Rationing and Winter Diets for Suckler Cows
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Introduction

Nutrition in the suckler cow is geared towards achieving the correct condition score at key times of the year in order for good calving performance, calf health and growth and subsequent cow fertility. Meeting body condition score targets through efficient feeding is important as it has been shown that excessively thin or fat cows produce poor milk yields, under-weight calves and have difficulty getting back in calf again. Forage quality, cow condition score and approximate liveweight must be known so that rations can be produced to accurately meet the protein and energy requirements of both dry and lactating cows.

Target Body Condition Scores for Suckler Cows

Condition should be monitored throughout the year at weaning/housing, 60-90 days before calving and at calving. Targets for spring and autumn calving cows are shown below:

Stage	Spring Calvers	Autumn Calvers
Calving	2.5 - 3 (3 for 1st and 2nd calvers)	3
Service	2.5	2.5
Housing/Weaning	3 - 3.5	2.5 - 3

Management Considerations

Target forages available to various groups of stock. Priority should be to cows with calves at foot as they have higher energy requirements (almost double!) for milking compared to dry cows. If condition of dry cows is variable, group cows early in the winter to give time for condition score adjustment, with the aim of having cows in their target condition score at least 4 weeks from calving. If you cannot practically separate and feed thin, normal or fat cows, even taking out the thin cows (< score 2.5) and first/second calvers to give better quality forage or some concentrates will help.

Nutrient Guidelines and Rations for 650kg Cows

Stage	Dry Matter Intake (kg/day)	Energy (ME MJ/day)	Crude Protein (% dry matter)
Early Lactation	12-14	120-130	12
Late Lactation	9-11	85-95	11
Dry	10	75-80	9

Autumn Calvers with Milk Yield 8-10kg/day

Grass Silage Quality	Forage Feed level	Concentrates (kg/head)
Good (10.5 – 11MJ/kg DM)	Ad lib	1-2
Poor (9-10MJ/kg DM)	Ad lib	3-4

If protein level in silage is less than 12%, the concentrate must include a source of protein and not just barley. If silage is 10% protein, then include either 1kg wheat dark grains or 0.75kg rapemeal in the concentrate portion. Alternatively, 2kg pot ale syrup or draff inclusion (10kg) will ensure sufficient protein. This will aid milk yield and therefore calf growth.

Cows should not be less than condition score 2.5 at service for good fertility. A constant feeding rate should be maintained during the mating period and for 6 weeks after to

minimise embryo loss. Six weeks after mating, cows in good condition (>3) can be allowed to lose a little condition before turnout (target 2-2.5).

Spring Calving Dry Cows

Manage thin cows (condition score <2) at weaning with ad lib good quality grass silage (>10.5ME) or poorer quality silage supplemented with 1-2kg of high energy concentrates. Feed to increase condition, with the aim of putting on 0.5kg/day over 3 months which is roughly half a condition score to achieve the target of 2.5 at calving.

The danger with dry cows is being fat at calving, if they have access to ad lib silage in the winter. However, they can run the risk of being deficient in protein if silage is low in protein and straw is included to limit weight gain. Rumen function is compromised if crude protein content falls below 9% on a dry matter basis. Rumen microbes require a minimum protein level of 9% to digest feed efficiently.

Example rations for thin, normal and fat cows 12 weeks from calving (based on silage at 25% dry matter, 10ME and 12.5% protein on a dry matter basis:

	FAT (score >3, losing -0.5kg/day)	NORMAL (Score 3, no weight change)	THIN (score <2.5, gaining 0.5kg/day)
Silage	17	25	32
Barley	0	0	1
Straw	5	4	2
Minerals	0.1-0.15kg	0.1-0.15kg	0.1-0.15kg

Minerals should be fed on a daily basis to suckler cows. Consider using a higher spec (pre-calving mineral 4-6 weeks before calving) to improve colostrum quality, calf health and vigour (selenium, vitamin E and iodine are important pre-calving). If feeding a high straw or wholecrop diet with little or no silage, higher levels of minerals will be required.

Take Home Messages

- Get your silage analysed so quality is known. Take advice on rations so that dry cows calve at their target condition score. High energy silages are great but not so appropriate for dry suckler cows. Forages with good protein levels can be fed with straw to fill cows up and meet requirements. Watch low protein, high energy silages, especially if adding straw. Supplementary protein will be necessary for rumen function.
- Target your forages to the different groups of livestock on your farm. Poorer quality forage can go to dry cows, with better quality forage for lactating cows, 1st calvers and growing heifers.
- Management is important – start planning early and split dry cows according to condition for feeding. Separate thinner cows or 1st calving heifers, which are still growing, for a higher energy ration.
- For lactating cows make sure they do not lose too much condition after calving and that they are on a rising plane of nutrition 6 weeks before bulling for good fertility.
- Use an appropriate mineral supplement depending on the time of year and forage quality.