

Additional energy inputs needed for BCS gains

It takes more feed energy inputs to put on a condition score when a cow is dry than when she is lactating because energy is used less efficiently during the dry period. Every kg of body weight gain requires about 42 Megajoules Metabolisable Energy (MJ ME) in a lactating cow and 58 MJ ME in a dry cow.

Bigger cows need more MJ ME to put on a condition score, and this energy input increases as BCS increases.

Cow's liveweight	Additional MJ ME per day to increase BCS from 4 to 5					
	in 30 days		in 45 days		in 60 days	
	Lactating cow	Dry cow	Lactating cow	Dry cow	Lactating cow	Dry cow
400 kg (Jersey)	49	67	33	45	25	34
475 kg (Friesian X Jersey)	58	80	39	53	29	40
550 kg (Friesian)	68	94	45	63	34	47
650 kg (Holstein-Friesian)	80	110	53	74	40	55
750 kg (Large framed Holstein-Friesian)	91	127	60	85	45	64

(Source: CSIRO (2007). *Nutrient requirements of domesticated ruminants*)

Example:

If you wanted to put half a condition score on your 550kg Holstein-Friesian lactating cows in the last 45 days before drying-off, you would need to feed each of them an additional 23 megajoules of metabolisable energy per day.

If feeding a concentrate with an energy density of 11.5 MJ ME / kg DM, you would therefore need to feed each cow an extra 2 kg DM extra (or 2.2kg as fed of extra concentrate @90%DM).

Use energy/protein dense supplements to provide the extra energy within the cow's daily food intake limits.

Seek help from an adviser to design a balanced diet for the desired BCS gain.

