Dairy Australia

The impacts of your feeding decisions

While it is important to provide optimum nutrition to your stock for growth, pregnancy and milk production, with unfavourably seasonal conditions, it may be tempting to cut corners and feed less to your herd.

In a feed shortage, it is better to fully feed less animals rather than a larger herd at restricted levels of feed intake. Regardless of the stock type, underfeeding animals only transfers the problem into the following season.

Reducing feed to young stock will likely cost much more in the long run. In addition, compromising on dry cow feeding will strip condition off these cows and will result in more empty cows after breeding.

Key messages

Underfeeding animals can have implications beyond the current season

Fully feed fewer animals

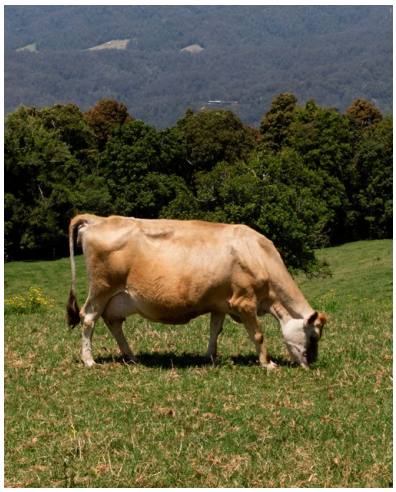
Calves and heifers	You may decide to	Consider the implications
	Go for free choice palm kernel extract (PKE) meal and keep the grain/concentrate up to them.	This diet is likely to be nutritionally unbalanced and too low in effective fibre for healthy rumen function unless long fibre sources are also fed.
	Accept a lower growth rate just for this year, assuming they will compensate down the track.	Smaller heifers will produce less milk this year and in years to come. They are also far less likely to get back in calf during their first lactation, and therefore are more likely to be culled. This may have big financial implications for several years as these animals move through the milking herd.
	Rear a smaller number of better quality animals.	

Weaning to 12 months - Depending on size, this group needs 40–80 MJ ME, 15–17 per cent CP
12 months to calving - Depending on size, this group needs 80–100 MJ ME, 13–15 per cent CP

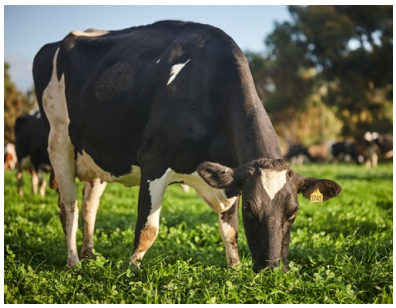
Bulls	You may decide to	Consider the implications
	Worry about them later.	Don't forget these guys. More empty cows are likely if the bulls aren't kept in good body condition. This may result in the effects of a poor season this year being felt next year which should always be avoided.
	Reduce your bull numbers to save on feed and use more AI strategically for replacements.	This will increase the overall cost of AI but removes the risk of infertile bulls due to poor nutrition. Use beef semen or cheaper conventional semen on cows not earmarked for breeding replacements. Remember more resources will be required for heat detection if using less bulls.

(700 kg, no liveweight change) This group needs about 80 MJ ME, 12 per cent CP

DELIVERING for DAIRY

Dry cows	You may decide to	Consider the implications
	Feed them a little less than you normally would and allow them to strip off some body condition before calving.	You need to feed 35 MJ ME to put on a kg of bodyweight, but you only get 28 MJ ME back when the cow mobilises it. That's like paying a 20 per cent 'interest rate'. Cows in poorer body condition at calving will have low body reserves and take longer to get back into positive nutrient balance. These cows will be at increased risk of metabolic problems (e.g. milk fever, ketosis) and mastitis, produce less milk and have poorer in-calf rates, at a time when optimal health, milk production and fertility are essential.
	Not worry too much about their transition feeding management in the 2–3 weeks before calving.	Poor transition management will result in even greater metabolic problems in fresh/early lactation cows, higher risk of acidosis and abomasal displacements, and even greater impacts on milk production and fertility.
	Both of the above strategies run the risk of dragging a problem this season into next year and even further down the track. A large rise in empty cows can throw a well-tuned farm system off course for several seasons and should always be avoided. In a tough season, try and 'limit the damage to one year'.	

(550 kg, no liveweight change). This group needs about 90–100 MJ ME, 11–12 per cent CP

Milkers Cows in early lactation	You may decide to	Consider the implications
	Increase energy intake of early lactation cows by offering more grain/concentrate in the dairy.	Cows' rumens may not be adapted to handle that much grain/concentrate, and the risk of acidosis will be increased. Smaller cows and first calvers are at greatest risk. Monitor these animals closely and ensure they have equal access to feed.
	Place cows in a sacrifice paddock to feed grain/concentrates and other supplements, in order to slow the paddock rotation and build a pasture feed wedge	Effective fibre levels and total energy intakes may not be sufficient to maintain production and prevent body condition loss whilst the pasture feed wedge is being built. Ensure diet and daily feeding rate are adequate.
(550kg, 30L, 3.8 per cent F, 3.2 per cent P, -0.2kg per day) This group needs about 220 MJ ME*, 16–18 per cent CP	Put cows into paddocks before pasture has reached the three-leaf stage	Pasture still at the 1–2 leaf stage will provide cows with less NDF and less effective fibre. The pasture will take longer to recover from grazing and you'll grow less feed. Make sure pasture is an absolute minimum of 2 leaves before grazing.
Milkers **Cows in mid lactation**	Use silage supplies to feed this group	
	Give cows sudden, unrestricted access to young, lush pastures or forage crops	Risk of nitrate poisoning. Avoid feeding high-risk plants to hungry cows. Delay feeding until plants are more mature. Dilute high-risk plants with hay or other low nitrate forages.
	Buy hay from other regions	Ensure you acquire a feed test prior to purchasing. Be mindful of the risk of introducing weeds to your property. Buy feeds from reliable sources and feed all hay out in one designated paddock if possible. Remove any weeds before they set seed.
(550kg, 25L, 4 per cent F, 3.4 per cent P, +0.1kg per day) This group needs about 200 MJ ME*, 14–16 per cent CP	Use high fibre by-products where the history of agchemical use is unknown	Risk of chemical residues. Buy feeds with a Commodity Vendor Declaration. Introduce new feeds gradually. Feed in limited proportions of the diet e.g. < 20%.

Milkers **Cows in late lactation** 	Accept a lower body condition score target at dry-off	Milk production and in-calf rate will suffer next lactation unless body condition is made up during the dry period. The cow is more efficient at converting feed into body condition while she is still milking than when she is dry.
	Dry the cows off a bit early to save feed	Drying cows off early will mean less milk income to pay for the feed they need. However if cows are doing less than 10 L/ day and/or are have a low body condition score (< 4.5), they can benefit from a longer dry period.
	Milk mid-late lactation cows once a day (OAD)	OAD milking of under-conditioned cows in late lactation will help these animals to recover some condition before dry-off.
(550kg, 19L, 4.2 per cent F, 3.6 per cent P, +0.1kg per day) This group needs about 180 MJ ME*, 12–14 per cent CP	**MJ ME = megajoules of metabolisable energy. CP = crude protein.** *** Additional energy may be required for walking activity and to cope with adverse weather conditions.**	

For further information

Please visit **dairyaustralia.com.au**

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