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## Introduction

I recently attended the 3<sup>rd</sup> Life Start symposium at Nottingham University. It was excellent and I will summarise some of the nuggets later. Sometimes it's not so much the presentations that grab the attention, it's the conversations in the bar!

After the drink had been flowing a while, I overheard this little gem from a couple of fairly "well oiled" scientists.

"So, what I keep telling my students is that they are all going to get very wet!"

"How's that then?"

"It's simple, global warming heats up the sea, we get a lot more evaporation, evaporation makes rain clouds, we all get wetter!"

So, there we have it, global warming made simple! I love it!

We have upgraded our Britannia calf milk replacer brands to include a new supercharged Patriot Gold performance pack. In a nutshell Briannia is the best in the marketplace and in a different league to the base product. So yes, it costs more but you are getting a lot more performance and health.

For many years the mineral supplement business has been a mine field of misinformation about the relative differences between the chelate sources. Each manufacturer will flag up trials and comparison data and then let their marketing people do the rest. There is only one way to work out if you are getting the best deal!

Our Partners TBA and I have recently sat down and reviewed our F1 dry cow range and agreed to re-invent one of our original products because it was actually brilliant! Watch this space for a re-launch!

On a more business-like note, this newsletter is really a precursor of what we will be discussing at Agriscot. That said, I will get on with it!

# **Agriscot**

The Farm Business Event

**Wednesday 22nd November 2023**  
**Royal Highland Centre, Edinburgh**

**We are exhibiting,  
at Agriscot 2023,  
come and say hi.**

**Remember it's FREE ENTRY!**



Agriscot will be held at the Royal Highland Showground at Ingliston, next to Edinburgh Airport as usual. It's all happening on Wednesday November 22nd which is a week later than last year because the organisers have tried to avoid the obvious clash with Eurotier, which is happening in Hanover between November 12<sup>th</sup> and 15<sup>th</sup>.



This year you will find us in our regular place, Stand 31 in the Highland Hall.

Lakeland-Scottish are delighted to be supported once again this year by Trevor Birchall and his team from TBA Ltd and also by Dr Laura Tennant from Trouw Nutrition. We will also have other staff from our range of suppliers dropping in from time to time. These staff offer a wealth of knowledge and experience so please feel free to come and have a chat with us.

## 3<sup>rd</sup> Life Start Symposium.

This event was held at Nottingham University on October 17<sup>th</sup> and 18<sup>th</sup>. Trouw Nutrition and Dr Ginny Sherwin put together an extensive range of scientific presentations showcasing current research and thinking on calf and heifer nutrition and management.

There was so much useful information in these presentations I have just selected some of the best nuggets to include in this newsletter.

- Did you know that suckler calves will consume on average about 1500 litres of fairly enriched milk by 6 months of age. This compares to a dairy calf reared on fairly generous milk consumption at around 400 to 500 litres! The national average being closer to 250 litres! Better intakes at an early stage will improve the animal for the rest of its life.
- **The traditional wisdom that tells us that the calf cannot absorb any extra passive immunity from immunoglobulins (IGG & IGA) after 12 hours is rubbish!** Feeding for the first 24 hours increases blood IGG by an extra 50%!
- Calf milk replacers that contain high levels of lactose have elevated osmolality which will increase the risk of scours significantly. Trials have shown higher mortality when tested against lower (normal) inclusions more typical of the levels in whole milk. There's a surprise! Attempts at replacing the lactose with extra glucose also backfires because of much increased insulin production leading to hypoglycaemia! (low blood sugar). You wouldn't expect this but the insulin response only spikes if the dietary glucose spikes.
- Calf pairing after the first 10 days settles calves much better and maintains less stress when they join larger groups. This trait persists into adult life.
- Target weights for Holsteins

Average daily gain from birth to calving (24 months) 0.82Kg

Bulling (16 months) 375 Kg

Post calving 580 Kg

Mature (3<sup>rd</sup> lactation) 682 Kg

There was much more to the symposium than these points and if anyone fancies a chat about calf rearing protocols, come and see us at Agriscot.

# Patriot Gold

When Britannia energised calf milk replacer was launched in 2018, we included our own unique performance pack “Patriot”. This effectively improved gut development and resistance to some bacterial challenges there are other elements to Patriot and it has undoubtedly shown an extra benefit over the base product Milkivit ECM.

5 years on, there have been some great new developments in early life nutrition and protocols for phased feeding of calves. The main reference point being “mother nature and natural suckling”. In systems where this is not really an option, feeding a good milk replacer is essential but if we can include a pack that enhances the ability to fend off bacterial challenges and enhance gut and organ development right from the start, the rewards are there to be taken right through the animal's life.

Patriot Gold has upgraded to include some new proven and well researched ingredients to help us achieve this. The natural additives in Patriot Gold work by helping to strengthen the gut barrier, maintaining the number of active cells that absorb nutrients whilst making it harder for any pathogenic bacteria to cross the gut wall and cause infection.

Britannia also includes a yeast extract which works by actively binding on to pathogenic bacteria preventing them from crossing into the blood stream so that they are simply excreted.

Only Britannia has this pack which also includes more elements than we wish to publish here. We are very confident that Britannia CMR is the best in the market.

## Price and Cost

Not the same thing but similar.

A price is the **quantity of payment** or compensation expected, required, or given by one party to another in return for goods or services. In some situations, the price of production has a different name. [Wikipedia](#)

Cost is the **value** of money that has been used up to produce something or deliver a service, and hence is not available for use anymore. In business, the cost may be one of acquisition, in which case the amount of money expended to acquire it is counted as cost. [Wikipedia](#)

One thing that keeps cropping up is the price of calf milk replacers. Whilst we do our best to keep the prices as low as we can, we know that there are always going to be cheaper versions and products available. I would say just three things about this.

1. Are you comparing like for like? No, Britannia is unique!
2. If you want cheap, we also have lower cost products that will all do a job. They are just not as good!
3. Heifer rearing is a long-term project. Life Start is probably the most critical part of the process. Investing in the best protocol will undoubtedly pay large dividends in the long run.

# Mineral Supplements, what are you buying?



This picture is irrelevant to this article below but I just thought I would share it with you!

Like I said in the introduction, the mineral supplement business has been a mine field of misinformation about the relative differences between the chelate sources. There is only one way to work out if you are getting the best deal!

Each year, at the end of September I send out a large spread sheet which lists all of the standard and bespoke mineral supplements that we do. The spread sheet also lists the fixed formulation for each one.

This means that all of the manufacturers are quoting like for like.

The trap that the majority of sellers fall into is that they ask to quote for a specification and not a fixed formula. This means that the manufacturer will opt for the cheapest chelate sources.

The problem with quoting a specification is the quality of the chelate and, to be perfectly frank, some of them are pretty awful with low levels of rumen protection, solubility, and general effectiveness.

Let's face it, a car and a bicycle will both get you mobile but there is a big difference in the ride!

By working with a fixed formula, we can avoid the rubbish.

We have opted to primarily work with “**Availa**” minerals from **Zinpro** as first choice and **Bioplexes** from **Alltech** for the rest. Some supplements also swap the base mineral ore's with **Trouw Nutrition's Intellibond**, or **Animine**.

The tender process this year was very interesting, given that the manufacturers were all quoting like for like, the average difference between the best and the worst was around 15% with dry cow minerals nearer 30%! This can partly be explained by buying power and volume, but in some cases the manufactures are taking

slightly more profit. Haulage rates also vary a bit and can be as much as £40 per tonne difference dependant to a large extent on the size of your order.

We currently offer the best range of dairy, beef, and sheep supplements. They are probably not the cheapest but we are very confident that the quality is the best.

We can fix the prices to the end of April 2024 so why not give me a call on 07711 034141 and we can look more closely at your mineral needs.

## Deft!

Definition of the word “Deft” : Demonstrating skill and cleverness.

This seems appropriate for a new product **LipoAktiv Glu60** (catchy name, isn't it? ) designed to deliver rumen bypass energy much more effectively to the liver and stimulate more liver activity.

**LipoAktiv Glu60** arrives in the UK in December

The main ingredient is sucrose.

The reason we use sucrose is because it is made up of 50% glucose and 50% fructose.

This gives us a favourable response in the animal, as the glucose proportion is rapidly available for use by the cow whilst the fructose is converted to glucose, lactate, and glycogen by the liver.

This gives both fast and slow releases of glucose preventing insulin spikes and providing glucose steadily to the animal over a longer time period (between feeds, for example).

This clever innovation encapsulates the two sugars inside a coating of a C16 fat.

### What is the benefit of supplementing glucose?

There are 3 opportunities where supplementing rumen-protected glucose (RPG) can be very effective, these are:

#### 1. In the close-up dry period

- a. During calving a cow draws upon her energy reserves due to a drop in DMI and an increase in energy demand. These reserves are in the form of glycogen stored in the muscles and fat stored in her adipose tissue. By supplementing glucose in the dry period, it allows the cow to convert this to glycogen and ensure her stores are as full as they can be, as this will in turn reduce the amount of fat she needs to mobilise. Too much fat mobilisation can result in overloading the liver and lead to fatty liver, ketosis, and a wide range of other metabolic issues.

#### 2. In early lactation

- a. For a few weeks after calving, a cow of course suffers from a negative energy balance. By supplementing RPG, we help to close that gap by providing an available source of glucose directly to the small intestine without the risk of ruminal acidosis.

#### 3. During times of immune response, such as heat stress

- a. During periods of heat stress there are two consequences that can be improved by supplementing RPG. The first is a drop in dry matter intake which is the most common symptom of heat stress – as our animals are still required to produce the same level of milk, it is not possible to do so if they have depressed DMI as this

essentially creates another form of negative energy balance. We can use RPG to reduce this gap once again.

- b. The second consequence we can target is inflammation which is a natural immune response triggered by heat stress. Inflammation requires the immune system to draw energy reserves from the animal, energy that would otherwise be directed towards milk production. The primary form of energy required by the immune system is of course glucose.

This is frankly another tool in the box of nutrition management of the liver.

Choline, Methionine, Niacin, Biotin will all have a significant role to play as does Monopropylene Glycol and Glycerol. But this Deft product has a clever mode of action that will improve energy management even more!


## Raw Material Markets

I have decided to withdraw from the usual commodity price comparisons.

The markets remain fairly stable at the moment but the daily fluctuation in both spot and future prices means that anything that gets published here will probably be a bit different should you decide to order.

I have also decided to stick to the commodities that are a bit more reliable for supply and contractable pricing.

From now on these will include the following products: -

- Molasses and Molasses Blends
  - Pea and Bean Meal
  - High Starch Maize meal in Totes
  - Sugar Beet Pulp (in season)
  - Trident Distillers Grains
  - Prairie Meal in Totes
- 
- **F1 Yeast** The existing **F1 Yeast** and **F1 Prosecure 1 and 2** are all available now so if you check out our website you will get all of the fine details. The web link is as follows: - [www.lakescot.co.uk/f1-yeast/](http://www.lakescot.co.uk/f1-yeast/)
  - **Britannia**. Our new **Patriot Gold**  performance pack is another reason to try this product. The revised protocols advising phased feeding between day one and day 10 of transition milk and or fortification with colostrum (natural or dried) should be adopted. Dairy heifers will benefit enormously and because **why protein does not clot**, skim-based calf milk replacers like Britannia should definitely be fed for the first four weeks and preferably

right through to weaning. Pasteurised cows milk will generally be the first choice but be aware that it can vary and may not always give the best results.

- **Mawerlac Gold** is a great substitute for most other refined fats. It is a 100% fat product (no carrier) and at 38MJ/KG DM it's still even better value for money than just about all of the others at the moment!
- **Feed grade Urea** is around £650 per tonne and dropping which looks great on paper but bear in mind that although it is much lower in price than Optigen it's volatility means that is only viable for around 2 hours in a typical farm mix and after that it has disappeared into the atmosphere as ammonia gas! Optigen will last all day and only get slowly released after it gets into the rumen and its protection is released by body heat.

For more information on any of the items mentioned in this newsletter please get in touch with Jerry (best on his mobile). Our phone numbers are always available during normal working hours. You can also email Jerry or visit the Lakeland-Scottish website. Telephone **01768 899513** Mobile **07711 034141**

Email [jerry@lakelandscottish.co.uk](mailto:jerry@lakelandscottish.co.uk) Constantly updating website [www.lakescot.co.uk](http://www.lakescot.co.uk)



**AgriScot**  
The Farm Business Event

**Wednesday 22  
November 2023**

**Royal Highland Centre**  
Ingliston, Edinburgh EH28 8NB

[www.agriscot.co.uk](http://www.agriscot.co.uk)   

- Over 240 trade stands from across all sectors
- 10 seminars/workshops
- Dairy cattle judging
- Beef demonstration
- Silage, Business Skills & Product Innovation Competitions
- Free parking & entry
- Venue within walking distance of Edinburgh Airport & direct train links

