



# Autumn Opportunities

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## Introduction

It's that time of year again, **UK Dairy Day** has just given the trade an opportunity to show off its latest product range and some of the best cows in the country have been through the show ring to remind us just how good these animals can be. For us **Agriscot** on **November 13<sup>th</sup>** will be the main event.

I think that the grumpy old man might just surface a few times in this introduction! Why? Because I am struggling with the blinkered approach that some of the nutrition advisors have when it comes to feeding cows. Let's face it, if you work for a feed company that only sells its own products and or a narrow range of other feeds and supplements you are very likely to be :-

- Biased. They have to stick to a commercial agenda.
- Limited in choice.
- Probably have only had full training on your own product range and possibly not been fully trained in ruminant nutrition. Meaning that you have to call on your technical team to fill in the gaps (and they are probably biased as well!)
- Not able to offer a truly optimum solution.

Okay that's a bit strong but not without some justification.

And another thing that needs to be said is **WHY** are we not using fish oil to enhance fertility and improve membrane health and subsequently milk yields? Why? It's not even a daft cost anymore!

Back in May I attended the “Sustainability” conference hosted by Trouw Nutrition at Coventry.

The agenda concentrated on how the ruminant sector could progress towards net zero.

Some of the speakers were obviously not aware that farmers have to generate enough profit to make a living! Net Zero should NOT be about developing a plan that is great for the planet but puts you out of business.

The more progressive speakers were concentrating on “efficiency” and I believe that, whether we like it or not, we are going to have to change some of our techniques and beliefs to make those improvements or we could be penalised for not embracing the program.

Those of us old enough to remember the need to avoid food rationing for our population, will now be wondering if the topic might carry any weight in the new governments food policy? I think it should, but most of the population are not educated about food production and have no idea about why food security is so important. The saddest thing is that most people in government haven’t got a clue either!

I have included a great table showing the relative values of soya vs other protein sources. It now looks like the gap is starting to close.

Oh yes, this issue features a great trial showing just how much benefit feeding Yea-Sacc® has when it is fed during the dry and fresh cow transition. It’s yet another reason to use **F 1 Yeast**.

## Sugar Beet Pulp vs Soya Hulls

This year sugar beet pulp is a really good buy and very desirable choice!



Here's a thought... Feeding the cow should always prioritise a healthy and productive rumen. When you think about that statement, you soon realise that optimum fermentation is a bit of a challenge when you have poor silage and have to feed loads of concentrates. But good nutrition can help and quite often it's down to some pretty basic balancing.

One of the things that struck me was just how good sugar beet pulp prices are this year and that maybe the advisors who champion soya hulls are a bit blinkered!

Look at this simple table: (Prices may vary a bit according to location and seller)

	Price Per Tonne (£)	Dry Matter (%)	Price Per Tonne Dry Matter	ME (MJ/Kg DM)	Price Per MJ/kg DM	FME Dry Matter (MJ/kg DM)	Price Per MJ FME/kg DM	Sugar (%)	Price Per Unit Sugar
<b>Molassed SBP</b>	227	90	252	12.5	20.16	12.3	20.5	23	11.0
<b>Soya Hulls</b>	185	90	206	11.9	17.3	9.6	21.5	9	22.8
<b>F 1 Sugarmol</b>	300	70	428	14.3	30.0	13.6	31.5	46	9.3*
<b>Stockmol 20</b>	278	70	397	12.5	31.8	12.0	33.1	56	7.1

On the face of it the soya hulls look like the best buy. I think that when it comes to rumen fermentation the opposite is true and the **soya hulls are a more expensive source of fermentable energy (FME) than the sugar beet pulp**. After all, why do we want a high energy fibre feed? It's always **to improve rumen fermentation**, it doesn't really have any advantages for the abomasum or hind gut over better energy feeds like cereals!

Wheat has an FME of 12.8 and barley only 11.0 but this is derived from fast fermenting starch which promotes lactic acid and lower rumen pH if not balance properly. My critics will look at this and say that FME is a bit out of date and that we should use DYNE type models. But even these measurements are better for sugar beet pulp.

The best thing about sugar beet pulp is that we are dealing with a type of fermentable energy that promotes the fibre fermenting rumen microbes and this is a great pH stabiliser and promotes a better output of microbial crude protein (MCP), which is by far the best source of protein that the cow can get! (much better than anything that we can add to the diet).

But if we are looking for sugar, Stockmol 20 would be the go-to product even though the FME looks relatively expensive. This is because the rumen microbes will make the distinction between the different sources of FME. They prefer around 6 to 8% sugar in the TMR dry matter. This is especially true for fresh cows because they need a readily available energy source compared to relying solely on protected fat for a boost.

\*Note: **F 1 Sugarmol** analysis for sugar does not include the fraction from the glycerol (which is technically a sugar analogue and doesn't get fermented but is metabolised via the liver).

# Essentials

Who remembers the leaky bucket analogy with the idea of the first limiting mineral?



The lowest hole in the bucket dictates how much the bucket will hold. Fix it and the level will rise to the next lowest hole and so on.

This principal works with all nutrient supplies to the cow. We refer to these nutrients as “limiting”. It is now agreed that the first limiting and essential amino acid is Methionine and the second is Lysine. This is true in virtually all of the dairy diets we come across.

The first limiting and essential fatty acid is an Omega 3 called DHA the second is EPA and the third is ALA. (The bio-chemical names are much longer!)

## Replacing Soya

Using both protected and rumen available methionine supplements allows us to use less soya for example because it effectively fixes the lowest hole in the bucket and allows us to reduce the overall crude protein supply.

The thing is, we are dealing with a ruminant so methionine that is used in the rumen-by-rumen microbes, has a different effect than the methionine that by-passes the rumen and gets digested in the abomasum and small intestine.

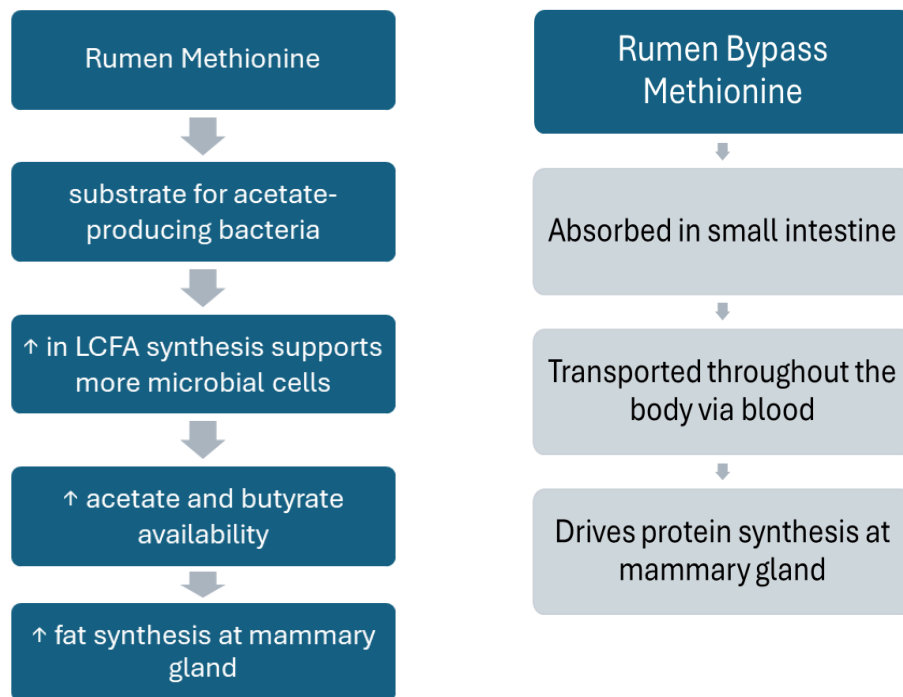
That’s when we have to make a decision:-

What do we want?

- More butterfat and milk?
- More milk protein and milk volume?
- Some of both?

Most of the current products offer some of both, but it is possible to tailor supplements to suit any of the three scenarios.

The **TBA Rumen Active** product features a good balance between the two types. If this is of interest lets have a chat about it.



We have been talking to **Evonik** probably the worlds largest producer of methionine supplements by a very big margin.

They have not been very visible to the UK ruminant sector because the vast amounts of their product range is supplied to the pig and poultry industry.

My associates at **TBA** are using “**Mepron®**” The key Evonik bypass methionine concentrate in some of their supplements.

The un-diluted feed rate for **Mepron®** is 10 to 20 grams and this will deliver a great yield and protein response.

**MetaSmart®** from **Adisseo** is a rumen available form of methionine that has a more balanced effect on butterfat protein and yield stimulation for all dairy cows.

We are now able to supply a range of methionine supplements to suit all the possible scenarios.

The table below shows a fairly up to date value for money comparison of some commonly used protein commodities.

The cost per 100 grams of metabolisable protein is quite useful and the advantage that Rape, Distillers and Maize glutens have over Soya for methionine is fairly obvious.

### **Soya or Rape seed meal?**

Just remember that Rape meal has an ME of 12.00 Mj /Kg DM whereas Hi-Pro Soya has an ME of 13.6 to 13.8 Mj/Kg DM. This makes the value for money a little less obvious.

The price per Kg CP / Tonne DM for HiPro Soya is **£8.56p**. The price per Kg CP / Tonne DM for Rapemeal is **£9.72p**. So, the choice would normally favour Hi-Pro Soya by £1.16p per % CP.

	Cost (£/ tonne)	CP (% FW)	MP (g/ kg FW)	mMet (g/ kg FW)	mLys (g/ kg FW)	£/ 100g MP	£/ 10g mMet	£/ 10g mLys
Hipro Soya	370	46.35	226.8	3.3	13.6	£0.16	£1.12	£0.27
Protected Soybean Meal	650	45.97	372.8	5.7	21.3	£0.17	£1.14	£0.31
Rapemeal	280	33.81	194.8	3.9	10.8	£0.14	£0.72	£0.26
Protected rape	340	30.6	220.5	4.2	11.2	£0.15	£0.81	£0.30
Beans	365	24.55	154.8	2	9.7	£0.24	£1.83	£0.38
Peas	365	22.09	126.6	1.8	8.7	£0.29	£2.03	£0.42
Prairie Meal	950	60.24	418.9	9.8	7.4	£0.23	£0.97	£1.28
Maize Gluten Feed	200	20.43	146.5	2.7	6.3	£0.14	£0.74	£0.32
Maize Distillers	240	27.66	143.8	2.8	4.6	£0.17	£0.86	£0.52
Wheat Distillers	240	30.97	178.8	2.8	5.2	£0.13	£0.86	£0.46

## F 1 Yeast Price Rollback Offer

This year happens to be the 25th anniversary of the launch of **F 1 Yeast**. We couldn't let that little landmark go unnoticed so we ran a June 2024 only price rollback to its launch price in 1999. The promotion was a great success so we will repeat this offer at AgriScot on November 13th

**The offer is for a minimum order of half a tonne at £40 per bag which is £9 per bag less than the current RRP!**

Over the years we have experimented with lots of different strains and combinations. It is now very obvious that when the late Dr Pearce Lyons selected the best strain for the job, he knew exactly how much better than all the others **Yeassac®1036** was. The TS (thermically stable) version is extraordinarily virulent compared to the typical competitors. Over the years we have found that **Altech** still has the largest data sets and most comprehensive research and peer reviewed trials and published papers than any of its competitors,

The protocol is simple:-

- Double dose for the first 10 days to two weeks
- Revert to the standard feed rate for the next 4 weeks
- Double dose for another 4 or five days
- Repeat every 4 to 5 weeks

This technique will keep giving the rumen microbes a boost towards more efficient fermentation. The signs to watch out for are a softer muck, a slightly improved appetite, around 1.6 to 2 litres of

milk and slightly lifted butterfat. For beef its worth typically around 0.2 Kg extra daily liveweight gain.

It's got to be worth a shot, the conservative response to **F 1 Yeast** over hundreds of trials is currently 1.6 litres worth typically £0.55p at a cost of @ say between 9 and 10 pence per day. That's a return of 6 to 1 which in any reckoning is a good bet! This offer drops the cost to only 8 pence per cow per day.


## Raw Material Markets

Soya prices still set the trend for most of the other protein straight feeds. Current expectations for the early winter would be around the late £360's to £370's for full loads. Rapeseed meal is normally around  $\frac{2}{3}$  of the protein and should be a bit less than  $\frac{2}{3}$  of the price because it is also much lower in energy, current futures are around £280's to £290's which is about  $\frac{3}{4}$  of the price of HiPro Soya. Value for money depends on how your diets are constructed and what your targets need to be. The net zero dividend is now starting to play a real part in the buying decision!

Cereal futures are getting very interesting. May London wheat futures were at £180 ish for November with longer positions slightly firmer. This represents about £200 on farm

Protected fats are reasonably good value but refined pure C16 fats like Butterfat Extra have been withdrawn due to supply issues.

The recent fire at the BASF vitamin plant has resulted in some companies refusing new business and others inflating prices. The situation is easing a little but winter contracting is a good idea. We have just concluded our tendering and we know that we have the most competitive prices for contracting so please call me and let's get it wrapped up for the winter.

- Molasses and Molasses Blends are down in price for the winter.
- Pea and Bean Meal ( still great value at the moment )!
- Sugar Beet Pulp is great value this year (see above). Press Pulp could be a great forage extender choice for farmers in England that are short of good quality silage.
- Trident Distillers Grains in bulk and Prairie Meal in Totes.
- **Britannia**. Our unique **Patriot Gold**  performance pack is another reason to try this product. This product is now starting to outsell its competitors in Northern Ireland through our trading partners at Farmgate Nutrition. If you haven't tried it, now is a good time because your calves will prove to you that they can be even better.
- **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 £600 per tonne and still 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) Website [www.lakescot.co.uk](http://www.lakescot.co.uk)

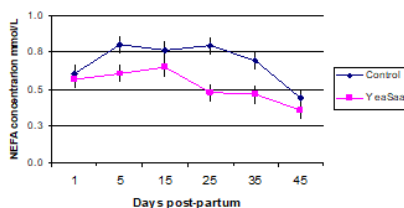
## Proof that Yea-Sacc® Improves Fertility

Trials done at the University College Dublin have shown how using Yea-Sacc improves energy balance in early lactation by better rumination.

The increased rumen pH created by using Yea-Sacc being more conducive to a better use of energy just when the cow needs it most, in her early lactation. Although not shown here, double dosing Yea-Sacc in the close-up dry period will improve the transition even more.

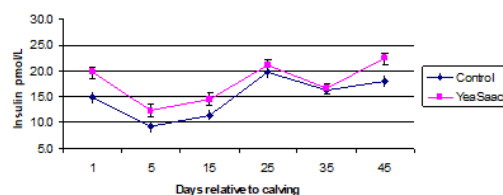
### Yea-Sacc<sup>1026</sup> Lower NEFA values in the Yea-Sacc Group equals higher energy values (p<0.001)

Effect of Yea Sacc Supplementation on Blood Serum NEFA



### Yea-Sacc<sup>1026</sup> Higher circulating Insulin levels means more energy for production or reproduction. (p=0.0508)

Effect of YeaSacc Supplementation on Blood Serum Insulin



## Conclusions

Yea-Sacc<sup>1026</sup> inclusion in dairy cows fed either grass or TMR after calving resulted in:

- Higher energy balance
- A lower circulating NEFA, meaning less body mobilisation
- A higher VFA production
- A higher insulin level
- A higher rumen pH