

DEVENISH™

Beyond Nutrition



Body Condition Scoring



Body condition score

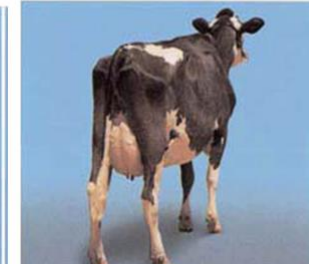
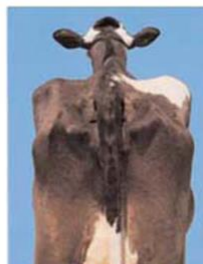
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Score 1



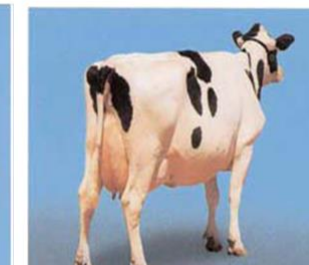
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Score 2



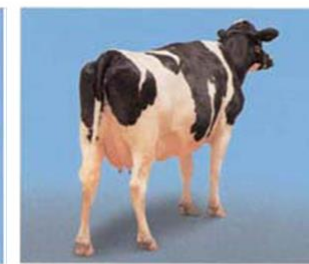
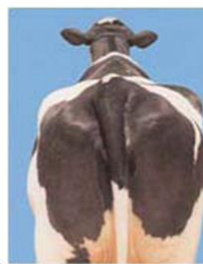
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Score 3



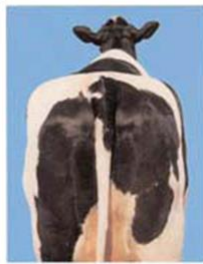
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Score 4



5

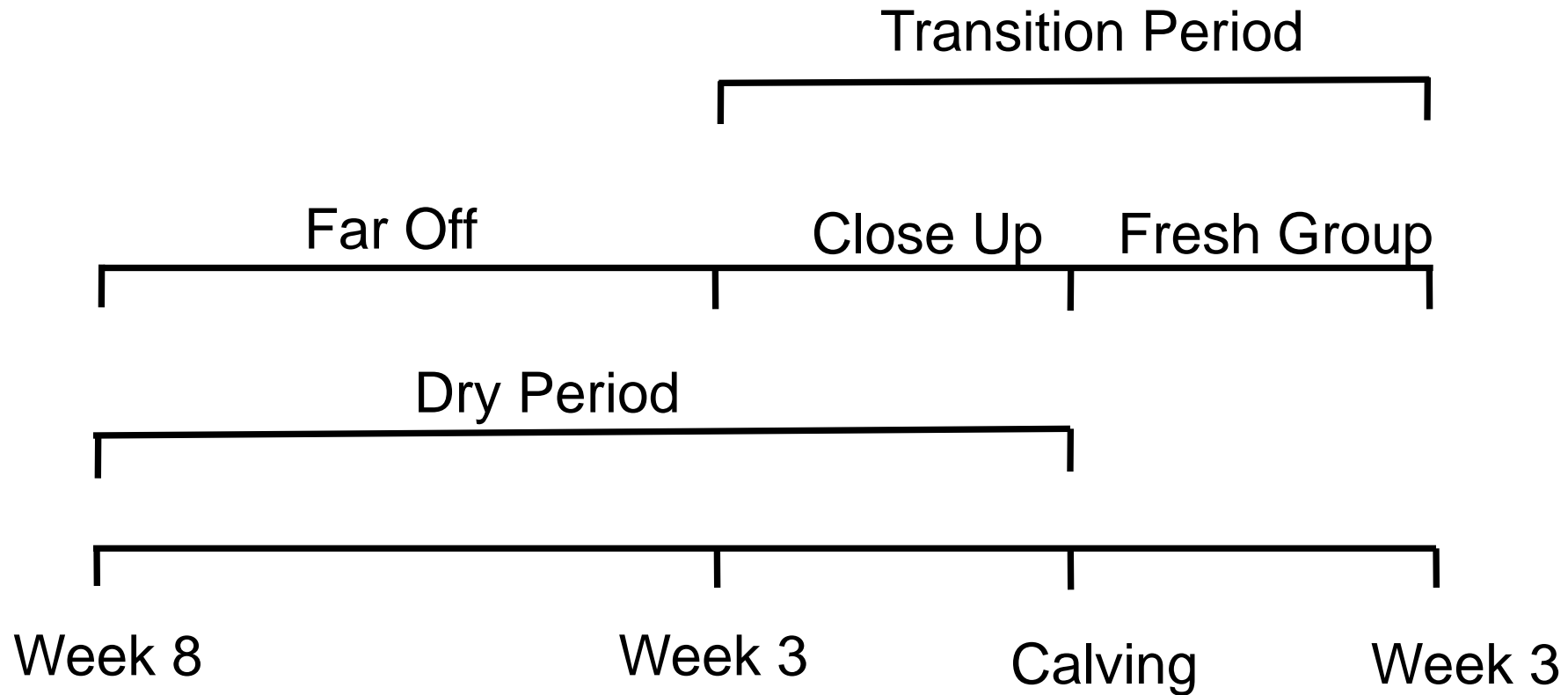
Score 5



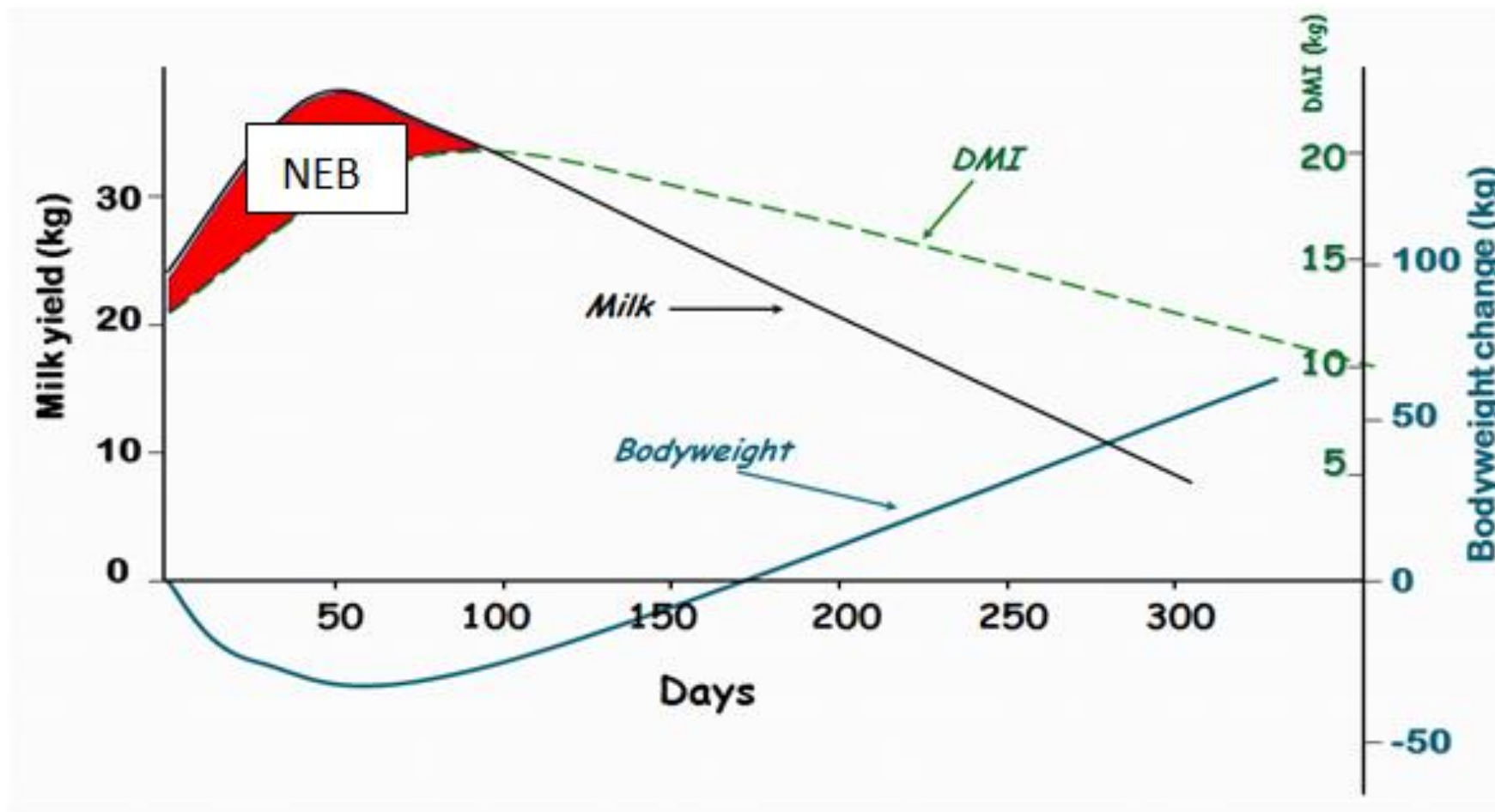
Elanco

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Transition Period Overview



Dairy Cow Gestation-Lactation Cycle



Target body condition score

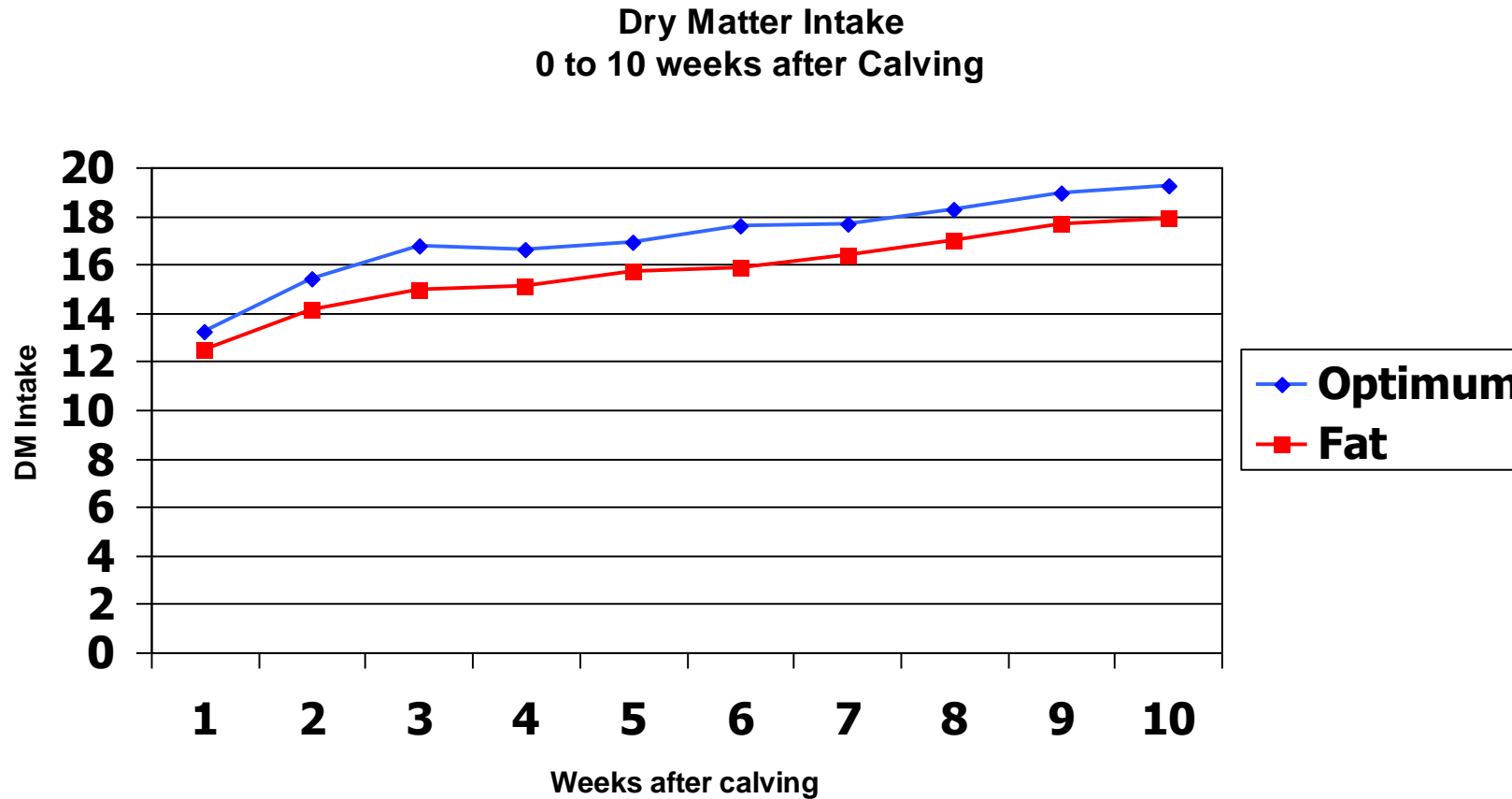
Stage of Lactation	BCS Target
Drying off	2.75
Calving	3.00
Breeding	>2.50
150 Days in Milk	2.75
200 Days in Milk	2.75
250 Days in Milk	2.75

(Mulligan et al., 2006)

Body Condition Score

- BCS at calving effects
 - Milk Yield
 - Milk Quality
 - Fertility
 - Health
 - Metabolic Disorders

Effect of Body Condition Score at calving on Dry Matter Intake



Condition Score at calving and Milk Composition

	Thin	Optimum	Fat
BCS at calving	<2.5	3.0	>3.5
Milk Fat %	3.78	3.83	3.95
Milk Protein %	3.35	3.48	3.32

Source: ARINI 1997

The Effects of Cow Condition Score on Fertility

Condition loss post calving	Conception to 1 st service
0 – 0.5	65%
0.5 – 1	53%
Greater than 1	17%

Source: Ferguson

Body Condition Score Consequences

Over-condition cows

- Loose more condition postpartum
- Reach peak DMI later
- Greater incidences of metabolic disorders
- Poor reproductive performance

Thin cows

- Less energy stores
- Less likely to reach genetic potential for peak milk yield

Managing Early Lactation Cows

Intake Intake Intake

1. Maximise DMI
 - Ensure best forage goes to milking cows
 - Ensure ad-lib feeding
 - ~5% refusals
2. Maximise Energy Density
 - Feed high energy concentrate
 - Lead feed cows in early lactation (100 days)
3. Supply the cow with enough Protein

Nutrition early lactation dairy cows

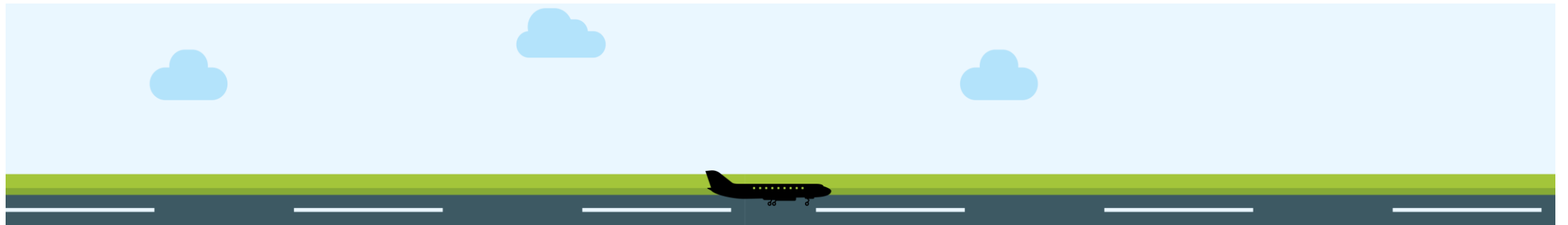
- Concentrate allowance for grazing cows in Early lactation with varying grass intakes and milk yield

		<u>Milk Yield kg/day</u>							
		20	22	24	26	28	30	32	34
<u>Grass DM intake</u> <u>kg/cow/day</u>	8	7.4	8.4	9.4	10.4	11.4	12.4	13.4	14.4
	9	6.3	7.3	8.3	9.3	10.3	11.3	12.3	13.3
	10	5.2	6.2	7.2	8.2	9.2	10.2	11.2	12.2
	11	4.1	5.1	6.1	7.1	8.1	9.1	10.1	11.1
	12	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
	13	1.9	2.9	3.9	4.9	5.9	6.9	7.9	8.9
	14	0.8	1.8	2.8	3.8	4.8	5.8	6.8	7.8
	15	0.0	0.7	1.7	2.7	3.7	4.7	5.7	6.7
16	0.0	0.0	0.6	1.6	2.6	3.6	4.6	5.6	

Fertility: what we want to achieve



Fertility: short runway!



Plane does not take off



Success Story



Replacement Heifer target rates for 2 year old calving

	Month	% Mature Liveweight	Holstein	New Zealand /Br. Friesian	Jersey X Holstein Fr.
Birth	February		41	38	34
6 wks	March		63	56	56
3 months	April		90	80	80
6 months	July	30%	181	148	138
8 months	September		236	170	160
9 months	October	40%	266	210	196
12 months	February		352	267	250
15 months	May	60%	400	315	295
19 months	September		499	425	390
21 months	November		550	470	437
24 months (pre calving)	February	90%+	608	525	490

Source: Teagasc

Dr Morgan Sheehy
Ruminant Director
Devenish

086 8276506

morgan.sheehy@devenish.com

