (involution). Also have a herd health plan in place before dry off with your veterinarian for vaccinations, drenches, injectable trace minerals, dry cow therapy etc.

A good dry cow plan should include taking stock of all available fodder including crop estimates, silage and hay tonnages. From here you can work out if you have the quantity and quality of feed on hand and then fill in the gaps. It is wise to cost out available feed options not only on a dry matter basis but in terms of energy and protein to ensure you choose the most cost effective options. Feed testing is a good tool to gain an understanding of the feed quality you have on hand and if purchasing fodder weighing up the most viable feed option (Please refer to our Feed Testing brochure for more information). Keep in mind any cows going off farm on agistment are appropriately fed so there are no surprises. If grouping cows, it makes sense to split the herd into younger/lighter cows and more mature or optimal condition cows. The lighter herd can then be preferentially fed.

The key to a successful dry period is adequate dry matter intake! This will prevent the cow from mobilising body tissue and will keep the rumen functioning. Keep an eye out for heavier cows as well as the lighter ones. Throughout lactation rule of thumb is to provide 3-4% of body weight dry matter intake. However a dry cow can only consume around 80% of this and intake will depend on the NDF (neutral detergent fibre level)* of the diet.

*Neutral Detergent fibre (NDF): essentially the proportion of the product that the animal can utilise

A cow can consume 1.2% of body weight in NDF x 0.8% in the dry period.

The average target NDF level for a dry cow is 36-40% therefore between 12-15kg of DM needs to be offered depending on weight of the group. If poorer quality high NDF forage is offered the cow will have restricted dry matter intake and energy and protein requirements will not be met.

*For example 550kg x 1.2% of BW (NDF req) x 0.8/38% overall diet NDF = 14kg DMI.
However if the NDF level is 45% the cow could only consume 12kg.*

The dry cow needs to be fed sufficient energy and protein for maintenance of body weight, foetal demand and additional energy for body condition if lower than desired. We also need to factor in additional energy for wet, cold, muddy conditions. Cow comfort is important and ideally cows would have a stand-off/loafing area with access to adlib effective fibre such as cereal or quality pasture hay rather than standing in mud or on a crop which will place stress on the cow. Also remember there can be a large percentage of wastage in these conditions so you would need to factor in for example 15-25% additional fodder in some systems.

Maintenance energy of between 90-100MJ/ME is the minimum requirement which may be achieved quite easily using cereal hay and/or other lower quality forages. However, the quality of hay typically used for dry cows does not supply the cow with adequate levels of protein. The loss of protein reserves will not be obvious at the time, but will impact the following lactation in terms of optimal peak milk production. A diet of 12% crude protein is the minimum acceptable with 14% crude protein preferred.

Pasture, cereal and pasture hay and silage, brassica crop or alternative by products/supplements can be used to meet energy and protein demand if balanced appropriately. When grazing crops are part of the dry cow diet, make sure cows are transitioned slowly to prevent any rumen upsets. All of the hard work can be undone quickly if cows are not transitioned onto crop safely with adequate effective fibre. For example high quality feed sources such as brassica crops are low in NDF so adequate effective fibre is critical. Aiming for a minimum 36% and maximum of 40% NDF and >30% effective fibre will maintain rumen function but not be so high that the intake is restricted and energy/protein requirements are not met.

As the quality and mineral nutrient profile of fodder or crops will vary, dry cow licks are a great way to ensure cows have access to macro and trace minerals at all times.

It is also a good investment to feed test your transition diet feed sources to ensure the close up cows receive adequate nutrition three weeks prior to calving. The transition diet should be carefully balanced to minimise herd health issues and set the cow up for a productive lactation (Read more on our transition cow management brochure).

**If you have any questions or require assistance with your dry cow management
please ask we are here to help.**

