YEASTSOLUTIONS
ISSUE 37 - SPRING

IMPROVEMENT IN RUMEN FUNCTION SEEN AFTER INTRODUCTION OF ACTISAF®

Loose, bubbly dung is often indicative of bigger problems in cattle, and can often accompany stressful periods such as calving, diet transitions or group changes. Quick recognition and early intervention is key to ensuring that a more serious condition doesn't occur.

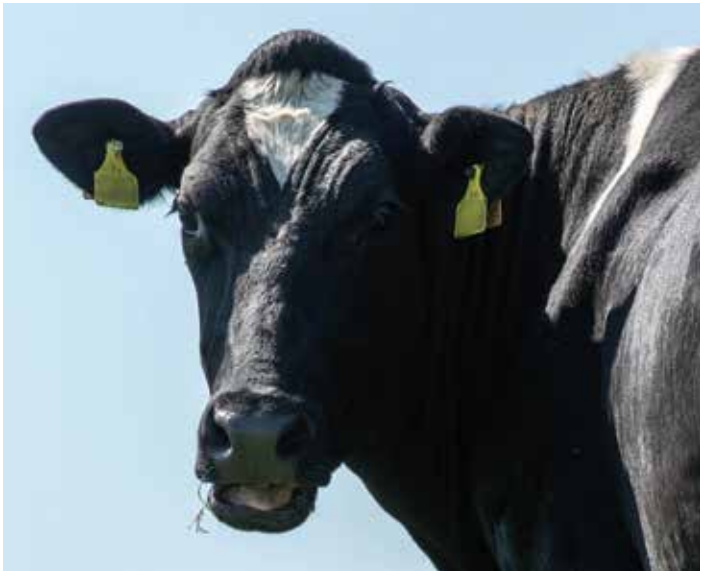
Phil Courtney milks 135 Holstein-Friesian cows, in addition to 30 sucklers raised and finished for beef, on his farm in Co Monaghan, Ireland.

His milking herd averages 8,000 litres and produces an average of 487kg of milk solids per year. All calving occurs in the spring and cows are paddock-grazed with 12 or 24-hour breaks, dependent upon grass growth and quality.

"Last February, the cows' dung got very loose. Naturally I was concerned and phoned the vet to take a look and see what we could do for them before it became a problem. He reckoned it was sub acute rumen acidosis and recommended we add Actisaf live yeast to our TMR which we did, and the problem disappeared within two days!"

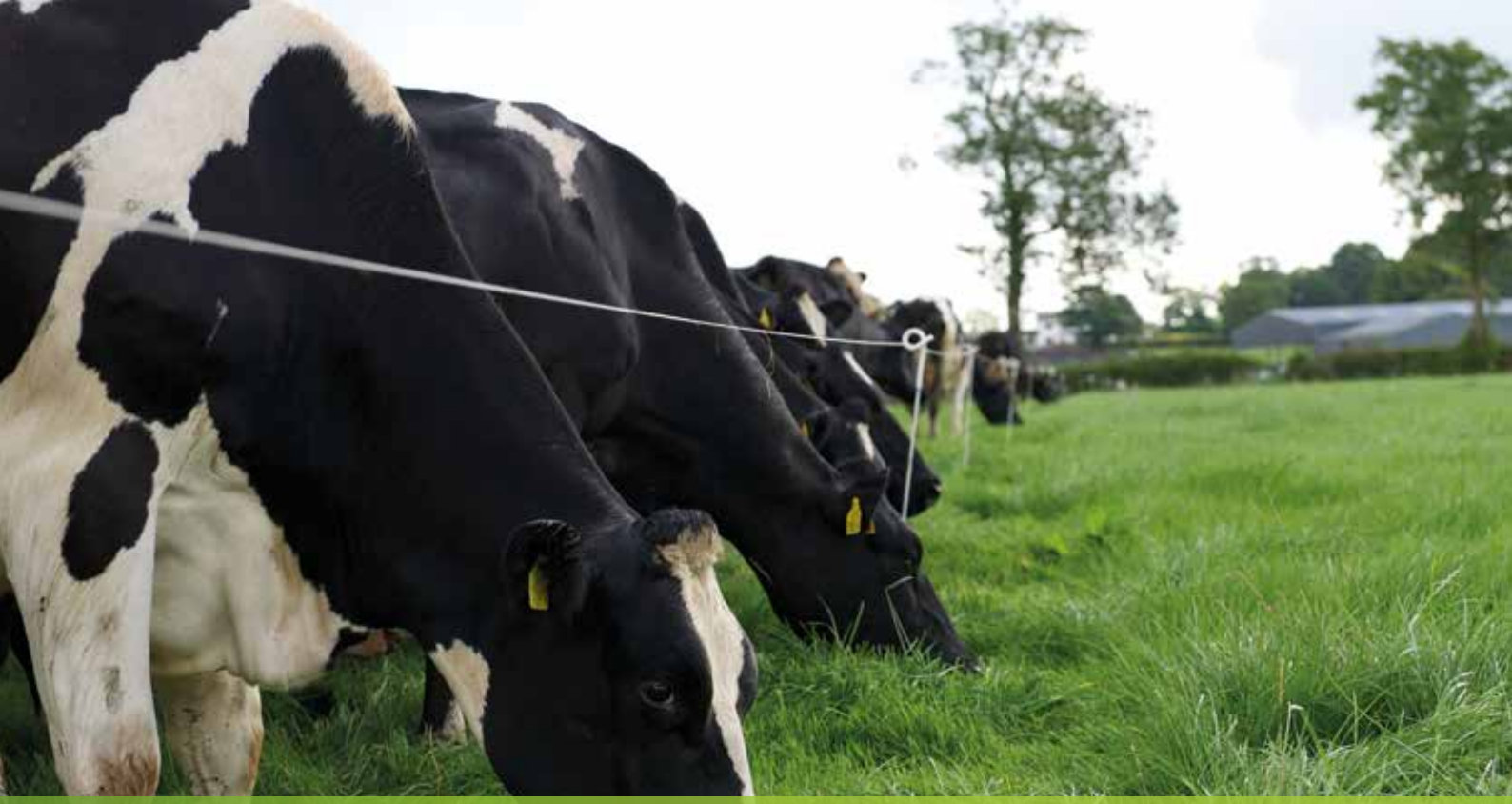
Phil's veterinarian Paddy McGinn suggested adding Actisaf again in the winter. "The cows were getting a lot of concentrate at the time [9kg/head/day]. We noticed the dung getting loose again so I told Phil to re-introduce Actisaf, and again there was rapid and marked improvement," explained Paddy.

After seeing such great results in his milking herd, Phil is looking for other ways he can use it on the farm. "Now that I've seen the benefit it has given the milking herd, we're looking into adding Actisaf into our beef finishing diet in the hope that it will improve productivity during the finishing period and reduce the risk of acidosis when cattle are on a high energy diet."



Contact us...
Tel. : 00 44 28 9334 3900
Fax : 00 44 28 9334 2132

Phileo by Lesaffre



TOP TIPS FOR TURNOUT TO GRASS...

Wet weather has drastically impacted on the start of the grazing season and cows will be on winter diets for longer than desired in many parts of the country. There are major benefits to getting energy-dense and protein-rich spring grass into dairy cow diets where possible, as there can be savings on purchased protein and energy costs brought on to the farm i.e. 23% + crude protein and 11.8 MJ ME / Kg DM on well managed swards. However you need to be mindful of low dry matters.

Once ground conditions allow, it is important to gradually ease cows out on to paddocks. Aim for a few hours per day initially, allowing 4-6 kg DM intake from grazed grass from morning milking to lunchtime. Avoid a rapid dietary transition on to grass, as it can result in loss of production due to SARA and poor rumen function.

Where ground conditions don't allow grazing, consider using a zero grazer to bring grass into the cows' diet while indoors, as it can save on dietary costs but it is also a great way of conditioning the rumen microbes for the upcoming change in diet that cows will experience when they do get turned out to grass. In effect, the transition in diet can be conducted while still indoors, allowing a faster turnout when the weather allows. Once out, time at grass can be increased daily over the course of 7-10 days up to evening milking, and then full-time once growth rates allow.

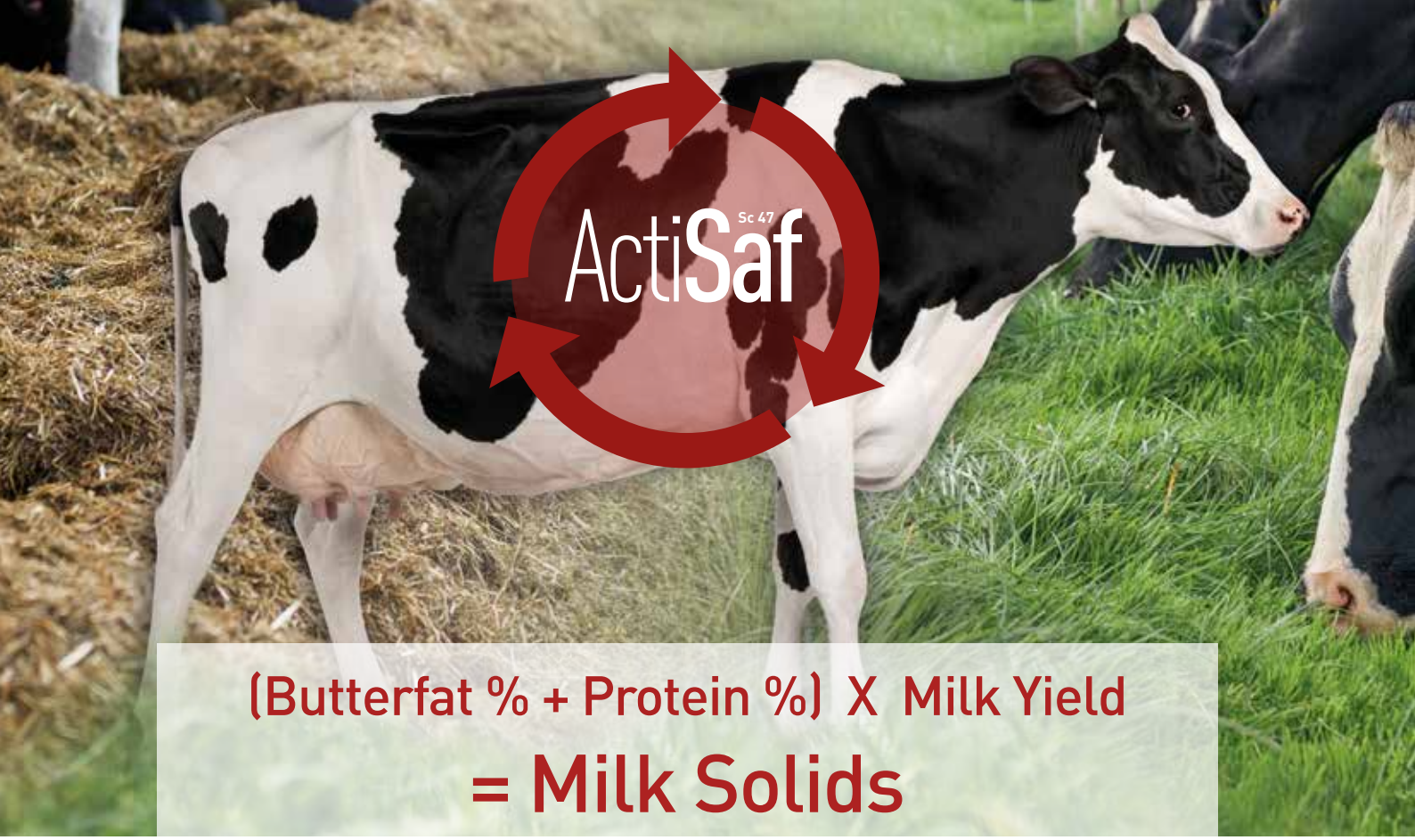
Here are some top tips to make the best use of spring grazing...

• **Gradual turnout** – As outlined above, turning cows out to grass creates a big change in diet, as well as imposing a stress event on the cow. It takes around three weeks for the bugs in the rumen to adapt to this, so it is important to manage the transition to grazing gradually, to avoid digestive upsets and loss of performance. Even a few hours of on/off grazing by day, when weather conditions allow, will mean that the rumen bugs can adapt to fresh grass. Cows should be able to consume 5kg DM in approximately 3 hours in suitable swards and weather conditions.

• **Dry matter intakes** – The moisture content of grass can vary significantly in spring, and this can have a major impact on dry matter intakes. At 15% DM a cow estimated to consume 15kg of grass dry matter needs to eat 100kg of fresh grass! It is important that you don't overestimate the dry matter intake a cow can take from grazing or body condition score, performance and fertility will be compromised.

• **Excess crude protein** – Lush, leafy spring grass can often have a crude protein content in excess of 250g/kg DM, particularly after fertiliser application, and this is mainly rumen degradable protein (RDP). Rumen microbes are unable to utilise this much protein from high grass intakes, particularly if there is a shortage of fermentable energy available to them, and so excess RDP is broken down into ammonia in the rumen, and then absorbed into the blood stream and converted to urea in the liver. Elevated blood urea nitrogen levels (BUN) from excessive crude protein in the diet can increase body condition score loss, reduce fertility and impact on hoof health.

• **Buffer feeding** – During the transition to grazing when grass is gradually being built up in the diet, it is important to supplement



Does your herd's production add up?

Do you see low butterfats once cows go out to grass?

Do you see loose dung with gas bubbles?

Do you see low cudding rates on spring grass?

Do you get concerned about fertility in the spring?

If you see these issues this spring once cows are grazing lush, leafy swards then your cows might be suffering from SARA - sub-acute rumen acidosis

Adding Actisaf live yeast to your cows' ration minimises dips in rumen pH and increases rumen efficiency, delivering improved milk constituents and more consistent dungs. It should be included at a recommended rate of 1kg/tonne of grazing compound, assuming a feed rate of 6 - 8kg compound/cow/day in early lactation.

Find out more at www.yeastsolutions.co.uk or call us on 028 9334 3900.

ActiSaf Sc 47

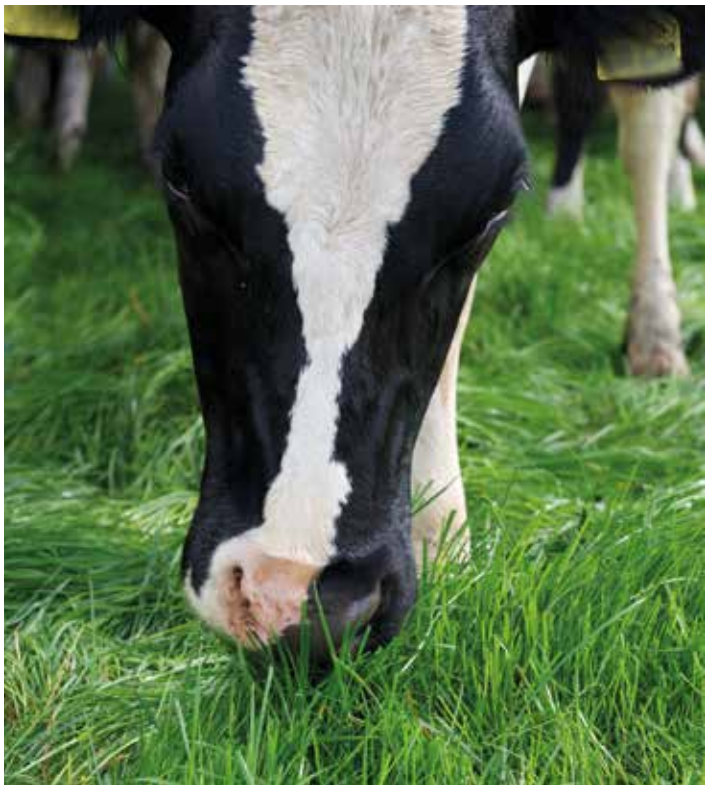
Warehouse

Unit 1 Doagh Business Park
11 Kilbride Road
Doagh.
Co Antrim, BT39 0QA
Tel. : 00 44 28 9334 3900
Fax : 00 44 28 9334 2132

Head Office

Rocktwist House
Block 1 Western Business Park
Shannon, Co. Clare
V14 FW97, Ireland
Tel. : 00 353 61 708 099
Fax : 00 353 61 363 682

Phileo by Lesaffre



cows with forages with a high energy content and digestibility to maximise dry matter intake. Starch-based forages such as maize silage are a great combination with grass, as the use of nitrogen in the rumen is enhanced and microbial protein synthesis is increased due to the fermentable energy being supplied by the maize starch. High DMD grass silage (>28% DM) is also highly effective. This will help to maintain milk constituents and protein, in particular, as well as ensuring sufficient dry matter intake, which is critical in early lactation.

• **Highly digestible grass swards can challenge rumen function** - Lush spring grass tends to have a high proportion of leaf to stem, resulting in low structural fibre levels in the overall diet. This lack of 'scratch factor' can impact on cudding rates and saliva production, further compromising rumen function. While the nutrient analysis of grass can vary wildly, this lack of structural fibre can be accompanied by high sugar levels – often more than 18% during sunny, dry weather. High sugar levels are great for rumen fermentation, promoting good milk proteins and strong yield, but when supplied in excess in combination with low structural fibre they can challenge rumen function, leading to acute or sub-acute rumen acidosis (SARA). Consequently, butterfat % and milk protein % can be compromised as a result of the change in rumen fermentation, whilst prolonged challenges can impact on fertility. High levels of unsaturated fatty acids in spring grass can also cause butterfat % to be reduced, so lower butterfat doesn't always mean SARA is a problem, however.

• **Compound feeding** – It is important that compound feed, fed through the parlour, tops up the dry matter that grass and forages do not supply in order to match the energy requirements for a given yield. It is also important that the nutrient content of the compound feed balances that of the grass to optimise rumen fermentation and maximise performance. Aim for a feed that has around 14-16% crude protein, a high digestible fibre content (such as sugar beet pulp and soya hulls), a balanced source of cereals including maize and barley and a source of bypass protein. It should also contain minerals that grass is deficient in, for example magnesium.

• **Monitor what the cows are telling you** – assess rumen fill 2-3 hours after milking to determine whether adequate grass has been allocated; monitor cudding rate – you are looking for more than 65% of the herd to be lying down chewing the cud 2-3 hours after milking; check dung consistency – loose, bubbly dung with undigested fibre in it is indicative of poor rumen function, as is the presence of cud balls in collecting yards or cubicles; monitor condition – cows losing excessive body condition can point to insufficient feed intake, a possible metabolic disorder, health issue or sub-optimal rumen function.

• **Milk quality** – Monitor bulk tank milk collections for average yields and constituents. A fall in butterfat or protein of 0.3% or greater in one week is a warning sign for poor rumen function and the occurrence of SARA. It is also useful to keep an eye on the butterfat to protein ratio to ensure this falls within the optimum range of circa 1.2:1.

• **Feed Actisaf live yeast** – Adding Actisaf live yeast to your cows' ration will reduce setbacks in performance at turnout by helping the rumen bugs adjust to grazed grass faster and more effectively, thereby improving rumen function. Actisaf also reduces the risk of SARA, both at turnout and throughout the grazing period. Actisaf helps to stabilise rumen function and promotes milk solids and milk yield. It should be included at a recommended rate of 1kg/tonne of grazing compound, assuming a feed rate of 6 - 8kg compound/cow/day in early lactation.