

EXCELLENT SILAGE YEAR POINTS TO BETTER WINTER FEEDING

2019 looks set to be a good winter for many dairy farmers with better quality silage and increased stocks pointing towards reduced feed costs and improved production from forage.

Trouw Nutrition GB operates the UK's largest feed and forage analysis laboratory, analysing grass, wholecrop and maize silage samples from across the UK. Commenting on the results of 4500 first cut grass samples, 1000 second cuts, and over 500 wholecrop samples analysed so far this year, Dr Liz Homer, Ruminant Technical Development Manager at Trouw Nutrition GB says the prospects for the winter are more encouraging than for several years.

"Good weather and the adoption of multicut systems by many farmers mean that stocks are generally higher and the quality is looking very good. Together these should allow higher forage intakes, improved rumen performance and the potential to reduce purchased feed costs per litre.

"The high quality seen in the early first cuts has continued into later cuts (see table below). Grass silage is generally drier with good energy and protein contents while wholecrop has a higher starch content but overall slightly depressed energy levels."

"While silages are generally analysing better, there is a range in the results meaning it is essential farmers get their own clamps analysed regularly. Then the priority must be to understand how the forages will feed and to balance them appropriately."

Dr Homer says that on average grass silages have higher NDF content than in 2018 although still not extremely high. However, levels of lignin are high this year. She warns that higher lignin content makes the fibre less digestible which could lead to reduced rumen passage rates, lower feed intakes and lower production if the diet is not carefully balanced.

"These drier, high lignin silages will be

less fermentable with low rapidly fermentable and total fermentable carbohydrate levels. So they need to be balanced with sources of rumen fermentable energy and fermentable protein to improve rumen efficiency. Energy sources such as molasses and ground cereals will help supply the carbohydrate required while soya and rape will provide the necessary protein.

"Although less wholecrop appears to have been made, those farmers who made any will find it will balance grass well, providing rapidly fermentable carbohydrate from starch, and maize should do a good job too when it is available.

"Encouragingly, the acid load and fibre index of grass silages suggest that rumen health should not be too much of an issue, meaning cereal levels can be increased without the risk of acidosis, provided farmers avoid feeding cereals in large feeds which could precipitate a pH drop."

With most farms entering the winter with high stocks, Dr Homer says there should be the opportunity to drive forage intakes. She comments that each additional 1kg forage DM/day would allow a reduction of 0.8kgDM from

concentrates, helping increase margins.

To maximise intakes she stresses the need to avoid the TMR or clamps heating, to mix the diet correctly, to push feed up regularly and to optimise total ration dry matter at 45-50%.

"It will also be important to change between clamps and cuts carefully. We are seeing big differences in digestibility between first and second cuts, irrespective of whether first cut was taken early or at a typical time, with later cuts being less digestible. This could lead to reduced intakes when clamps are changed unless diets are modified carefully.

"Our results suggest dairy farmers could be on the brink of a more profitable winter, but the imperative will be to maximise the value in the clamp by balancing diets carefully, targeting higher forage dry matter intakes and having faith in the forage and not over-supplementing diets."

2019 silage averages to September 2019

	Early first cut	First cut	Second cut	Wholecrop
Dry matter (%)	34.1	33.3	34.8	37.8
Crude protein (%DM)	15.4	14.6	14.4	8.7
D Value (%)	71.8	70.6	67.6	64.7
ME (MJ/kgDM)	11.5	11.3	10.8	10.1
Starch (%DM)				27.2
NDF (%DM)	45.8	47.4	49.0	45.8
Lignin (g/kgDM)	35.2	36.0	37.7	45.8
Acid load	49.8	48.6	46.3	52.3
Fibre Index	183.8	189.9	197.1	188.8
DyNE (MJ/kgDM)	6.20	6.12	6.00	5.52

Source: TNGB

FEFAC MAKES BIOSECURITY RECOMMENDATION IN RELATION TO ASF AVAILABLE

While the livestock farming community is put under stress by the prospect of outbreaks of viral diseases, in particular African Swine Fever and Avian Influenza, minimising the risk of incidental dissemination of pathogens is everybody's best interest

The EU Feed hygiene legislation (Regulation (EC) No 1831/2005) sets a solid baseline to manage the risk of dissemination of any pathogen via feed: guides to good practice have been developed at EU and national level to help operators implementing prerequisite programmes and HACCP-based procedures for the control of hazards in feed. Additional provisions are required to address the risk of dissemination of pathogens via other vectors than feed (i.e. vehicle, personnel).

The focus of this document is on biosecurity measures for the operations of sourcing of feed ingredients, transport, storage, manufacturing and delivery of final feed to farms. It also covers visits to farms of feed company personnel.

PANCOSMA AND BASF SETTLE THEIR PATENT DISPUTE WITH BIOCHEM ON THE METAL-GLYCINE COMPLEX PATENTS

PANCOSMA SA and BASF SE settled their patent dispute with BIOCHEM concerning the intellectual property rights of metal-glycinates. The patent dispute was settled in Germany on June 24, 2019.

As a result of the settlement, the glycinates IP rights EP 1453843 B1 and EP 2161075 B1

are maintained and BIOCHEM was granted a license thereto.

The companies are pleased with the outcome and are looking forward to further develop metal glycinates to the benefit of their respective customers.

Glycinates are organically bound trace elements used for animal nutrition. Such trace elements are essential micronutrients that enhance the vitality and productivity of animals. The patent-protected glycinates comprise copper, iron, manganese, and zinc. These glycinates are patent protected due to a unique technology that provides free-flowing granules and enables outstanding bioavailability. In addition, they show excellent mixing properties and easily dissolve in water. Due to their superior bioavailability, glycinates optimally supply the animal with trace elements, and the environment benefits from less excreted trace elements.

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NFU UNVEILS ITS PLAN FOR BRITISH FARMING TO DELIVER NET ZERO

The NFU has unveiled its vision of how British farming hopes to reach net zero greenhouse gas emissions by 2040.

The new report, *Achieving Net Zero: Farming's 2040 Goal*, sets out three pillars that will help the industry reach its ambitious goal:

- Improving farming's productive efficiency;
- Improving land management and changing land use to capture more carbon;
- Boosting renewable energy and the wider bio-economy.

The first of these is about reducing our own emissions, using a wide variety of techniques to enhance productivity and deliver the same output or more from every farm, working smarter to use fewer inputs.

The second is about increasing farming's ability to capture more carbon through bigger hedgerows, more trees and woodland, enhancing soil organic matter and conserving existing carbon stores in grassland and pasture.

The third theme involves displacing GHG emissions from fossil fuels and removing carbon dioxide from the atmosphere through bioenergy and bio-based materials like hemp fibre and sheep's wool.

NFU President Minette Batters said: "There is no doubt that climate change is one of the biggest challenges of our time and rising rapidly on the political agenda both at home and globally.

"Representing British farming, we recognise our unique position as both a source and a store for greenhouse gas emissions and, importantly, how we can build on our work so far to deliver climate neutral farming in the next 20 years.

"We aspire to be producing the most climate friendly food in the world. The carbon footprint of British red meat is only 40 per cent of the world average. And we can go further, whether that is through improving our productivity, using our own land to take up and store carbon, planting hedgerows and trees to capture even more, and boosting our renewable energy output. We know that there is no single answer to the climate change challenge facing us all.

"That is why we must work across a range of internationally recognised inventories and utilise the best available science, working in partnership with concerted support from government, stakeholders and the wider supply chain. This 'white paper' provides a strong foundation on which to talk to others about joining us on our journey.

"We mean what we say about delivering

against this aspiration and we have a sense of urgency for what is needed to achieve it. We need to implement pilots of the new Environmental Land Management scheme and productivity scheme to see how these work practically on the ground, as they will play a key part in achieving net zero. A new shared prosperity fund for rural development also needs to be in place and support from the current Industrial Strategy is crucial.

"I am also very clear that we can deliver on our commitment to net zero while retaining, if not growing, our agricultural capacity. British farmers are proud to produce food to some of the highest standards of animal welfare and environmental protection in the world. We must avoid anything that undermines UK food production, and merely exports our greenhouse gas emissions to other parts of the world."

AIC SERVICES LAUNCHES PALM OIL CREDIT SCHEME (APOCS) TO SUPPORT SUSTAINABLE SUPPLY CHAINS

AIC Services' Palm Oil Credit Scheme (APOCS) has been developed in conjunction with the Roundtable on Sustainable Palm Oil (RSPO) to purchase palm oil credits on behalf of AIC members.

By purchasing RSPO Credits, a business can directly support those palm growers who have changed growing practices to meet all the RSPO Principles and Criteria to produce certified sustainable palm oil products. This supply chain model also supports smallholders who may not have access to the market for certified sustainable oil palm products.

AIC estimates that the UK animal feed industry uses between 40-50,000 tonnes of palm oil each year. Most palm oil is included in blended fats for ruminant feeds along with palm fatty acid distillate (PFAD) and mixed soft acids. AIC estimates PFAD usage at 16-20,000 tonnes annually.

Palm oil is used in many other industries ranging from food to cosmetics.

UK government is committed to securing a 100% sustainable palm oil supply chain by 2020. APOCS provides the feed sector with a simple means of moving towards this target and demonstrating to customers a commitment to sustainable products.

Most palm oil is produced in South East Asia, mainly Malaysia and Indonesia. Its production is associated with deforestation and climate change, loss of habitat for orangutans and other diverse species, use of peat resources and exploitation of plantation workers. RSPO standards are set to avoid these adverse effects.

John Kelley, Managing Director, AIC Services said: "APOCS should help the UK feed sector meet some of its sustainability targets as well as having a positive impact by supporting growers in the RSPO. We look forward to managing this new initiative."

Organisations such as RSPO and the European Palm Oil Alliance (EPOA) are raising awareness of palm oil and urging users to move towards sustainable supply chains which work with farmers to promote sustainable practices.

APOCS purchases RSPO Credits on behalf of AIC member companies. This avoids members having to individually join RSPO with the associated fees and audit requirements. APOCS confirms a RSPO Credit purchase price for a defined quantity, carries out the transaction and provides the member with a traceability certificate for the quantity of palm oil purchased. A small fee is charged for this service.

Member companies using APOCS can apply the RSPO Credits logo on their packaging so demonstrating commitment to sustainable supply chains.

To find out more about APOCS and how it can help your business's sustainability goals, visit the Feed Sector page on the AIC website or email palmoil@agindustries.org.uk

INTOUCH AND UNIFORM-AGRI COLLABORATE TO DRIVE EVEN GREATER DAIRY FARM EFFICIENCY.

InTouch, the award-winning feed management platform, and Uniform-Agri, one of the world's leading herd management software providers, have announced a new data sharing collaboration, providing dairy farmers with cutting edge insights and herd management tools.

Each day, InTouch manages the feeding of over 300,000 cows in 37 countries worldwide. As part of animal nutrition company, Alltech, InTouch puts particular focus on providing farmers and nutritionists with the most relevant insights and analytics for delivering optimum nutrition to the herd. Creating a link between InTouch and UNIFORM-Agri's herd management platform to automatically share herd data will further enhance the value of insights that can be provided. This collaboration will also reduce the need for manual input of data and ultimately enable both farmers and nutritionists to work together to make more informed herd management decisions.

"At InTouch, we continually strive to evolve and deliver the best service to our customers," said Conan Condon, director of InTouch. "Collaboration is a key part of this, and we are delighted to now work with such a respected name like UNIFORM-Agri to enhance our user experience. Together we can provide the most effective insights and ensure that the herd's diet can be quickly adapted to any changes in milk output."

The desire to provide the best service possible is shared by UNIFORM-Agri, who for decades have been working together with dairy farmers globally to improve management efficiency.

“With UNIFORM-Agri we want to support dairy farmers and their suppliers worldwide with the best and most user-friendly software solutions that help to build a profitable and sustainable business,” stated Harm-Jan van der Beek, managing director of UNIFORM-Agri. “Working together with a partner such as InTouch helps us to achieve the goal of making it easier for the dairy farmer to gain more insights into the herd, leading to better results.”

PIONEERING SERVICE TO HELP FARMERS CUT FEED WASTE AND DRIVE PROFIT MARGINS LAUNCHED AT UK DAIRY DAY

Dairy farmers across the UK can now benefit from Alltech® Navigate™, a pioneering advice service that aims to increase profit margins by a minimum of 1.2 pence per litre through reducing feed waste and optimising input utilisation.

Presenting at UK Dairy Day, Ian Leach, Alltech retail programmes lead, explained that results from the latest Alltech feed waste reduction and utilisation on-farm pilot study, which looked specifically at higher-efficiency UK dairy herds, highlighted that feed waste could be costing as much as £216.00 per cow, per year.

“However, the reality is that this figure could be much higher depending on the system in place. For example, results from our first pilot study, which assessed a broad spectrum of dairy farms, revealed that the average waste value per cow sat at £522.44 per annum,” he said.

“Based on a 200-cow herd, this could lead to financial losses of up to £105,000 over 12 months. Tackling feed waste therefore offers a huge opportunity to boost the bottom line and while it is a challenging area, there are practical steps that can be taken.”

Alltech® Navigate™ aims to support the dairy industry on the journey to higher business resilience.

“The advice service, which is free to access, involves a simple three-step process; assess, analyse, action. A two-hour on-farm assessment looks at detail into the four key areas where feed waste can occur, including; in the field, during storage, at feed-out and inside the cow,” explained Ian.

“Data collected during the assessment is then analysed using the programming tool in order to produce percentage losses, and monetary values, to illustrate the financial pinch-points,” he added.

“Finally, a concise report, containing actionable recommendations, is generated to help farmers make well-informed strategic decisions on what steps, and potential investment, is required to help reduce feed waste and optimise input utilisation.”

Andrew Henderson from Independent Feeds, who has experienced the impact of

Alltech® Navigate™ first-hand, believes the advice service is fundamental to the future of the UK dairy sector.

“Feed is the single biggest variable cost on farm,” he said. “It’s therefore key that farmers are taking steps throughout the entire feed process to manage factors that can be controlled, such as forage quality, cow health and fertility, and feed conversion efficiency (FCE).

“This will help protect businesses from external factors such as milk contracts, market volatility and supply chain pressures.

“I’m certain that the focus the initiative brings, in terms of producing high quality home-grown forage and encouraging effective utilisation of feed inputs to minimise waste, is key to the long-term sustainability of farms across the UK.”

ROTHAMSTED RESPONSE TO NEW PM’S PLEDGE ON GM

In response to PM Boris Johnson’s pledge yesterday “...to liberate the UK’s extraordinary bio-science sector from anti-genetic modification rules and let’s develop the blight-resistant crops that will feed the world.”

Professor Achim Dobermann, Director and Chief Executive of Rothamsted Research said:

“Rothamsted Research welcomes the prospect of a more pragmatic approach to the risk assessment of genetically engineered crops, which have already been widely grown around the world - including Europe - for a generation.

“As the world faces the challenge of feeding more and more people from less land and with the least harm to the planet – in the face of climate change and all its associated challenges – we need every possible tool and technology at our disposal to improve our crops, and to make them more nutritious and more resilient.

“What we need in the UK is a more straight-forward process for the regulation of genetically engineered crops, that meets the highest standards in terms of safety, as well as productivity, nutritional value and environmental impact. This can be done in a much smarter way than previously, for example on a trait by trait basis, rather than a blanket ruling across all gene technologies.

“There is also a requirement for better legislation on the specific technique of genome editing that, firstly distinguishes it from other GM technologies, and is differentiated in terms of where it is being applied – whether its crops, microbes, animals or human medicine. Sound ethical decisions and societal consent also play central roles in framing discussions about both GE and GM and how they deliver benefit to the wider public.

“I think if this happens, the whole UK science community would welcome an opportunity to support the new government in this.”

NFU RESPONDS TO IPCC REPORT

In response to the IPCC report on land use across the world and its impact on the climate, NFU President Minette Batters said: “Having gone through the report in detail, it is clear that the IPCC recognises the important role animal products play in a balanced diet, and when produced in sustainably in low greenhouse gas emission systems is actually part of the solution to climate change.

“It is therefore incredibly frustrating to see this inflated within some part of the media to recommending a reduction of meat consumption in the UK.

“I take this opportunity to reiterate that our aspiration to become net zero – reducing our greenhouse gas footprint and offsetting emissions – by 2040 does not mean downsizing agricultural production. This would only export our production to countries which may not have the same standards of environmental protection.

“Our plan for achieving our net zero goal is focused on making the most of our natural resources. With 65% of UK farmland best suited to growing grass, this means using our grasslands, which are also a huge store of carbon, to produce high quality beef and lamb.

“British farmers are determined to continue reducing methane emissions through a variety of methods, including dietary changes and breeding techniques. Alongside this, we are also looking for ways to continue to improve soil health and increase organic matter within our soils, which is one of our greatest assets.”

DSM BECOMES INAUGURAL VALUE CHAIN PARTNER TO THE INTERNATIONAL EGG COMMISSION (IEC)

DSM has become the first Value Chain Partner to the International Egg Commission (IEC), the international trade association representing the producers of eggs and egg products worldwide. The IEC was founded with the goal of fostering international co-operation among all sectors of the egg industry to their mutual benefit.

Designed to promote sustainable production and drive positive developments in the egg industry, the new Value Chain Partnerships will see the IEC form close strategic relationships with global organisations to deliver on the United Nations Sustainable Development Goals across the global egg value chain. DSM is the inaugural company to partner with the IEC on this basis

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and has been confirmed as exclusive IEC Value Chain Partner for Feed Additives and Sustainability.

The partnership will see the two organisations work together to tackle four key areas of joint interest: environmental sustainability of feed nutrition; human nutrition and poverty alleviation; anti-microbial resistance; and animal welfare.

DSM has been a member of the IEC since 2011. It is already involved with the IEC's Global Initiative for Sustainable Eggs (GISE), which aims to champion continuous improvements in sustainability across the egg value chain. Areas of collaboration include: sustainable feed supply; the introduction of alternative raw feed materials & feed efficiency; reducing direct and indirect GHG emissions and reducing nitrogen and phosphorous flows to the environment.

UNIBIO COMPLETES £12.4 MILLION FINANCING ROUND

Unibio International plc has raised GBP 12.4 million (USD 15 million) from existing and new shareholders. These funds enable commencement of global roll-out of full-scale protein-from-methane production technology.

The investment will allow Unibio to initiate full-scale production projects, together with local partners, around the world (including in the USA and the Persian Gulf). In addition, Unibio will expand its R&D activities and strengthen the organization for the commercial stage but first and foremost commence a global roll-out of additional commercial projects. The financing was led by West Hill Capital. Unibio is still in discussion with potential additional corporate and financial investors.

Unibio's fermentation technology allows the large-scale production of affordable, high-quality protein, sold under the brand name Uniprotein®, via a process that uses little water and no agricultural land. Protein for human or animal consumption can thus be produced without the use of farmland or fishing, leading to a more sustainable food production. Uniprotein® is an organic, safe and extensively tested microbial protein that has been approved by the EU for all animal and fish species.

Unibio is an alternate protein company with core competences in microbial fermentation technologies. In collaboration with the Technical University of Denmark and others, Unibio has developed a range of innovative technologies under the U-Loop® brand. These technologies allow the cost-effective, large-scale conversion of methane

(natural gas or biogas) into high-quality protein using methanotrophic ("methane-eating") microbes.

Unlike most other alternate protein approaches, Unibio's technologies allow the full decoupling of protein production from farming and fishing. They thus help address one of the key challenges of today's world – how to provide a growing population with high-quality food, without further exploiting depleted fish stocks or converting ever more land to intensive agriculture. At the same time, the process provides owners of gas assets with a commercially attractive way to valorize their gas, addressing significant and growing markets with a low environmental footprint process and product.

Unibio has its pilot and R&D facilities at the Technical University of Denmark near Copenhagen and operates a demonstration plant in Kalundborg, Denmark. The first full-scale production plant, constructed and operated by Unibio's partner Protelux, is being commissioned in Russia. Since formation Unibio has raised a total of USD 35 million in financing, including the current round.

Unibio has signed two licence agreements, one for the Russian Federation and one for the USA.

GREATER FEED EFFICIENCY WILL SOFTEN CARCASS WEIGHT LIMIT BLOW

Increasing feed efficiency to reduce days to finish will help reduce total feed costs and maintain margins in the light of moves by beef processors to set a lower cap on carcass weights, according to David Bonsall from UFAC UK.

Mr Bonsall says there is pressure from processors and retailers to reduce carcass weight to optimise the value of the carcass in the food chain.

"Supermarkets are looking for steaks at around £5 on the shelf which has seen the average size of a steak drop to 200g," Mr Bonsall comments. "If they have to trim steaks down they lose around £11/kg on the offcuts. The optimum carcass to supply a suitably sized loin is 280-350kg."

"But the industry is producing larger animals. According to AHDB, around 35% of carcasses are currently over 380kg. This helps explain why some processors are penalising heavier animals."

Mr Bonsall says that two major processors in Scotland, Scotbeef and ABP Perth, have announced a lower cap for carcasses, down from 420kg to 400kg. Each overweight kilo will be price penalised in a drive for smaller slaughter weights. AHDB figures suggest that if all processors followed their lead, one in five carcasses would currently be overweight and penalised.

"This represents a major challenge for producers," Mr Bonsall continues. "On many beef units the strategy has been to produce a

larger animal in a drive to maximise income. They target producing to the highest weight possible, but with the target weight declining and more penalties being applied it is time to reconsider the strategy for beef finishing.

"Rather than driving for a bigger animal, the focus should be on increasing feed efficiency to get them growing quicker to increase throughput. Key to this is taking a close look at the diet."

Mr Bonsall says that fine-tuning the diet can have a big impact on growth rates and feed conversion. In particular he recommends increasing the inclusion rate of fats in beef diets and cutting back on cereals.

The recommended inclusion rate of fat in growing diets is up to 5% but most diets are closer to 3%. In finishing diets a typical inclusion is also 3% fat but diets can safely include over 5%.

"By replacing barley with a fat supplement you can increase the energy density of the ration to promote faster growth with little impact on cost," Mr Bonsall continues. "Feeding the correct blend of rumen protected fatty acids improves performance whilst maintaining rumen health."

"Feeding optimum fatty acids also improve carcass classification and can increase price per kilo."

"If the pressure is going to be on producing lighter carcasses, then the focus has to switch to producing as efficiently as possible. Optimising fatty acid content in the ration is a proven way to achieve this."

SEARCH IS ON FOR TOP DAIRY SECTOR EMPLOYERS

A new category at the annual dairy industry trade Cream Awards will recognise the importance of people in businesses as well as building, maintaining and developing strong and effective teams.

The award, titled the Dairy Employer of the Year is split into two categories of 'Farmer Employer of the year' and 'Supply Trade Employer of the year'. Stuart Goodinson, managing director of award sponsors De Lacy Executive says that increasingly the ability to get the most from great people and manage effective teams will be a major factor determining profitable businesses.

"The challenges and opportunities facing farmers and their suppliers continue to increase and the whole supply chain must embrace new technologies and practices to drive performance, efficiency and profit. Central to this will be the creation of highly skilled teams."

"While recruitment is a central building block, we know the market for good quality staff is becoming tighter and the industry needs to present itself better to other sectors where similar skills are utilised. Increasingly successful businesses will need to place a premium on training,

development and career progression to retain the best staff.

The award judges will be looking for businesses who really understand the crucial importance of people management for business success, showing a real commitment to attracting the best candidates from inside or outside the industry. They will then train and develop them and have clear career progression resulting in good staff retention.

"The winning company will be able to demonstrate how they put people at the core of their business to deliver improved productivity and satisfaction.

"We know there are good employers out there and feel they need to be recognised for the good job they do. I am certain that winning the award will help businesses attract even stronger staff in future," Mr Goodinson concludes.

To enter the award go to <https://www.britishtdairying.co.uk/cream-awards-2020/> or call De Lacy Executive on 01885 483440. Entries close on 30th September and the winner will be announced at the Awards dinner on 5th February 2020.

RE-THINK HOW YOU FEED FATS TO DAIRY COWS

It's time to stop thinking of a bag of fat as a bag of fat and instead think about the balance of fatty acids being fed to dairy cows in order to meet specific requirements.

That was the message from Dr Adam Lock of Michigan State University at a recent Mole Valley Farmers' "Get your fa(c)ts right" mini-roadshow.

Dr Lock threw out traditional thinking that suggested feeding fats to fresh cows was ill-advised due to the fact cows were already mobilising body fat at this time. Instead, he highlighted research from Michigan State University which had found that providing specific fats to fresh cows could actually boost milk yields by 4kg a head a day, without compromising body condition.

This highlighted that "not all fats are created equal" and achieving a positive outcome ultimately came down to choosing the right balance of fatty acids.

In Dr Lock's trial work, cows were fed varying ratios of palmitic and oleic acid in a two thirds maize silage, one third alfalfa diet. Supplemental fatty acids made up 1.5% of total diet dry matter and were fed for the first three weeks post-calving.

Feeding a 60:30 blend of palmitic and oleic acid resulted in a 4.5 kg per cow per day increase in energy corrected milk (ECM) over the fresh period. At the same time, those cows didn't lose any more body weight over the control group that did not receive fats.

Although cows fed an 80:10 blend of palmitic and oleic acid also increased EMC to a similar level, they lost more body weight over

the control group, which suggested there was a threshold for the palmitic and oleic ratio.

Fatty acids were taken out of the diet after three weeks. Cows that were supplemented with the 60:30 blend during the fresh period continued to produce 4 kg more ECM than control cows for a further seven weeks, despite all cows being fed the same diet during this seven week period.

"There's some kind of programming during the fresh period," explained Dr Lock. As a result, he urged farmers to consider feeding a balanced supply of fatty acids to fresh cows.

He said the right balance of fatty acids depended on stage of lactation and also milk contract requirements.

For example, palmitic acid promoted milk fat production, whilst oleic acid helped yields and promoted body weight gain after peak lactation. This meant that ratios would need to be tweaked according to specific systems and milk contract requirements. In general, less oleic was required post peak to stop cows from getting too fat.

For example, for the first 2-3 weeks of lactation, a fatty acid balance of 25-30% oleic and the rest palmitic acid was ideal. Once cows had reached peak - and were at an ideal body weight for a specific system - oleic acid should be dropped back to 10%, with 90% from palmitic acid.

EVONIK AND PERSTORP SIGN RESEARCH AGREEMENT TO DEVELOP NEW ANIMAL NUTRITION PRODUCTS

Evonik and Perstorp have signed a research agreement for the development of new animal nutrition products and are investigating future options for commercial partnerships.

This joint approach combines Evonik's access to the unique gut health simulation system and probiotics portfolio with Perstorp's innovative ester technology platform for efficient and safe acid application. In that way combining advanced science and practical experience from both well-established companies will deliver breakthrough innovation supporting the requirements for tomorrow's animal farming. Specifically, the products to be developed will be aimed at improving the gut health of the animals and at the same time keep the performance compared to antibiotic growth promoters.

Roger Mann, Executive Vice President Animal Nutrition, Perstorp, said: "As a leading specialty chemicals innovator, we help prevent antibiotic resistance from becoming an even bigger problem by offering alternative, more sustainable solutions for sound and profitable animal production.

"We're excited by the opportunity this partnership with Evonik brings to build on the expertise of both companies to tackle this global challenge."

Dr. Christoph Kobler, Head of Product Line Sustainable Healthy Nutrition at Evonik, added: "Both companies believe that the challenges of antimicrobial resistance in animal production can only be tackled with a holistic approach, using new and innovative solutions instead of the preventive use of antibiotics. This approach will help to ensure that sustainable livestock production remains possible without resorting to that intervention."

ALLTECH ANNOUNCES INDUSTRY-WIDE SURVEY ON WOMEN IN AGRICULTURE

The challenges associated with the ever-increasing global population have made it more important than ever for the agri-food industry to be able to perform at its full potential. Inclusion and diversity in the workforce are essential to shaping a sustainable future — and yet, according to the Food and Agriculture Organization of the United Nations, the gender gap in the food and agriculture industries is extensive. To gather real-world insights into the professional landscape for women in agriculture, Alltech has announced its support of an industry-wide survey.

Launched on Sept. 10, this global survey, which will be conducted in partnership with AgriBriefing, aims to collect feedback about the barriers that impede progress and to identify the resources needed to ensure workplace equality. The survey is open to women and men across all sectors of the agri-food industry, and the results will be revealed at the Women in Food & Agriculture Summit, to be held Dec. 3–4, 2019, in Amsterdam, the Netherlands.

"It is my experience that the most effective organizations embrace diversity and support inclusion," said Dr. Lyons. "The food and agriculture sectors include many talented female leaders, and we need to make sure young people see themselves represented and can envision a future career in the industry. Through this industry-wide survey, we hope to gain a better understanding of the challenges facing women in agriculture and identify opportunities for growth."

Women and men in all sectors of the food supply chain are encouraged to contribute to this important global conversation about gender equality in agriculture by taking the survey here.

For more information on the Women in Food & Agriculture Summit, visit wfasummit.com, and join the conversation on social media using #WFA19.