



Cow Nutrition May 2021

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Nutritional Goal

- Have cows calving at Body Condition Score (BCS) 3.0 to 3.25.
- Minimize BCS loss from calving to breeding to a max of 0.5 BCS.
- Cows must be increasing in BCS during the breeding season.
- Ideally cows need a minimum BCS of 2.75 at breeding.
- Cows that are fed well during the breeding season have higher submission rates, higher conception rates and lower levels of embryonic deaths.

The current challenge for many farmers is to provide an adequate dry matter intake to prevent body weight loss. The loss of body condition will delay return to oestrus and its expression. A missed heat can cost as much as €150 (Ref; Teagasc) and this makes it critically important to bridge the energy gap. Reducing empty rates from 15% to 10%, generates a net return of 1 cent per litre. The target infertility rate is 5 to 10% (as low as possible).

Concentrate supplementation has a key role to play. The concentrate should supply the following:

- A balanced high energy profile including by-pass starch
- High in digestible fibre
- High spec minerals and vitamins
- Magnesium to help prevent grass tetany
- Inclusion of yeast and buffer to match feed rate

The quality of grazed grass will have a large impact on dry matter intakes and milk solid production. Slow growth has stagnated the early growing season, making measurement a key tool in matching supply and demand. We need to make sure cows have enough grass by understanding ideal covers, allocating adequate area per day, and keeping track of growth rates.

In springs like 2021 with low grass growth rates farmers have received excellent financial and animal performance rewards from adjusting concentrate levels and feeding high quality bale silage/maize silage where needed.

The following table gives the optimum concentrate feed levels for specific grass dry matter intakes to ensure cow energy balances are met in ideal grazing conditions (sun shining and not cold). When weather conditions are sub optimum and if cows are less than target body condition score extra will have to be fed

Milk Yield (Kg /day)

Grass Intake (kg DM/day)	22	24	26	28	30	32	34
13	2.7	3.6	4.9	5.9	6.9	7.9	8.9
14	1.5	2.5	3.4	4.8	5.8	6.8	7.8
15	0.4	1.4	2.3	3.7	4.7	5.7	6.7
16		0.3	1.2	2.2	3.1	4.6	5.6
17			0.1	1.1	2	3	3.9

The most common error made is an overestimation of the grass intake. If you overestimate grass intake, cows will not be fully fed and will lose BCS. The most vulnerable cows are the 1st calvers and the high yielders.

If phosphorus deficiency is suspect (eating clay or stones) please contact us and we can add extra phosphorus to match the phosphorus level in your forage to meet the animals' requirements.

TIPS TO PREVENT BUTTERFAT DEPRESSION

- Avoid paddocks that have very low covers – low fibre and high oil content reduce butterfat %
- Follow the cows with fertiliser as opposed to blanket spreading – high nitrogen grass is high in oil
- Use of mineral buffers - proven to reduce durations of lower rumen pH and increase fat yields in grazing cows
- Feed a partial TMR or buffer feeding may aid in rising fat%
- Consider high inclusions of beet pulp and soya hulls - these help stabilise rumen pH
- Cow genetics is very important - farmers should focus on looking at bulls with higher fat PTA and higher fat kilos

MONITORING THROUGHOUT THE BREEDING SEASON

- Protein % in the tank – A drop in protein % indicates energy intakes are declining.
- Milk Volume in the tank - A volume drop indicates energy intakes are declining – milk yields should not decline by more than 2.5% per week.
- In inclement weather, grass intakes and utilization are reduced, hence cow's intakes are reduced therefore extra concentrate supplementation is required in such situations.