Mineral supplementation

As herds commence the second rotation, concentrate feeding rates can be cut significantly where grass is in good supply. However, the issue of mineral supplementation for the milking herd then arises.

Minerals can be divided into two classes: (1) **macro minerals**, which are required in large quantities per day; and, (2) **trace minerals**, which are needed in tiny quantities per day.

Magnesium (Mg) is the most important of the macro minerals. 60g CalMag per day will provide adequate Mg to prevent grass tetany. This can be fed in 1-2kg concentrate, by pasture dusting or through water systems. There should be little requirement for supplementary calcium in grazing cows past four weeks post calving. Where grass is low in phosphorus (P), up to 20g supplement may be needed daily.
DAIRY

Spreading a fertiliser compound containing P can help overcome low P levels in swards. Extra sodium (Na) should not be needed unless high levels of grain are being fed.

<table>
<thead>
<tr>
<th>Table 1: Mineral supplementation guidelines for spring-calving milking cows in the April-June period.</th>
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<tbody>
<tr>
<td><strong>Macro minerals</strong></td>
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<tr>
<td>Magnesium (Mg)</td>
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<tr>
<td>Phosphorus (P)</td>
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<tr>
<td>Calcium (Ca)</td>
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<td>Sodium (Na)</td>
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¹To cover milking cow requirements, assuming the typical mineral composition of spring grass

There are six main trace elements to consider when supplementing grazing cows. Table 1 shows guideline levels for each based on the typical mineral composition of spring grass. These can be delivered through concentrate, water or in bolus form. Iodine most likely needs to be supplemented daily during this period as it does not store well in the body. There is very little evidence that ‘protected’ trace minerals give any significant performance advantage. Remember, there is a very poor economic response to feeding minerals beyond actual requirements, so plan your supplementation carefully.

Don’t delay, start milk recording today!

Many farmers will wait until most, or even all of the herd has calved before doing the first milk recording of the season…don’t wait! The sooner you start to milk record, the sooner you will identify sub-clinically infected cows. Early lactation mastitis is a high risk and dealing promptly with new infections will give you the best chance of curing them, and protecting the rest of the herd.

Early milk recording will also give you invaluable information on the success of your dry cow treatment, and management of your dry cows and in-calf heifers. The CellCheck Farm Summary Report looks specifically at mastitis control during the dry period and at calving, but it can only do this for cows that have a milk recording within 60 days of calving. So to get maximum value from your milk recording, now is the time to arrange your first recording.

While some farmers may believe that milk recording is a luxury that they cannot afford, in fact, the opposite is true. It allows you to react quickly to cows with high SCC. These cows may have no visible signs of infection, but they will spread infection within your herd, raise your bulk tank SCC and potentially reduce your milk receipts. Milk recording will also help you to identify those cows not ‘paying their way’. In a poor milk price year, can you afford to ‘carry these passengers’? Contact your local milk recording agency for further details.

Munster Cattle Breeding Group (023) 43228
Progressive Genetics (01) 450 2142
Tipperary Co-op (062) 33111
Research into practice: impact of genetics on herd performance

Is it possible to breed cows with good milk production traits as well as good fertility traits? This question was addressed as part of a long-term study initiated in 2008. Holstein cows with similar genetic merit for milk production but either very good (Fert+) or very poor (Fert-) fertility breeding values were assembled at Teagasc Moorepark. Once assembled, they were managed as a single herd.

Animal performance
The Fert+ cows had greater daily milk yield and tended to have greater daily milk solids yield than the Fert- cows. In early lactation, the Fert+ cows had greater dry matter intake, which allowed them to maintain greater BCS, have earlier postpartum resumption of cyclicity and have superior uterine health status.

Fertility performance
The Fert+ cows had a shorter interval from calving to conception and fewer services per conception. The Fert+ cows also conceived at a greater rate than the Fert- cows (50% Fert+ cows in calf after 19 days v 69 days for Fert- cows). The Fert+ cows achieved a final pregnancy rate of 89%, compared to 72% for the Fert- cows.

In summary, this research shows that animals with high genetic merit for fertility will deliver excellent fertility performance (assuming good management, including nutrition). It also shows that it is possible to have animals with both good milk production traits and good fertility traits. Based on this study, the recommendation is that the herd fertility sub-index should be at least €140. Check your current HerdPlus EBI Report and pick a team of bulls to ensure that your herd will achieve this target in the future.

HEALTH & SAFETY

Plan work and provide a safe place for children

So far in 2016, three farmers have lost their lives in farm accidents. Let’s put safety to the fore as the busy summer season approaches. The period from April 11 to 22 has been designated as Farm Safety Fortnight to focus farmers’ attention on accident prevention. Areas that deserve particular attention include work organisation and childhood safety. Most accidents are associated with ‘hurry’, so plan work and work at a steady pace. Children need special safety care on farms – a code of practice is available at www.hsa.ie.

Provide a safe play area for young children.
DAIRY

Breeding – making it easier

Almost one in ten farmers finds breeding their cows to be the most difficult task of the year. Being organised in advance can make it an easier job. Here are some of the practices used on the most labour efficient farms.

- Have a definite start date and finish date for the breeding season (13 weeks)
- Decide on the number of heifers you want and the number of artificial insemination (AI) straws needed (allow 5.5 straws per heifer in the parlour in three years)
- Use ICBF HerdPlus SireAdvice to match the sires chosen to cows in advance

- Use a heat detection aid
- Consider using an AI technician, rather than DIY, if you are under time pressure at breeding
- AI cows once a day only, in the morning
- Synchronise heifers and confine heifer AI to 10-12 days
- Move heifers home for AI
- You must have a drafting facility; it is not too late to install one for 2016
- A teaser bull is very useful for the second half of the breeding season (if you don’t have one for 2016, then plan to have one for next year)

Controlling breeding/AI costs

1. Firstly, this investment must be made but make sure that you select the right team of AI sires for your herd. The starting point must be an examination of your ICBF EBI Report with your adviser.
2. Achieving a submission rate of over 90% is critical to achieving a high six-week calving rate. Start recording heats about a month before the breeding season begins – this will reduce the number of cows that you need to check before AI starts. Then 10 days before breeding begins, check cows that haven’t shown heats and are more than 30 days calved.
3. Tail paint is the cheapest heat detection aid available and must be used; alternatives are available but may be slightly more expensive.
4. Use of GeneIreland AI sires is a great way to access high quality, high EBI sires for very small money. A small number of black and white packs and a larger number of crossbred packs are still available. Farmers committed to the industry long term, who are milk recording and actively recording data on ICBF, should consider applying. Contact 1850 600900 for details.
5. You can minimise AI costs by working hard to increase conception rates. Increasing conception rate to first service from 45% to 55% in a 100-cow herd will result in 20 fewer AI straws over nine weeks (and at €20 per straw a saving of €400). You must ensure that heifers are at target weight at bulling time (you really should have been working on this before now). Thin cows and late calvers must be milked once a day to allow them gain necessary body condition and increase the likelihood of conception.