



# Reduce Feed Costs & the Impact on the Environment

By maximising the intake of good quality grass and extending the grazing season farmers can reduce emissions produced and the requirement for concentrates, saving money on feed costs and reducing the impact on the environment.

## 1. Maximise Grass Intake

- Aim for 70% of feed to be grazed grass.
- Implement a rotational grazing management system.
- Use concentrates only as a supplement to grass.

## 2. Extend the Grazing Season

60-65% of the farm should be closed by the end of the first week of November.

### Cost Benefits

For every extra days grazing in the autumn it is worth on average €1.80/cow/day.

- > Lower cost of grazed grass compared to silage or concentrates.
- > Less silage production required.

### Environment Benefits

For every 10 day increase in the grazing season there is a 1.7% reduction in GHGs.<sup>1</sup>

- > A shorter housing season means less emissions are produced from slurry storage and spreading.

## 3. Reduce Crude Protein% of Concentrates

### Crude Protein%

A measure of protein in feed. Excess protein in an animal's diet is excreted as Nitrogen and Ammonia which pose a risk to water, air, emissions and can be a wasted cost.

- Dairy cows have an average crude protein requirement of 15 to 17%.
- High quality grass has a crude protein content of 18% during the grazing season.
- Using concentrates only as a supplement to grass and choosing feed with a lower crude protein content reduces Nitrogen losses.

### Cost Saving Tips When Buying Concentrates

- Shop around. Compare the price of buying straights and home mixing rather than buying standard concentrates.
- High crude protein concentrates are not necessarily high in energy. The energy content of a 14% crude protein concentrate could be higher than an 18% crude protein concentrate.

<sup>1</sup> Teagasc 2020 Review of the Influence of Chemical Nitrogen Application Rate, Soil Type and Agroclimate Location on Grass Production, Feed Budgets, Nitrogen Use Efficiency, Environmental Impact and Farm Profitability Retrieved from: <https://www.teagasc.ie/publications/2020/review-of-the-influence-of-chemical-nitrogen-application-rate-soil-type-and-agroclimate-location-on.php>

## 4. Improve Silage Quality

Cutting silage earlier in the growing season (mid to late May) ensures higher quality Dry Matter Digestibility (DMD) silage with higher crude protein content reducing the need for concentrates.<sup>2</sup>

Growth Stage	Crude Protein Percentage
Leafy young grass	> 15%
Middle stage growth	12 – 15%
Mature stemmy grass	9 – 12 %

## 5. Increase Feed Efficiency

### Feed efficiency

How well an animal converts feed into meat or milk. Animals with a high feed efficiency have reduced feed requirements, costs and emit less methane.

- The feed efficiency of an animal depends on the age and weight of the animal, the potential for growth, and other genetic traits such as fertility and health.
- Focus on these feed efficiency traits when considering breeding management.

## 6. Prepare a Feed Budget

- Weekly grass measurements and grass budgets should be considered in order to assess the quantity of feed available on the farm.
- Estimate your winter feed requirements against your winter feed supply.



## 7. Correct Mineral Deficiencies

### How to identify mineral deficiencies:

- Consider the history of deficiencies in the past.
- Look out for clinical signs including reduced growth, infertility or drop in milk yield.
- Test your soil to identify low minerals which will be low in the grass grown.
- Test your silage to identify low minerals.
- Ask your vet to carry out blood or tissue tests.

### How to correct mineral deficiencies:

- Top dressing on pasture.
- Adding supplements into drinking water.
- Top dressing on silage.
- Incorporation into concentrate feeds.
- Injectables, drenches and boluses.
- Free access mineral supplements (mineral licks).

<sup>2</sup> Teagasc 2017 Silage Analysis-Why it is important and what it all means. Retrieved from: <https://www.teagasc.ie/publications/2017/silage-analysis---why-its-important-and-what-it-all-means.php>