

The Dairy Group

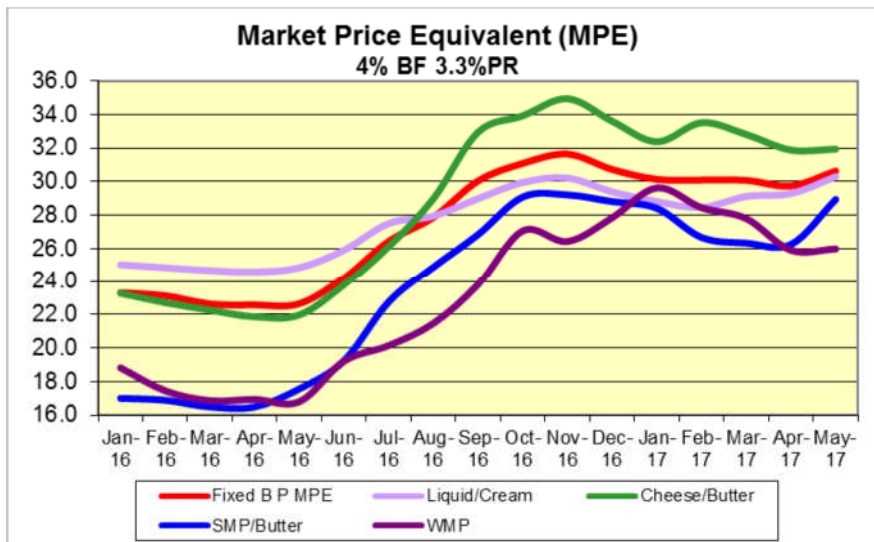
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Dairy market and dairy cost outlook

Ian Powell, Managing Director

Despite UK milk production falling by 800 million litres over the 12 months to March 2017, the dairy markets have remained relatively stable since January with falls in powder being offset by increases in butter and cream, with cheese remaining relatively stable. The market is delivering an average market price equivalent (MPE) of around 30ppl, which is the average value the milk processor can achieve from the market, which means the average UK milk price should be around 28ppl. The latest average milk price reported by Defra for March 2017 was 27.5ppl, so close to what the market should be delivering. The latest Global Dairy Trade (GDT) auction on 1st May saw average product price increasing by 3.2%, the 5th consecutive price increase which does suggest some firming in the markets. However, rising global production is likely to limit any significant price increase over the coming months. The latest 12 month rolling average milk price to March 2017 was just 23.7ppl but will increase each month as higher prices in 2017 replace the lower 2016 prices. We should see the 12 month rolling average UK milk price reach 26ppl by August 2017.



Whilst the milk price has improved, there remains a great deal of uncertainty going forward and many businesses are now looking for realistic values to base long term decisions on future investment and cost structure. The following graph is from our MCI dataset and looks at the 12 month rolling and 5 year rolling margin over purchased feed (MOPF), with the 5 year average between £1600 and £1700 per cow for the period from August 2014 to March 2017. Taking a mid-point of £1650 per cow, this equates to a milk yield of 8,000 litres @ 26ppl and a purchased feed cost of £430/cow.

EDITORIAL

Welcome to the June edition of The Dairy Group's Newsletter which covers a range of dairy topics including dairy market and cost outlook, copper toxicity, the new Mastitis Index and cluster alignment. The 'News in Brief' section includes information on Thermoduric counts in milk and Countryside Stewardship.

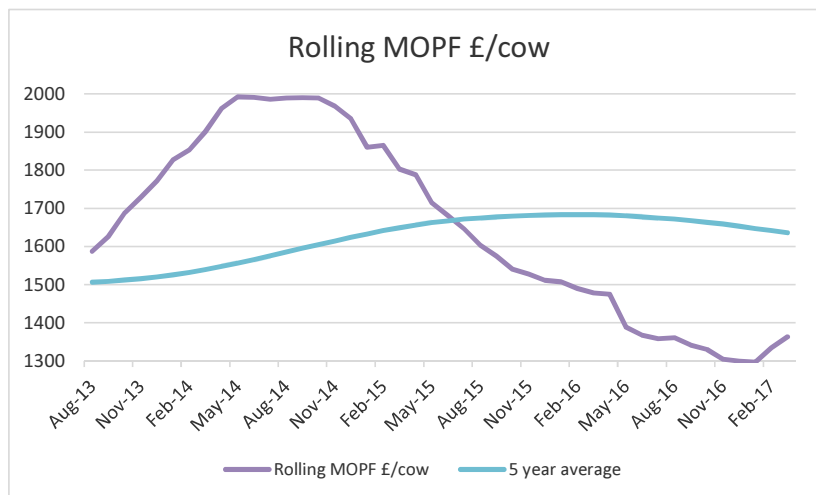
The Dairy Group is a silver sponsor of The Total Dairy Seminar 2017 and will also be sponsoring and presenting at the 2017 NMR RABDF Gold Cup Open Day that will be held at Pilsdon Dairy Farm, Pilsdon, Bridport, Dorset, DT6 5NY on 28th June by kind permission of the 2016 Gold Cup winner Simon Bugler. We look forward to seeing you at either event.

If you would like to discuss any of the topics featured in this newsletter further, please speak to your consultant or ring the office on 01823 444488.

Christine Pedersen

To receive this newsletter by email in future please email: newsletter@thedairygroup.co.uk

Every farm is different, but a medium term (5 year) plan based on a milk price of 26ppl would need the production cost to be 28ppl just to breakeven (assuming 2ppl of income from culls and calves) and no support payments post 2020. This could be pessimistic but better to plan for this scenario. To get the true cost of production below 28ppl will be challenging, with the true cost including all labour (paid and family), rent and finance (comparable farm profit leaves out rent & finance which can be very high for some). Output should remain a key focus as any reduction in output tends to increase overhead costs per litre.



There are a variety of systems that deliver cost of production below 28ppl, but changing system may be a distraction from the key issue of production efficiency. This depends on maximising the yield of energy from land (130 GJ/ha is a good target to aim for, e.g. 12 t DM/ha @ 11 ME); the genetic potential of the herd (target should be top 10%); and the efficient organisation of all the resources that go in to milk production.

Ian works with clients across southern England and can be contacted on 07831 617952.



Copper and the Dairy Cow

David Donaldson, National Dairy Nutrition Specialist

Last July new regulations were adopted by the European Food Standards Agency (EFSA) for the current maximum copper concentration for livestock. Whilst the limit for dairy cattle was reduced to 30mg/kg at 88% DM (34.1mg/kg DM), the level for pre-ruminant cattle remains the same at 15mg/kg at 88% DM (17 mg/kg DM). However, for most farms in the UK, a level of 20mg/kg DM for dairy cattle should be more than sufficient.

Copper is essential for all life forms from bacteria to humans, and is crucial for enzyme systems underpinning lipid, carbohydrate and protein metabolism. It is also involved in other systems such as energy production, neurotransmitters, in the uptake and utilisation of other trace minerals and in antioxidant activities. However, evidence indicates that copper toxicity has been rising in the UK. A study of liver copper concentrations in cull cattle in the UK showed that of 389 Holstein Friesian dairy cows, 58.6% had levels above normal and almost 17% had high or toxic levels. This study suggests that a significant proportion of the UK dairy herd could be at risk.

The first indication a producer may have of copper toxicity is animal death; there are no early warning signs or symptoms. Serum/plasma copper concentrations may not be a totally reliable indicator of copper status and liver biopsies remain the most reliable indicator of copper level.

A regular review of your diets (including all dairy cows, i.e. milking cows at all stages of lactation, dry and transition cows as well as youngstock) is essential to ensure that you do not exceed the guidelines. The mineral review should take into account the supply of minerals from all sources and their interaction with each other. Many producers will be aware of the interaction of sulphur, molybdenum and iron with copper and how these antagonists can reduce copper availability.

You are advised to check forage mineral levels regularly and look at all feeds and supplements being fed to cows and youngstock. Some raw materials and by-products such as palm kernel, sunflower and wheat bran can contain high levels of copper, so reliable figures from your feed supplier are important. Limestone and Dicalcium phosphate can also have high levels, so don't forget to factor these in. Likewise, many dairy compounds are well fortified with copper so make sure you are aware of the levels and mineral supplements can have copper sources that are highly available which need to be accounted for.

Many farmers continue to overfeed copper. Seek help to determine (and regularly review) an appropriate level of copper supplementation for your herd; the risk of copper toxicity is high. For more information please contact David.

David is The Dairy Group's National Dairy Nutrition Specialist with over 30 years of ruminant nutrition experience and can be contacted on 07471 890888.



New Mastitis Index improves breeding decisions

Kevin Lane, Breeding Consultant

A new mastitis genetic evaluation has been published by AHDB Dairy to coincide with the issue of the April 2017 bull proofs for the dairy cattle breeds. The new evaluation gives an indication of a bull's ability to transmit mastitis resistance on to his daughters and is expressed as a percentage on a scale of about -5 to +5. As with the Somatic Cell Count PTA (Predicted Transmitting Ability) which has been used successfully by milk producers to breed lower cell counts into dairy cattle for many years, negative figures are desirable for mastitis. This means that for every one percent decrease in a bull's Mastitis PTA there will be a corresponding one percent decrease in the proportion of his daughters expected to get mastitis.

Improvements made through breeding depend on both the heritability and the reliability of measuring that trait. Farmer recorded data from the UK's milk recording organisations are used to generate a Mastitis PTA for each bull. This highlights the importance of producers recording all cases of mastitis with their milk recorders to help build up our own national database of sire information. The same applies to offering lameness data at milk recording, which will increase the reliability of the information for the lameness index which will hopefully be released later this year.

Using this information it has been established that the heritability of mastitis is about four per cent which is low but similar to several traits being improved through breeding and it is higher than some which are making good genetic progress, including female fertility. The existing SCC PTA will continue to be published alongside the new mastitis evaluation. Although similar, the two traits are not identical; there is a correlation between the two evaluations of +0.8, indicating there's a strong, but not exact likeness between the two traits. As you may expect, most bulls with a negative SCC will have a negative mastitis figure and vice-versa, but this isn't completely clear-cut as some bulls are outliers in this respect.

There is some evidence that very low SCC animals can have issues with milk let-down, the reason behind this being the very small teat canal openings preventing a fast milk let-down but also helping to prevent bacterial ingress into the teat canal. Therefore if milking speed is an issue, as well as mastitis, both indexes can be viewed alongside each other to find bulls that pass on good mastitis resistance without extremely low SCC and a possible attendant milking speed issue.

There is certainly a good case to be made to use this information when looking at sire proofs without compromising other important factors such as production and fertility values. Like all low heritability traits, the compounding effect of a large number of cows over several generations reaps dividends beyond the individual values themselves. The new mastitis index, along with the existing SCC index, will certainly help farmers address both traits to improve their herd management and milk price bonuses. It is another factor to consider when making breeding decisions.

Kevin runs The Dairy Group's Breeding Manager service, offering independent advice on bull selection to clients all over the UK. For more information, please contact Kevin on 07770 923344.



Even and complete milking

Ian Ohnstad, Milking Technology Specialist

Ensuring correct cluster alignment is an essential part of the milk harvesting process. The aim is for the milking unit to hang squarely on the udder with equal weight distribution between all four teats, on all cows at all times. When clusters are correctly positioned on the udder, liner slip is minimised and milk flow rates and milking out times are reduced. Poor cluster position will lead to un-even, slower milking as well as an increased incidence of liner slip. Because the ACR operates on the combined flow rate from all four quarters, if one quarter is not fully milked out before the cluster is removed, over time the quarter will regress and become 'light'. It is more difficult to milk an uneven udder without liner slip and therefore the risk of new infections increases.

Correct design and installation of a milking parlour should result in good cluster position on the majority of cows in the herd. Good cluster position can be achieved, in most circumstances, by:

- Ensuring that the long milk and long pulse tubes are the correct length so that they do not pull or twist the cluster when attached on the udder.
- Using swing arms in 1 unit: 2 stall (swing over) parlours to support the weight of the tubing. The arms should point down the spine of the cows' backs, which will help minimise twisting of the cluster on the cow to the right or the left.
- Correctly adjusting the tubing when attaching clusters to cows so that the unit is not pulling.
- Ensuring that the cluster assembly itself is not twisted, e.g. short pulse tubes incorrectly aligned can distort positioning of the teat cups and twisted long milk and pulse tubes pull the cluster to one side.
- Providing supports for the long milk tubes, either on the kerb of the cow standing or by hooks off the rump rails. These supports hold the tubing in the correct position so that they do not twist or drag after the unit has been correctly attached.
- Installing dedicated cluster support arms, if necessary.



Achieving good cluster position requires the milker to make an effort to position the cluster correctly when attaching units and to react quickly when clusters become poorly aligned, for whatever reason. Good cluster position is therefore an important element of the milk harvesting process, minimising mastitis, poor udder conformation and benefiting milk flow rates and unit-on time. Cluster alignment is an important aspect of a milking review, regularly undertaken with clients by The Dairy Group's milking technology specialists.

Ian is an internationally recognised specialist in milking technology working throughout the UK and worldwide. He can be contacted on 07774 267900.

News in Brief.....

Thermoduric counts in milk - From April 2018, Muller Wiseman are proposing to introduce a penalty (up to 1 ppl) on all milk produced with a thermoduric count great than 1000 cfu/ml.

Thermoduric bacteria are organisms that can survive pasteurisation and can cause defects in the final product, such as reduced shelf life for milk or spoilage of cheese and butter. Silage, faeces, animal bedding and soil contain large numbers of Thermoduric bacteria and are the most common sources of these bacteria in raw milk. While it will never be possible to completely exclude Thermoduric bacteria from raw milk, there are certain steps which can be taken to significantly reduce their numbers.

The main contributors to elevated Thermoduric counts are dirty teats, poor parlour hygiene and inadequate plant cleaning. Taking more care to clean teats prior to milking, wearing gloves and keeping them clean during milking as well as ensuring there is sufficient hot water, at a high enough temperature, to adequately sanitise all parts of the milking equipment can all help control Thermoduric counts in the milk.

Countryside Stewardship – Countryside Stewardship applications are now in full swing. If you are thinking of applying you must request an application pack from Natural England (NE) by 31st July. However, we recommend that you register your interest with NE as soon as possible to ensure there is adequate time to develop a competitive application. If your ELS or HLS agreement has expired, or will expire in 2017, NE will have written to you and provided an application request form. Either complete this or phone NE to request a pack. Alternatively, contact your local consultant who can initiate this process for you. As a reminder, the scheme is competitive and an agreement will run for 5 years starting in January 2018. As we understand, interest is high this year compared to previous years. This emphasises the need for a strong application, but should not put you off applying. Your consultant can help to develop an application.

The Dairy Group consultants work across the UK providing a wide range of dairy business advice. Please contact our Head Office at Taunton or visit our website for further information or to contact our consultants:-

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