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Milk Manager NEWS



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Market Update

UK Wholesale Dairy Commodity Market

- Fonterra's latest on-line GDT auction (3rd March) resulted in the third consecutive decrease of 1.2% in the weighted average price across all products, reaching US \$3,112/t. This follows on from the 2.9% and 4.7% reduction on the 18th and 4th February respectively. The biggest drops were seen in butter milk powder (-4.8% to \$2,718/t) and cheddar (-4.7% to \$4,285/t). Butter only rose 1% to \$4,131/t. Full results are available at https://www.globaldairytrade.info/en/product-results/
- UK wholesale prices of dairy products have all dropped, with the exception of cheddar for the month of February.

Commodity	Feb 2020 £/T	Jan 2020 £/T	% Difference Monthly	Feb 2019 £/T	% Diff 2020- 2019
Bulk Cream	£1.250	£1,300	-4	£1,610	-22
Butter	£2,930	£3,060	-4	£3,680	-20
SMP	£2,180	£2,220	-2	£1,690	+29
Mild Cheddar	£2,870	£2,830	+1	£2,880	0

Source: AHDB Dairy - based on trade agreed from 1st to 27th February 2020. Note these prices are indicative of values achieved over the reporting period for spot trade (excludes contracted prices)

- Butter prices are back on average by £130/t for the month of February, partly as a result of the coronavirus outbreak, which has impacted on shipping. With transport slowing down the demand has been reduced. Milk supplies are increasing at this time of year and so butter supplies are also rising.
- Cream has weakened on the back of the drop in butter price. Milk supplies are increasing within the EU (up 0.5% on the year-to-date) and with exports of UHT milk paused, the demand for cream from the UK has fallen, increasing domestic availability. Cream income to liquid processors dropped 4% from 7.31ppl in January to 7.02ppl in February.
- Skim milk powder (SMP) fell for the first time in 12 months by 2%, as shipping problems have affected trade.
- AMPE fell by 1.03ppl from January, mainly on the back of a reduction in the butter (-0.64ppl)

and SMP (-0.38ppl) components. MCVE increased by 0.35ppl mainly on the back of the rise in mild cheddar by on average £40/t, which influenced the mild cheddar component of MCVE by +0.43ppl (there was a combined drop in the whey butter and whey powder component of 0.07ppl). Tight cheddar supplies have helped support prices with the uplift being the first monthly average price move for 11 months.

	Feb 2020	Jan 2020	12 months previously	Net Amount less 2.4ppl Average Haulage – Feb 2029
AMPE	30.40ppl	31.43ppl	29.30ppl	28.0ppl
MCVE	30.56ppl	30.21ppl	31.42ppl	28.16ppl



GB Milk Deliveries and Global Production

• Whilst GB milk production was up 0.6% on the previous week, for the week ending 29th February, production is back 3.4% (or 1.2 million litres) for the same week last year.



- The impact of the Australian bush fires on milk output have not yet been quantified. However, many producers have reduced cow numbers due to tight feed supplies, with significant loss of crops, both in the field and in storage. The impact on milk production will be seen in the coming months.
- New Zealand has also been hit with unfavourable weather recently, which will negatively affect milk output for February and March. The North Island has been extremely dry and the South Island has been affected by flooding in the first half of February. Over 100 dairy farms have been severely affected by flooding, being underwater or cut off completely

by road. However, the drought in the north is expected to impact on milk output more than the flood hit south.

Monthly Price Movements for March 2020

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Commodity	Company	Price Change	Standard
Produced	Contract	from Feb	Litre Price
		2020	Mar 2020
Liquid &	Arla	+0.86ppl liquid	29.75ppl
Cheese	Farmers	+0.9ppl	liquid
	UK	manufacturing	30.94ppl
			manufacture
Cheese,	First Milk	No change	26.5ppl
Liquid &			liquid
Brokered			27.38ppl
Milk			manufacture
Cheese	Fresh	No change	26.50ppl
	Milk		liquid
	Company		27.61ppl
	(Lactalis)		manufacture
Liquid &	Grahams	No change	25.50ppl
Manufacture			
Liquid &	Müller	No change	26.25ppl
Manufacture	Direct		(includes
			1ppl direct
			premium)
Liquid &	Müller	No change	29.39ppl
Manufacture	(Co-op)		
Liquid &	Müller	No change	31.18ppl
Manufacture	(Tesco)		
Liquid,	Yew Tree	No change	25.5ppl
Powder &	Dairies		Standard A
Brokered			litre price

Other News

- Arla continue to buck the trend, being the only milk buyer in Scotland to announce a price rise of one eurocent for March, ahead of the spring flush. Given the fall in cream prices by 10p/kg around the 3rd week in February and the spot price of milk down to 25ppl at the end of February, any rise in milk price was unexpected. Arla's organic suppliers will see a one eurocent reduction in their March price as a result of strong supply and less demand for organic milk.
- The Arla Group's revenue increased from €10.4 billion in 2018 to €10.5 billion in 2019, mainly due to growth in branded sales volume of 5.1%. This growth is due to the success of Arla's new Lactofree and organic ranges and rapid growth of Skyr in their main EU markets. The UK's contribution to growth of branded sales volume was 8.8%. The value that Arla produces per kg of owner milk (known as Arla's performance price) increased from 36.4 eurocent in 2018 to 36.6 eurocent in 2019.

- M&S suppliers to the Müller Milk Group will receive a 0.61ppl price reduction in their milk price from April 2020. This brings their liquid standard litre down to 32.72ppl from 33.32ppl.
- The Sainsbury's Dairy Development Group is seeing a very small 0.05ppl reduction in their milk price from April 2020 on the back of its latest cost tracker review. This brings their liquid standard litre down to 30.7ppl for Müller suppliers and 30.58ppl for Arla suppliers, taking into account their 0.12ppl haulage charge. The 0.05ppl reduction is made up of -0.01ppl for feed, -0.01ppl for fuel and -0.03ppl for fertiliser.
- There are concerns that the Government's new based immigration points svstem will disadvantage dairy farmers being able to recruit staff from the EU and that the industry will suffer with an increased labour shortage. The Government has not included dairy workers on the MAC shortage occupation list for their new points based system, which takes effect on 1st January 2021, as it does not class dairy workers as being "highly skilled". RABDF is putting pressure on the Government to amend this decision, highlighting that their 2016 survey showed that over half of respondents employed staff from outside the UK, with two-thirds stating that this was due to insufficient UK staff being available.
- Scottish dairy farmers are being encouraged to take part in a study on *Mycoplasma bovis* carried out by SRUC. The study will look at the prevalence of this disease throughout Scotland and how it is spread within, and between farms. Farmers are requested to submit four bulk tank milk samples throughout the year (tested free of charge) and complete a short questionnaire on general herd management. Email: <u>mycoplasmabovis@sruc.ac.uk</u> to find out more about joining the study.
- The coronavirus outbreak in China has had an impact on the prices of whey and skim milk powder in Oceania, as China has reduced its purchases, with quarantine procedures affecting transport, food deliveries and demand. The number of Chinese people eating out has greatly diminished and there are reports that movement of refrigerated dairy products is slow. More than 30% of KFC and Pizza Hut outlets in

China have closed down, with total sales having dropped by over 50% being reported.

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Straights Update

Straights prices for delivery in artic loads as of early March are as follows (varies depending on location):

£/T for 29t loads delivery + £8/t haulage to central belt	Mar 20	Apr 20	May 20 - Sep 20	Oct-20 Apr 21
Proteins				
Hipro Soya	314	314	May 308 Jun-Sep 302	306
Rapeseed Meal	216	217	May-Jul 217 Aug-Sep 202	-
Maize Distillers Meal	207	209	200	-
Starch				
Wheat	158	159	May-Jul 162 Aug-Sep 167	172
Barley	134	135	137	142
Maize	179	180	183	176
Fibre				
Imported Sugar Beet Pulp	183	183	186	-
Soya Hulls	177	177	163	-

Source: Straights Direct and Cefetra on 9th March. Barley and wheat prices are based on delivery to central belt (for North-East, deduct £5/t for wheat), courtesy of Julian Bell, Senior Rural Business Consultant, SAC Consulting. Prices do not include seller's margin.

Global News

- There is increasing concern over global economies with the spread of the coronavirus and this is putting pressure on commodity markets. Since the start of the year, crude oil has lost a quarter of its value and world wheat prices have fallen 6% since 21st February (as reported on 27th February). It is likely that wheat prices will come under even more pressure if the virus continues to spread.
- The world cereal harvest is expected to climb in 2020 based on current crop conditions. The International Grains Council (IGC) raised world grain production estimates for 2019/20 to 2.17Bn t, which would be 30mt higher than 2018/19 output. Their report puts global wheat

production in 2020 at a record 769mt. Higher world cereal output is partly expected, due to a predicted 2% rise in estimated harvested area for 2020/21.

- Ukraine is the 7th largest producer of wheat in the world (and 6th for maize production). The country has reported a record area of winter wheat with the majority having wintered successfully, with winter losses nearly at zero.
- There is downward pressure on soyabean prices, with a large Brazilian crop being harvested, but little Chinese demand. The Brazilian crop is estimated at 5% higher than last year, at 126mT. Harvest progress in South America will be helped by forecasted favourable weather conditions. Export taxes for soyabeans have increased in Argentina and with a cheaper currency, it is likely that their farmers will store more soyabeans for longer this year.

UK and Scottish News

- The continued wet weather in the UK has affected planting of both late sown winter wheat and spring crops, and in some of the worst affected regions some land may stay undrilled this season. The UK's wheat area for 2020 harvest is estimated to be 1.5Mha back, which is 17% lower than the previous year. It is not surprising that the feed wheat futures for November 20 have increased by 14% since September and the falling global maize market means that maize imports may look more attractive.
- However a number of factors may affect the UK feed wheat futures price, which could fall on the back of an increase in global wheat output, more maize imports and potentially a large carry-over of old crop cereals in the UK as indicated by the UK's cereal balance sheet.
- Over 1.0m ha is destined for spring malting barley across the UK. With a 2020 UK barley crop that could exceed 8mt (8.2mt in 2019) and a barley price already at a £20-£30/t discount to wheat the need to export this barley is set to grow.

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Bovine TB: How Can I Protect my Herd and What Happens if my Holding is put Under TB Restrictions?

Bovine tuberculosis (bTB) is caused by *Mycobacterium bovis* and is an infectious disease of cattle and many other mammals including sheep, goats, pigs, badgers and humans. Bovine TB is a notifiable disease and if it is suspected in Scotland it must be reported to your local APHA Field Services Office immediately.

Bovine TB can be introduced into your herd in a number of ways. The main method of transmission is direct contact with infected cattle. However, it can also be spread to cattle from wild animals such as badgers and deer. In Scotland, there is no known infection of wildlife and no known transmission of the disease from wildlife into cattle. This however is a significant problem in parts of England, Wales and Ireland, where badgers are infected with bTB. Bovine TB can also be spread to cattle via people, and from slurry.

Humans can contract bTB although the risk is fairly low. The main route of infection from cattle is by drinking unpasteurised milk from infected cattle and by inhalation of bacteria from breath, from a carcase or from bodily fluids, such as faeces from an infected animal.

Bovine TB is detected mainly within the slaughterhouse or as part of a routine skin test amongst others. At slaughter all carcasses are examined by a vet. If lesions suspicious of bTB are detected this is immediately reported to the local APHA Field Services Office and your officially TB free status is suspended. Samples will be taken from the carcase for culturing. Similarly, if you have a positive skin test reactor at a routine skin test, your APHA Field Service Office is notified and the animal will be taken for compulsory slaughter and post-mortem where samples are taken for culturing.

Once your officially TB free status is suspended your holding will now be under TB restrictions. You will no longer be able to move animals on to or off your holding, except if you are moving them directly to slaughter under licence. Your official TB free status will be withdrawn once two pieces of evidence to suggest bTB have been found i.e. lesions at slaughter plus positive culture. Once your status is withdrawn, cleaning and disinfection will take place and there are guidelines for the safe disposal of animal wastes i.e. farmyard manure should be sprayed with DEFRA approved disinfectant, removed and stacked for at least three weeks before application. Cleaning and disinfecting should be done with DEFRA approved disinfectants at the specified dilution rates for TB. After bTB has been confirmed, APHA will begin to investigate the case and try to identify the source of infection. As part of the investigation they will risk assess holdings adjacent to the breakdown herd and may decide to contiguous test, which involves a skin test.

A TB skin test is routinely carried out depending on the risk area of your holding, if you do not meet the criteria for exemption i.e. if you send a high percentage of animals direct to slaughter. The skin test works by triggering an immune response within the animal to the two types of tuberculin; avian and bovine. If the reaction at the bovine site is larger than that of the avian site this is checked against graphs which will determine whether the animal is a reactor, an inconclusive reactor or clear (see diagram below). There are two interpretation levels; standard and severe. During a bTB breakdown a herd will be tested at severe interpretation.

TB Skin Test Results Interpretation



The cut-offs used for combinations of 72-hour increases in Single Intradermal Comparative Cervical Tuberculin (SICCT) test reactions to bovine and avian tuberculin (mm), where oedema was not present at the injection site. Based on the TB64 diagram for England and Scotland issued by the

predecessor of APHA in January 2010. The arrows show the direction in which the diagram would be expanded for measurements greater than 7 mm. APHA, Animal and Plant Health Agency.

In a bTB breakdown herd an interferon-gamma blood test can be used which is highly sensitive but not as specific, making it a more reliable individual test.

Both tests rely on the immune system of the animal, which means animals that are immunosuppressed, i.e. those with Johnes or BVD, may not show an accurate result.

In order to regain the official TB free status a breakdown herd must have two short interval skin tests 60 days apart with a clear result and have fully completed cleaning and disinfecting to the standards specified within the order.

Bovine TB cannot always be easily prevented within a herd, but certain measures can be deployed in order to reduce the risk of infection. Since the main source of infection tends to be from other bovine animals, when sourcing replacement cattle you should try to buy from areas with a low incidence of bTB. On farm controls include maintaining fences and double fencing boundaries amongst others. Animal bedding and feed sources should be as wildlife proof as possible. A good biosecurity policy will also reduce the risk of infection. This could include minimising visitors who move from farm to farm, and insuring visitors are properly disinfecting footwear and clothing on arrival and departure. Where possible you should not import slurry or use other farmer's slurry equipment unless it has been properly cleaned and disinfected.

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Are your Cows at Risk of Copper Toxicity?

Copper toxicity is becoming more common in dairy cows and is thought to be an underdiagnosed problem. A UK survey involving 510 cull cattle in the UK showed that 40% of dairy cattle had liver copper concentrations above the reference range, indicating that these cattle were at a high risk of chronic copper toxicity (Kendall *et al.*, 2015). The main cause of increased risk of copper toxicity is deliberate excess supplementation.

The problem with copper toxicity is that there are very few warning signs before clinical disease is seen. Although cows suddenly appear to be ill, clinical signs are usually the result of a long process of copper accumulation in the liver over a period of weeks or even months and can occur by feeding what is considered a safe level of dietary copper. Clinical signs are caused by the sudden release of large amounts of copper into the bloodstream from the liver. This leads to the breakdown of red blood cells in the blood vessels causing anaemia, blood in the urine, jaundice, colic, ill-thrift and poor appetite.

Evidence of Copper Toxicity in Cattle with Jaundice of the Mucous Membrane around the Eye and Liver Damage (a healthy liver is dark red in colour)



Source: NADIS: https://www.nadis.org.uk/disease-az/cattle/chronic-copper-toxicity/

Blood tests are not accurate for copper status and accurate diagnosis of copper toxicity is best carried out by liver biopsies. This can be done on live cows or on cull cows. If livers test high, all supplementary copper should be removed, as liver copper concentrations can remain well above deficient levels for very long periods of time (one to two years).

The EU maximum permitted level of copper in cattle rations is 40mg/kg DM and the ACAF (Advisory Committee on Animal Feedstuffs) suggest an industry standard recommendation of 20mg/kg DM. However, some industry nutritional experts suggest that 15mg/kg DM is sufficient, where cattle are not exposed to high levels of antagonists such as iron, molybdenum and sulphur.

It is very easy to exceed these recommended levels. According to Thomson and Joseph Ltd, a leading supplier of minerals in the UK, the average copper content from 384 1st cut grass silages tested in 2019 was 7.4mg/kg DM. In addition, feeding a mineral supplement with 2000mg/kg copper at 100g/cow/day provides 200mg of total copper intake. Assuming a herd average dry matter intake of 22kg, this is 9.1mg/kg DM. This brings the copper intake up to 16.5mg/kg DM from silage and mineral alone, before taking into account any

contribution from background levels of other feeds, a mineralised dairy cake or boluses.

Calves born to cows high in copper may also be at risk. Copper crosses the placenta into foetal tissues, causing calves to be born with already higher liver copper levels, which can potentially result in higher mortality rates from liver disease and copper overload.

To assess the risk of copper toxicity on your farm, test for liver copper levels in cull cows and carry out a mineral audit with your nutritionist or vet. A forage mineral analysis is essential to determine the overall copper content in the ration so that an appropriate and safe level of supplementary copper can be recommended.

Reference: N. R. Kendall, H. R. Holmes-Pavord, P. A. Bone, E. L. Ander and S. D. 2015. Liver copper concentrations in cull cattle in the UK: are cattle being copper loaded? Veterinary Record 2015 177: 493

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Succession Planning

A study by Mindset Research in 2017, found that fewer than half of agricultural businesses in the UK have a succession plan. Succession can be a difficult topic for family-run businesses, but it is a conversation that is better had before any unforeseen events force that conversation upon your family. For a family that has suffered recent bereavement or has had the head of the family business suffer an illness or injury that means they are no longer able to manage the business, the last thing they need is a dispute within the family over succession. That is why having a plan, which all parties agree to, is crucial.

Succession

Successful succession requires the planned and gradual transfer of all managerial responsibilities over an extended period of time. If the succession process is planned carefully, then the ideal scenario could be as follows:

- 1. Work for the predecessor with little or no involvement in decision-making.
- 2. Jointly manage the business with your predecessor with gradual increase in responsibility and involvement in decision-making.

3. Now predecessor works for you where you have full responsibility for managing the business, although predecessor is still present for advice.

It is also recommended that the successor should engage in training off the farm and work on another farm for a period of time. This allows them to see how other businesses operate, learn different ways of doing the same jobs, some of which could be applied to the business which they will be taking over.

When they come home, they need to be given controlled managerial responsibility, to keep them motivated. Gradually give them increasing responsibility until ultimately they are making all the major decisions. It is still common to find situations where the predecessor keeps control of the business too long and suddenly the successor is faced with all the financial responsibilities without having had the benefit of gaining experience on a gradual basis. The gradual nature of a planned succession not only allows the successor to prepare, but it also allows the predecessor to gradually let go of responsibility, which can be a difficult process for some.

Consideration must also be given to pension provisions for the predecessor, as well as tax implications of succession, particularly when nonfarming members of the family are inheriting part of the business. This area is particularly complicated and professional advice should always be sought when creating a succession plan.

The 10 Point Plan to Successful Succession

1. Decide who is to succeed and what timescale is involved.

2. Agree a plan with the successor and agree dates that the various phases of succession are to take place.

3. Give the successor a chance to make early management decisions.

4. Where there is more than one successor, inform and agree with all the family how the estate is to be divided.

- 5. Assess the capital position of the business.
- 6. Make early financial provision for retirement.

7. Assess the implications of any changes on support payments and determine and implement a subsidy management plan.

8. Ensure that the management policy of the business is viable.

9. Take expert advice whenever necessary.

10. Communicate at all stages with all parties.

For those interested in finding out more, the NFU have a very useful guide, which can be found by following this link:

https://www.nfumutual.co.uk/farming/successionplanning/

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Summer Concentrates – What do I Need?



As turn out approaches we move our attention to summer rations and selection of our summer compounds. Grass quality can vary throughout the season depending on its management so in order to use it to its full potential we must select our summer compounds accordingly.

At the beginning of the grazing season grass tends be leafy and lush and as it approaches its heading date the plant begins to lignify. Nutritionally this means in the early season the plant tends to be high in energy (mainly from sugar), high in protein and low in fibre. As the season progresses the energy and protein content reduces and fibre increases. Therefore, as the grass plants' nutritional composition changes, we should be adjusting our rations to complement its feed value.

In the early part of the season the ideal summer compound should be high in fibre and low in protein. This is because a high fibre, low protein compound will balance the nutritional composition of the grass, which in turn will improve cow efficiency. Protein sources are normally the most expensive components of a compound and if the protein fed is not utilised by the cow, it will be excreted. Therefore, if protein can be derived predominantly from home grown forages, i.e. early season grass, it has a financial benefit. A good indicator as to whether a cow is receiving sufficient rumen degradable protein is the milk urea level, which should ideally be between 0.015% to 0.03% (or 150 to 300mg/l).

A more crude way of assessing whether the cow is receiving sufficient protein is looking at the consistency of her dung. High levels of blood urea have been found to reduce conception rates by altering the environment within the reproductive tissues. It is always recommended that fresh grass should be analysed frequently to give a good indication of crude protein content, but for a good quality sward with very few unsown species, compounds with crude protein levels as low as 14% can be sufficient when fed alongside grass alone. This can be the case particularly in good grass growing areas in England and even some areas of South West Scotland. It is important to seek nutritional advice when selecting low protein compounds.

Since early season grass does not contain high levels of fibre, this must be supplemented via the compound or buffer feeding. Good sources of fibre within compounds could come from straights such as sugar beet pulp, soya hulls and palm kernel for example. These straights tend to be lower in protein thus complementing grass.

More and more commonly acidosis in dairy cattle is being seen, not just in the early grazing season but throughout the season, even in herds which feed very low levels of concentrates. Acidosis is caused by a drop in rumen pH, which makes the rumen environment less favourable for its microbes to work efficiently, thus reducing fibre digestion further. The drop in rumen pH is most commonly caused by high levels of rapidly fermentable carbohydrates, such as wheat, accompanied with low levels of fibre. Newer varieties of ryegrasses are more at risk of causing acidosis with their higher sugar content. Therefore, a high fibre compound whilst grazing is important and can also help to maintain milk fat percentage. It has been suggested that feeding yeast cultures during the grazing period can mitigate against the acidosis

risk, while also providing a feed conversion benefit and milk yield response.

Fresh grass samples can be carried out in order to determine protein levels as the season progresses to give a guide as to when to increase crude protein level in the compound.

The summer grazing period also sees the risk of grass staggers. Staggers is caused by the cow not receiving adequate daily amounts of magnesium from her diet, as magnesium cannot be stored within the body. Rapidly growing grass, especially where high levels of potash have been applied to the pasture, leads to low levels of magnesium within the plant. Traditionally feed companies increase the magnesium content within their products to compensate for this. In early turn out herds, especially where there are a lot of high yielding cows, it is important to ensure that the summer rate of magnesium is present within the compound or additional supplementation will be required.

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Early Detection of Mastitis in Dairy Cows

Mastitis, subclinical or clinical, in dairy cows is an inflammatory response to an infection within the mammary gland. Mastitis is one of the largest production costs to UK dairy farmers due to veterinary costs and reductions in milk yield, milk quality and fertility. A key indicator of mastitis is somatic cell count (SCC), with individual readings greater than 200,000 cells per ml indicating the cow is likely to be infected with mastitis and potentially in more than one quarter. (Kandeel *et al.*, 2019). Mastitis is one of the most prevalent diseases and the main reason for antibiotic use on UK dairy farms.

There are many risk factors associated with clinical mastitis in dairy cows. Two important factors are parity of the cow and stage of lactation, with older cows and early lactation cows being more at risk. Previous literature (van den Borne *et al.*, 2010; Hammer *et al.*, 2012) has shown that the first 30 days in milk is the highest risk period for clinical mastitis, with incidence rates being 4.6 times higher for primiparous cows than post 30 days in milk. Following a case of clinical mastitis, a cow is more

susceptible to a reoccurrence of mastitis within that lactation (Schukken *et al.*, 2010).

For successful treatment of mastitis to occur, it is dependent on the correct antibiotic being used for the type of bacteria present in the milk. Bacteria present in milk can either be gram positive or gram negative, and can be identified using bacterial cultures. For the most accurate bacterial identification and antibiotic sensitivity testing we would recommend using specialist veterinary laboratories. Data on bacterial identification from a range of clinical cases can inform health planning preventative strategies. Antibiotic sensitivity testing also helps inform treatment protocols.

In addition, there are now several culture products and methods which can be utilised on farm. allowing the correct identification of bacteria guickly, allowing the appropriate antibiotic to be used for treatment. These systems broadly characterise bacteria (for example gram positive and negative in the example below) so that treatment decisions can be made on a case by case basis. All treatment decisions and protocols need to be considered with your veterinary surgeon and need to reflect the known mastitis patterns and common bacteria present on farm. Previously, it has been shown that using the correct antibiotic following identification of the bacteria causing mastitis can reduce antibiotic usage on farm by up to 50%.

Bacterial Culture for Gram Positive and Gram Negative Bacteria



The left hand plate showing growth on the Factor media indicating gram positive bacteria and the right hand plate showing growth on the MacConkey media indicating gram negative bacteria. Figure taken from University of Minnesota, 2020.

Early detection of an increase in SCC is important to reduce use of antibiotics on farm and on farm somatic cell counters can be useful indicators of a

rise in SCC. The somatic cell counters allow mastitic cows to be detected at milking, therefore allowing early medical treatment to occur before the cow enters clinical mastitis. Somatic cell counters provide a SCC reading rapidly which allows separation of mastitic cows, reducing milk production losses and spread of infection throughout the herd. A recent study (Dalen *et al.*, 2019) found that a commercially available somatic cell counter can be used to identify intramammary infections within cows, although somatic cell counters require future developments to make it an effective decision-making tool for dairy farmers in the UK.

Another developing use of on-farm somatic cell counters is to check SCC just before dry off to provide the most up-to-date information possible prior to selecting dry off treatments. This will improve the performance of targeted selective dry cow protocols on farm.

Therefore, in conclusion, it is key to observe older parity cows that are in the high-risk period for mastitis in the first 30 days in milk. Secondly, it is important to detect mastitis and the type of bacteria early to ensure the appropriate antibiotic is utilised to reduce milk production losses. Detection on farm is an area which is improving, and bacterial cultures or cell counters may in the future become the key way of detecting a change in SCC early, reducing losses in milk production and lowering antibiotics used by dairy farms in the UK.

References available upon request.

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Dates for your Diary

 11th March - New Entrants to Farming – Planning for Calf Health. Fairway Hotel, 2 Edinburgh Road, Bathgate, EH48 1BA. Time 19.30-21.30. Book your place via the FAS website: https://www.fas.scot/events/event/new-

entrants-to-farming-planning-for-calf-healthbathgate/

12th March - Mastitis - Predict, React & Optimise. Lochter Activity Centre, Oldmeldrum, Aberdeenshire, AB51 0DZ. Time 10.30-14.30. To book your place, please

contact the KE Events hub on 01904 771216 or email <u>ke.events@ahdb.org.uk</u>

- 13th March Cow Signals: Indicators for High Herd Health (Eaglesham). Temples Farm, Eaglesham, G76 0PF. Time: 11.00-15.00. Book your place via the FAS website: <u>https://www.fas.scot/events/event/cow-signals-indicators-for-high-herd-health-eaglesham/</u>
- 13th March Mastitis Predict, React & Optimise. Green Valley Golf Academy, New Luce Road, Castle Kennedy, Stranraer, DG9 8SH. Time 10.30-14.30. To book your place, please contact the KE Events hub on 01904 771216 or email <u>ke.events@ahdb.org.uk</u>
- 14th March **UK Dairy Expo**. Borderway Mart, Montgomery Way, Rosehill, Carlisle, CA1 2RS.
- 16th-18th March Herdsman Foot Trimming Course, South West Scotland. For more information contact contact Stuart Martin on 07500 766083 or info@scottishdairyhub.org.uk
- 19th March Mobility Scoring. South West Scotland. For more information contact Stuart Martin on 07500 766083 or info@scottishdairyhub.org.uk
- 19th March South West Dairy Focus Group Improving Grassland Management. High Three Mark, Stoneykirk, Stranraer, DG9 9EA. Time: 18.00-21.00. Book your place via the FAS website: https://www.fas.scot/events/event/south-westdairy-focus-group-improving-grasslandmanagement/
- 23th-25th March DIY Al Course. South West Scotland. For more information contact Stuart Martin on 07500 766083 or info@scottishdairyhub.org.uk
- 24th March Animal Care Open Day at Elmwood Campus. SRUC Elmwood Campus, Carslogie Road, Cupar, KY15 4JB. Time 10.00. For enquiries please email: elmwood@sruc.ac.uk or call us on 01334 658800
- 25th March Webinar: What Drives Financial Success on a Dairy? Time 19.00. Register via

the following link: https://ahdb.org.uk/events/what-drivesfinancial-success-on-a-dairy

- 26th March Mastitis Predict, React & Optimise. Ardshiel Hotel, Kilkerran Road, Campbeltown, PA28 6JL. Time 10.30-14.30. To book your place, please contact the KE Events hub on 01904 771216 or email ke.events@ahdb.org.uk
- 17th April Open Afternoon at Oatridge Campus. SRUC Oatridge Campus, Ecclesmachan, Broxburn, West Lothian, EH52 6NH. Time 13.30. For enquiries please email: <u>oatridge@sruc.ac.uk</u> or call us on <u>01506</u>

<u>864800</u>. For all courses excluding Animal Care and Vet Nursing.

- 23rd April Growing Grass, Growing Success. Nether Affleck Farm, Lanark, ML11 9UJ. Time: 10.30. Register at: <u>ke.events@ahdb.org.uk</u> or phone 01904 771218.
- 5th May Driving Higher Margins from Feed. Hillhead of Covington Farm, Thankerton, Biggar, Lanarkshire, ML12 6NE. Time: 10.45-14.00. To book your place contact the AHDB KE Events Hub on 01904 771216 or <u>ke.events@ahdb.org.uk</u> or for more information contact Chris Stockwell on 07775 884831.

For any further enquiries regarding the information in this newsletter please contact:



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