

NUTRITION UNDERPINS TOP FERTILITY

The Daniel family farm at Lower Rillaton near Callington. Jack Daniel runs the farm with his wife Karen and sons Matt and Alex, although his father Chris is still involved on a daily basis. They run 180 all-year-round calving Holstein cows averaging 7800 litres at 4.95% fat and 3.67% protein.

Jack says the emphasis is on finding the right balance between the land available and the numbers carried, maximising productivity. Achieving exceptional levels of fertility based on a team approach is certainly allowing the family to move in the right direction with the farm ranked in the top 5% of Genus ABS RMS herds in the UK.

Getting cows and heifers in calf quicker means they can cull harder to improve the quality of the herd and avoid carrying passengers. They can also reduce average days in milk, improving feed efficiency and milk yield. Using sexed semen they can reduce the number of heifers carried and create the opportunity to produce more beef calves.

The Daniels use RMS for all breeding. Over the last 12 months the Daniels have averaged a conception rate of 52% and a pregnancy rate of 40% with 1.9 straws per conception.

The vet visits every two weeks to PD cows and heifers and to check the very few cows not seen bulling.

In the past the farm has produced and carried more heifers than they needed but this has allowed them to select the best, to cull harder and reduce the average herd age by bringing in around 50 heifers per year. They have been able to sell 15-20 heifers, usually at bulling age, per year.

Now, the aim is to pull back on the number of heifers reared and to produce more beef calves. This will give the option to grow beef calves on, either finishing or selling as stores.



Jack and Alex Daniel with Matt Dymond

QUALITY FORAGE

In addition, rearing fewer heifers will mean it will be possible to rear them better and reduce age at first calving down to 24 months.

In the winter the cows are fed a mix of maize and grass silage, urea-treated home-grown wheat, fodder beet, a 40% protein blend and a bespoke mineral. In the summer they graze by day and are housed by night on the winter diet minus the fodder beet.

In the parlour, they are fed 8kg/day of home-grown barley with a 25% protein balancer for 90 days before the rate is stepped down. The overall herd feed rate is 0.3kg/l.

Diets are based on quality silage. Around 200 acres of first cut are taken followed by 100 acres of second cut. Third and fourth cuts are baled. First cut typically analyses at 27%DM and 11.8MJ ME/kgDM with second cut at 32% DM and 11.1MJ ME/kgDM.

Close attention has been paid to minerals. Forage analysis showed a particular problem with iodine, so all animals receive a bespoke mineral to address this.

The Daniels believe they now have options to help them react depending on what the industry faces.

He doesn't rule out increasing the herd to 200 cows and while their focus is on milk constituents rather than milk yield, he says the genetics are in the herd to allow them to produce more milk.

They have the option to finish more beef calves or to keep and sell additional heifers as the younger herd should allow them to reduce replacement rates.

Being an Arla supplier, a major challenge at the moment is meeting the sustainability targets and achieving the required points. For this reason the whole farm has now moved onto Harpers Planet feeds which contain no soya, meaning they will pick up 11 points immediately by taking over 50 tonnes of soya out of the diet and reducing emissions by 250 tonnes of carbon per year.

Cutting soya out was an easy decision as it is perfectly possible to feed cows, heifers and calves without it and leave performance unchanged.

With the foundations of excellent fertility, quality forages and good nutrition the Daniel family have a system which can be more agile as the market, economic and environmental pictures change.



Matt Dymond

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GRAIN AND STRAIGHTS

For the first time the Black Sea grain corridor agreement has not been renewed by Russia.

The market was expecting this and there was not an immediate price reaction. It was the following few days when the volatility started. Between 17th and 19th July wheat futures rose by over £16 per tonne in 2 days!

This was on the back of the hostile acts by Russia on Odessa, the main export port for Ukraine, damaging silos and elevators and the threat that any ships travelling through the Black Sea would be considered a considerate legitimate military target.

Ukrainian crops are predicted to be up to 40% down on last year and it was considered that Ukraine would not be as reliant on Black Sea exports as they could export over land or by barge using the Danube. How the dynamics of the market can change so quickly. Neighbouring countries to Ukraine are currently campaigning for a continuation of the EU ban on Ukraine grain exports past the 15th September to protect domestic markets.

Closer to home the UK harvest is proving very stop start. Some barley has been harvested early but yields and bushels have been low in many areas. Spring barley crops are also a concern. Globally barley stocks will end 2023/24 at a 40-year low, so it is likely the differential between wheat and barley will narrow.

Dry weather across the US corn belts and the extreme heat in Europe are causing concern for many crops.

Some analysts are saying that US crops are currently in a worse state than the US drought of 2012. However, there is still a lot of the growing season left to go yet. The hot weather from the States is pushing into Canada affecting the rape crop, so we could see upward pressure on oilseed rape prices. We are expecting a bumper UK sugar beet crop this year with extra incentives for growers to grow more and current growing conditions are ideal. This will offset the lack of sugar beet imports.

Price direction of ingredients is currently very difficult to call with so many influences, but we anticipate considerable volatility over the next few months.



Farming thoughts

I wish I had a magic wand so that I could drum some common sense into our Whitehall politicians and officials.

Richard Waters and I have just come back from a conference in Dublin. We were reminded once again that today's global population is over 7 billion people and is projected to increase to 12 billion by 2060. How on earth are we going to feed all these people?

Firstly 1.2 billion people are already under nourished and now secondly, politicians want us to rewild the countryside and turn our productive land into a big national park. Thirdly, what is our priority? Is it food, energy or getting to net zero? Getting to net zero is all very well and good but not with empty mouths.

One speaker told us that all food waste should be fed to animals to produce food, but then another proposed all food waste should go into AD plants to produce renewable energy. The verdict is out on that one!

We always said when it starts raining it won't know when to stop. We have already bought a lot of grain forward, which is good because now Russia has now blocked the grain corridor and uncertain weather in Europe and USA is affecting harvests.

We had a mid-month price drop in July, another one is pencilled in for September and hopefully again in November.

Recent rain is bulking up grass yields and forage stocks, and hopefully we will see milk prices turn the other way, with beef and lamb staying where they are.



GETTING THE BEST FROM BEEF

Feed is the primary cost of beef production, whatever your system. Feed into Beef, a new collaborative project funded by AHDB aims to deliver more effective feeding guidelines for beef cattle to help improve returns.

We have compared our beef rationing system against Feed into Beef figures and our programme has proved to be most effective at matching intakes with performance. As with all programmes the animals are the final judges of the palatability of silages, both grass and wholecrop.

This winter we want to help you get the best from the system and your cattle. We will take forage analyses and run the equations against your required growth rates. When the cattle have been in for around a month, we will evaluate the diet giving the actual intakes cattle are achieving.



This will allow us to correct any situations where cattle are not eating as much as we would like, or they may be liking the silage so much that they are eating more than predicted.

When you contact your Harpers Feeds Specialist, they will arrange to visit your farm to take forage samples and plan the required performance levels to meet your objectives.

It may be that you want to have a group of cattle that you want to finish for the Christmas trade, these cattle will need feeding now and be in during September on a full finishing diet. Alternatively, you may have younger cattle that need more protein to ensure growth and then more energy in the last three months. Either way, we can produce a cost-effective ration.

Last winter showed that even with high cereal costs, cattle that are rationed properly and perform well, leave good margins. This winter we will be closely monitoring concentrate p/kg liveweight gain, so let us work out your best route to feeding your cattle profitably.

For more information, speak to your Feed Specialist.



PREPARING FOR A GOOD START FOR YOUR YOUNGSTOCK



Lilly Cochrane
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To ensure maximum immunity and desired growth rates, both the management factors and milk powder need to work in harmony to achieve targeted performance.

HOUSING

I think I will start in the calving pen. Make sure it is always cleaned out and disinfected (ideally pressure washed after each calving), with plenty of clean bedding available allowing a hygienic and germfree entrance into the world. Often the calving shed is overlooked and by managing these factors the risk of infection is greatly reduced.

CALVING

The big moment, the birth of a calf. As soon as possible, we advise dipping the calves navel with a good strong recommended naval disinfectant reducing the risk of any infection entering this vulnerable spot.

COLOSTRUM

I cannot emphasise enough that all colostrum should be tested with a refractometer. It is a small investment, but it is essential to know the quality of the colostrum which should be fed at a Brix measurement of 22 or higher. Feed at least 10% of the calves body weight e.g a calf weighing 40kg is fed four litres of quality colostrum. 50% of this needs to be fed within the first three hours of life, if not immediately. Try to feed by teat, if not please tube.

The next step is to move the calf to its new residence, whether it be calf shed, hutches or an igloo. The environment must be clean, dry, airy, but essentially draft free, very comfortable and plenty of light. A clean fresh water supply must always be available from day one, supported with availability of starter feed and clean fresh forage, preferably in a rack.

CHOOSING THE RIGHT CALF MILK REPLACER (CMR)

Once the aims and targets are set, the next decision is which milk powder suits your system. Growth rates? Beef or heifer replacements? Age of heifers when calving down?

Almost all calf milk powders are either skim or whey based. Either can be used with equal success. The importance is understanding the raw materials included. It's essential to be aware of the nutritional value of all of these ingredients as not all are suitable to the pre-ruminant and can bluntly be undigestible causing restricted growth rates and possibly scour.

INGREDIENTS INCLUDED IN YOUR MILK POWDER FOR BEST RESULTS

- Proteins – must be milk products, skim or whey
- Vegetable Oils – palm and coconut
- Ash levels less than 9%

LESS SUITABLE INGREDIENTS

- Oils – linseed, rapeseed, sunflower
- Dextrose
- Wheat flour
- Soya bean

SO WHAT DO WE HAVE TO OFFER?

- All our milk powders are made from British milk.
- They are all made of a concise list of ingredients with simple mixing instructions
- Ingredients suited for best performance

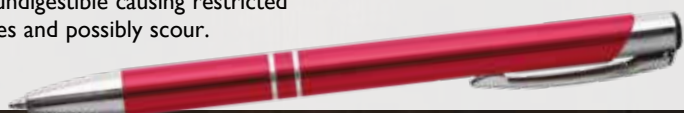
Skimmed:

- Milkivit Energizer - is 50% skim, it is a high-performance milk powder, allowed to be fed at a high level of up to 8 litres a day, at a mixing rate of 135g/litre of water at 40°C, allowing growth rates at over 1kg/day.
- Milkivit Rearing – 35% skim product that supports elevated levels of feeding to allow calves to achieve excellent performance and is designed to be mixed at 150g/litre of water. It contains a high digestible protein source to support optimum growth and performance in early life, ensuring that the genetic potential is reached.

Whey-based:

- Calfpriide Glow + BioMos – high energy based, formulated to give good feed conversion and growth rates, targeted for both dairy heifers and beef calves, the addition of BioMos to help aid good gut health and reduce scours and low-level pathogens. BioMos is a sticky yeast that low level pathogens will attach to, then passing out through the backend, therefore maintaining good health.
- Calfpriide Gold – is designed for modern beef and traditional dairy units and maintains good live weight gain.

For more information about the best milk replacer for your system, please speak to your Feed Specialist.



CONDITION SCORING YOUR HERD

Body Condition and mobility scoring have become an important part of dairy cow health and welfare management and it is necessary to keep records for Red Tractor standards and your milk processor.

But most importantly they give invaluable information to manage your cows.

BODY CONDITION SCORING

This involves assessing the fat cover over the hook and pin bones and the prominence of the tail head. Condition varies through lactation and cows can range from score 1 (very thin with no fat reserves) to 5 (severely over-conditioned).

Ideally score cows 2-3 weeks after calving and 60 days later, 100 days before drying off and at drying off. Ideal condition scores are 3.0 -3.25 at drying off and calving and 2.25 to 2.75 at peak lactation.

MOBILITY SCORING

Mobility scoring involves observing cows walk and ranking them on a scale of 0-3. Cows at score 0 walks with even weight bearing and rhythm on all four feet while cows at score 3 are unable to walk at a brisk pace, have an arched back, and need treatment and possible pain relief.

All our Feed Specialists are trained in both ROMS (Register of Mobility Scores) and Body Condition Scoring and are able to help you assess your herd.



TRANSITION DRY COW MANAGEMENT ON FARM EVENTS



Richard Waters
Ruminant Feed Specialist &
Development Manager
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We have kicked off our Transition Dry cow tour with an amazing day kindly hosted by Tony and Will Mitchell, Laram Holsteins at St Kew where we had an excellent team of speakers.

Phil Dawber, Clinical Director/vet from Cornwall Dairy vets spoke on metabolic diseases centred around calving. Carolina Daglio, Ruminant Key account manager with Elanco joined me in the dry cow discussions and lastly, our very own Paul Cholwill hosting his first public meeting in 18 years covered the newborn calf and rearing.

The discussion started with body condition scoring (BCS), which many still consider a waste of time. However, it is a clear and visual measure of possible problems to come. Cows need to be scored at least three times per lactation.

Dry cow scoring is a great place to start however we must aim to neither gain or lose condition while the cow isn't milking. This is of critical importance as then cows will put fat into all the wrong places as her energy demand for milk isn't there.

Similarly, if she is fat and we try and mobilise this weight then she uses the fat stored to plug the energy gap.

Fresh cow scoring is subjective in terms of days. I aim for 40-60 days in milk. Here isn't about who has scored the cow a 2 or 3 but more how much change has been seen since the last time she was scored. One point of BCS gain or loss equates to 10% of the cow's body weight. The 200-day BCS is also a very important one as we can adjust weight at the end of lactation while the cow is still producing milk.



Carolina spoke of targeted use of Kextone boluses aiming to support cows with issues such as over fat cows at BCS 3.5 +, underweight at BCS 2.25-, cows carrying twins, lame or older cows.

All these could be considered high risk at calving.

The importance of making abundant clean water available to dry cows to maximise dry matter intakes was also stressed. Due to the nature of many dry cow diets which are high dry matter often with lots of straw, cows work really hard to consume the desired amount hence the importance of water. If we can maximise dry matter intake during the dry period, then the cow will automatically want to fill up post calving on fresh feed, providing we cap the energy intake and provide a balance of starch and protein.

I am going to stop there as I am delighted to say based on the success of this day, we will be continuing these on farm sessions across the region in the coming weeks.

Watch out for the next and nearest dates to yourselves or ask your Feed Specialist for details. Subject topics will vary a little but I'm confident they will stimulate great questions and ideas to take home.

SHOW WINNER



Massive congratulations to our customers – Mr J Collings from Launceston, Cornwall who won Pig of the Year at the Great Yorkshire Show with his pedigree British Lop gilt.

Mr Collings feeds his pigs on Harpers pig feeds, giving his stock a good all-round finish and healthy frame.

DATES FOR YOUR DIARY

Event	Date	Location
Camelford Show	9th Aug	Trevilla, Camelford, PL32 9YN
Exford Show	9th Aug	Room Hill Road, Exford, TA24 7ND
Okehampton Show	10th Aug	Stoney Park Showground, EX20 1SW
Dunster Show	18th Aug	Just off the A39 between Dunster and Carhampton
Holsworthy Show	24th Aug	Killatree, Holsworthy, EX22 6LP 12pm onwards
Harpers Golf Day	30th Aug	Killatree, Holsworthy, EX22 6LP
Kingsbridge Show	2nd Sept	Borough Farm, TQ9 7QP