

## **About Us**







Graham Shepherd MRCVS

**Chris Shepherd** 

John Carr

Brothers, Chris and Graham Shepherd were brought up on the family farm in Lancashire. While Graham went to qualify as a Vet and ran a successful veterinary practice for eighteen years, Chris gained experience at home & at agricultural college. He went on to work in cattle genetics, a breed society and in farm finance. Graham also farms a pedigree Hereford herd and a flock of ewes.

Graham launched G Shepherd Animal Health in 2008 and the business has steadily grown and

developed into a reputable ginnovative animal health company. Originally focused on calf health and fresh cow management, GSAH now supplies a wide range of animal health products and equipment. Graham also provides advice to farmers and consultancy to larger organisations.

Graham states: "Disease is not just infection, and drugs are not the only answer. Most disease has its roots in animal management, especially the husbandry, nutrition, genetics and how they match the chosen farming system."

Graham and Chris are ably assisted by John Carr, who was also brought up on his family's farm. He went on to become a herdsman, before joining GSAH as product manager. John is also an accomplished triathlete and 'Ironman' competitor.



# **Why buy from GSAH?**

- Family-run business, offering first class customer service
- Access to veterinary advice on how to choose and use our products
- Grassroots farming directors, with practical experience
- Total focus on farm livestock production and pioneering new advances in cattle & sheep health
- Tell us what your problem is and we will do our best to help you
- Just choose your biggest problem and let's try to sort it!

# **How to order:**

call the order hotline: **01772 690131** 

or via the website: www.gshepherd.co.uk

Free delivery available on orders to UK mainland & NI

Terms and Conditions available on www.gshepherd.co.uk

# **What's NEW at G Shepherd Animal Health?**

#### **New Folk!**

We are pleased to welcome two new members to the team Rob Wainwright & Megan Thomas.



#### **Rob Wainwright:**

Lancashire lad Rob joins us after working in the Middle East and for a Dutch company. He supports our cattle products with an emphasis on housing & dairy hygiene.

Telephone: 07825 708041



#### Megan Thomas:

Champion Stockperson Megan, a keen YFC member joins us following studies at Bishop Burton College. Her broad experience in dairy, sheep and beef farming will be a valuable asset to her customers.

Telephone: 07825 685961

# **New Company!**

Last July we created "Shepherd Dairy Services" to become our local GEA Farm Technologies dealership. Chris runs this branch of the firm, while Graham looks after G Shepherd Animal Health. Both branches trade as part of "SHEPHERD AGRI".



#### **New Products!**

Perfect Udder Bag Caddy.

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First Thirst "Total Colostrum" for calves.

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TK Foam Clean, TK Swordsman, enhance the "Total Kill" cleaning and disinfection range.

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TK GOLDdust improves cubicle and bedding hygiene.

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Rumen Health.

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First Thirst "Fresh Cow Drink".

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"Sort Your Milk" 30L buckets with colour coded lids. Page 21

Hoof Health.

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IceMint - New 5L upright pump dispenser.

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## **New Website!**



Our old website has done us proud over the last five years, but now needs to be updated:

- Easier to find what information or product you need
- Easy to view on tablets and phones as well as 'big' computers
- Better at presenting information on animal health, whether it is articles, research, or video. Easier to find information through "Interactive Animals", the first being the "Interactive Calf"
- · The library of information will grow over time
- An up-to date payment system, making it easier & quicker to buy
- Aiming for "Accredited Internet Retailer" status

# MILKS ORKS

# Colostrum Pasteuriser & Thawer

- Capacity is upto 6 x 3.8 litre bags
- Unique colostrum pasteurisation machine
- Ensures that pooled colostrum is safe for calves to drink
- Removes disease pathogens Johne's;
   TB; salmonella; rotavirus; mycoplasma
- Reduces risk of disease being passed from adult animals to calves via colostrum
- Pasteurises, cools, thaws & reheats colostrum in a single unit
- Utilises 'Perfect Udder' bags, which come with screw-on nipples and feeding tubes. Bags can thaw and reheat contents four times faster than standard bottles. Can be stored in a freezer for up to 6 months.



# facts and figures:

- Water bath action, using pumps and jets for rapid, even heating and agitation of bags
- Temperature control protects colostrum proteins throughout pasteurisation
- Easy-clean, stainless steel basin
- 4,500 watt, self-contained electric heating system
- Uses single-phase power plus cold water connection
- · Supplied with set of Perfect Udder bags and bag filler
- Energy consumption approximately 30p per six bags of colostrum
- Supplied with a Colostrometer, a set of bags & a bag filler

Pasteurisation removes Johnes, TB, Salmonella, Rotavirus and Mycoplasma



Chris Willis, Malpas, Cheshire

Dairy herd: 550 pedigree 'Cholmondeley' Holstein

Friesians

Products: Milkworks Gold pasteurisation machine and

Perfect Udder bags

Purchase date: December 2013

Chris Willis rears high quality replacement calves for his pedigree dairy herd and says they are "undoubtedly doing better," since he purchased his pasteuriser as a tool for preventing the transmission of Johne's. The machine is used to process colostrum, in conjunction with Perfect Udder bags. It is a big improvement on the previous routine, he says, which involved freezing reserve colostrum in waste plastic bottles used for fizzy drinks.

The colostrum is much easier to manage in the Perfect Udder bags, as they lie flat and have a greater surface area, compared with a bottle. It is also much simpler to defrost it and warm it up to the right temperature using the machine," says Mr Willis.

"It's too early to evaluate the machine in terms of Johne's eradication, but the calves are definitely looking healthier than they did before. A lot of that is down to having a protocol in place for calf feeding; it is especially useful if more than one person is responsible for feeding the calves. I think both the pasteuriser and Perfect Udder bags have proved a very worthwhile investment."

# Milkworks Gold & Perfect Udder

GSAH's latest product is MilkWorks Gold, a unique pasteurisation machine originally developed by a fellow vet in North America. It ensures that pooled colostrum fed to new-born calves is safe to drink, by removing from colostrum disease-causing micro-organisms, including Johne's, TB, salmonella, rotavirus and mycoplasma. This eliminates the risk of transmissible diseases being passed from adult animals to their calves via colostrum.

MilkWorks Gold can chill, pasteurise, thaw and reheat colostrum within a single unit. It is different from other pasteurisers on the market, as it has been specifically designed to handle colostrum in conjunction with 'Perfect Udder' bags. These single-use, disposable bags, which come with screw-on nipples and feeding tubes, can completely thaw and reheat their contents four times faster than standard bottles. The bags can also be stored in a freezer, for up to six months.

"Feeding colostrum direct from the cows in your herd is the best way to boost your calves' immunity to diseases which are specific to your farm," says GSAH company Vet, Graham Shepherd. "Powdered Colostrum supplements are unlikely to achieve the same level of protection.

"Ideally, all large calves should receive 3.8 litres of pasteurised colostrum as soon as possible after birth. The colostrum should be of sufficient strength, which can be tested using a colostrometer. This instrument uses a traffic lights system to indicate colostrum quality. Perfect Udder 2.7 litre bags are also available for smaller calves and second feeds for larger calves," he adds.



# **Dairytech Pasteurisers**

Improve the bio security of your herd, raise a better calf and yield a better cow

G Shepherd Animal Health have championed colostrum and calf milk pasteurisation within the UK and Ireland for 6 years, giving you the farmer the technology to batch pasteurise colostrum and calf milk on your own farm. The Dairy Tech pasteurisers have been tried and tested in the USA over the last 16 years and the Due Ci Inox machines give you a bespoke pasteuriser option tailored to your calf rearing operation. Pasteurisation has proved to be a potent tool to improve herd health. Use it!

University research confirms batch pasteurisation kill's pathogens including Mycobacterium avium subsp. paratuberculosis.

Colostrum & Milk pasteurisers help to control Johnes, TB and to vastly improve calf health.

Healthy Calves are your best chance to improve the quality of your herd.

#### DT10G

- Feeds upto 20 calves
- Volume 38 Litres (milk or colostrum)

#### DT30G

- Feeds upto 60 calves
- Volume 115 Litres (milk or colostrum)

#### DT60G

- Feeds upto 120 calves
- Volume 228 Litres (milk or colostrum)

#### **New Research!**

J.Dairy Science 2014 shows pasteurised colostrum to me more effective than raw stored colostrum. More details on our website.



Charlie Weir

Waringstown, County Down, Northern Ireland ①

Dairy herd: 600 pedigree Holstein Friesians Products: DT30 and Perfect Udder bags

Purchase date: 2010

Charlie Weir first became interested in the idea of pasteurising colostrum and calf milk during a visit to the USA, where he discovered that it was common practice. He purchased a DT30 machine on his return and has used it ever since, alongside GSAH's Perfect Udder bags.

"There had been problems with Johne's disease, following the purchase of cows from other farms," explains Charlie. "The youngstock were also not thriving and despite bringing in several different vets, I hadn't been able to pinpoint the cause of the problem.

"The calves I saw in the USA had a real bloom to them and it was obvious that they were in peak condition. I became convinced that the pasteurisation of pooled colostrum and milk was the way forward and my instincts have been proved right."

The switch to the pasteurisation of calf milk was not the only change made on Charlie's farm. He also bought a number of outdoor calf hutches. These two factors together are responsible for a significant improvement in the condition of his young female replacements, he says.

"The calves are far healthier since I've altered the system. Scouring is now a rare occurrence and calf mortality has fallen sharply, with minimal losses. This is largely down to the elimination of bacteria and viruses in the colostrum and calf milk. Sick calves take up a lot of time and my vet bills have also been reduced.

"In addition, I'm making progress in my aim to gradually phase out Johne's in the herd and I can now be sure that the disease is not being passed down to the next generation via the colostrum and calf milk.

"Another bonus is that replacement heifers develop more rapidly and are ready to calve at two years, which is the optimum time, in my opinion. The previous average age at first calving was 25 months; this may not sound like a great deal of progress, but it all adds up in a large herd."

Charlie says he and his staff are now totally reliant on the pasteurisation machine.

"The machine wasn't working one morning; on further investigation, a fuse had blown. However the idea of feeding calves on unpasteurised colostrum or milk horrified my staff. They were extremely wary of using the raw product, saying they would prefer to use powder, until the machine was fixed."

#### Perfect Udder Bags

Charlie uses Perfect Udder bags as a convenient way to manage pasteurised colostrum.

"I find the Perfect Udder bags extremely useful," he says.
"Colostrum is poured into the bags and stored in the freezer, until it is needed. The pasteurisation machine then thaws out the liquid and reheats it to the correct temperature.

Stuart Heath
Red Earth Farms ②

Dairy herd: 500 Holstein Friesians Products: DueCi Inox milk pasteuriser

Purchase date: 2012

Stuart Heath and his family have a flying dairy herd and produce British Blue calves, which are sold at the local auction mart at 4-6 weeks old. Stuart was actively looking for equipment to help him store and heat calf milk, when he came across the pasteuriser. The machine has fulfilled both of the initial requirements and brought several other advantages, as he explains.

"The pasteuriser offers us peace of mind, as it ensures that milk for the calves does not contain infectious diseases which have been transmitted from the milking cows. This would be especially important, if we had a disease breakdown, such as Johne's or TB, for example. The pasteurisation process also kills off any bacteria and viruses in the milk.

"Pasteurisation has saved time and helped us to improve the utilisation of calf milk. Before we installed the machine, there would be some occasions during morning milking, for example, when we would have to discard milk, due to having a surplus. But we might find that there was a shortfall one evening and then we would have to take milk for the calves out of the tank."

There have been other side benefits, adds Stuart.

"The pasteuriser provides us with clean milk which is consistent in quality for every calf and is given at the optimum temperature. I wouldn't say that our new system has completely eliminated calf scouring, but the incidence has been greatly reduced. The calves are also looking better in general; we don't weigh them but we are sure that there has been an improvement in growth rates.

"To summarise, I would say that machine has more than paid us back for the investment. I think it's only a matter of time before the pasteurisation of calf milk becomes common practice on dairy herds around the country."



#### Simon Dutton

C and M Dutton, Market Drayton, Shropshire 1

Dairy herd: 200 pedigree black and whites

Products: DT30 milk pasteuriser Purchase date: 2009 & 2014

Simon Dutton bought his milk pasteurising machine several years ago and says he would never want to be without it. It was purchased for the express purpose of phasing out udder TB in the closed herd, as feeding unpasteurised milk meant that the disease was being passed from cows to youngstock.

"By feeding our calves on pooled raw milk, we were actually spreading the disease, so that the next generation became infected," says Simon. "This did not make sense and we were pleased to have an opportunity to break this destructive cycle. Since we have been pasteurising our calf milk, we have had no cases of TB being transmitted to calves by this route."

While some producers who routinely use a pasteuriser report an overall beneficial effect on health, Simon takes a different view.

"We have always had strict protocols in place for managing our calves and we like to think that we rear them to the best of our ability. Pasteurising their milk was like the missing piece of the jigsaw.

"The practice has helped us to standardise our management system; following pasteurisation, the machine reheats all the calf milk to 37 degrees C for feeding, in order to promote calf health. This process is carried out simply at the press of a button. Even in a closed herd, the risk of TB infection is always present, so the milk pasteuriser has proved to be a very worthwhile investment."

#### Kevan Windridge

Previously herd manager at Rectory Farm, Stow-on-the-Wold, Gloucestershire ② Dairy herd: 200-plus Holstein Friesians

Products: DT30 milk pasteuriser

Purchase date: 2008

Kevan Windridge is full of praise for the DT30 milk pasteurising machine, which he bought for the farm where he held the position of dairy herd manager. The machine caught his eye at the 2009 Dairy Event and he later spoke to GSAH vet, Graham Shepherd, about the problems he was having with the younger cattle.

"We had experienced several cases of TB in the youngstock and had lost several valuable animals to the disease," says Kevan. "I couldn't understand how they had become infected, because they had never been out at grass. When I explained how our calf feeding system worked, Graham said it was highly likely that we had been passing on TB via the pooled milk which we fed to the calves

"As it turned out, TB was not widespread in the herd; in fact the disease was eventually traced back to just a couple of animals. But by mixing their milk with milk from 'clean' cows, we had inadvertently been spreading the disease to the youngstock."

Kevan confirms that the pasteurisation system halted the cycle of TB infection in the younger animals, with no cases reported after its installation. While he was delighted to have found a cost-effective solution to the disease, he also found the pasteuriser useful for other reasons.

"The calves were routinely given milk at the correct temperature and this went a long way towards reducing stress. Our young calves thrived on the pasteurised milk and the incidence of scouring was significantly reduced. Rotavirus in particular had been an issue; milk pasteurisation did not eliminate this altogether, but it definitely helped.

"Previously, most of the milk for the calves was collected during the latter stages of milking. But it was difficult to stick to a precise time of day for calf feeding, which was carried out by the tractor man. Sometimes they would be fed as early as 3pm, while at other times it might get to 6pm, or even later.

"Having the pasteuriser meant there was less pressure on the person milking, as he or she didn't have someone who was waiting for the milk. The person milking could collect the milk when it was convenient and all the calf feeder had to do was press a button 20 minutes before feeding time. It made the management of calves much simpler and streamlined the whole process.

"I am no longer working in practical agriculture, but I am still involved in farming and I always advise farmers to buy a milk pasteuriser for their calves. It is a worthwhile investment and it will pay back the initial cost of the machine within a very short time.

"We lost a number of heifers to TB, just as they were coming up to bulling. Not only was this costly, as they were expensive to replace, but we also lost genetic progress.

"There were a few minor issues with the pasteuriser as time went along, but they were related to wear and tear; as the machine was in constant use; I remember that the element broke on one occasion. However it had come with a pack of spare parts, which were very useful.

"GSAH provided excellent customer service. There was a very quick turnaround when spare parts that weren't in the pack were required and we were given plenty of good advice and support.

"When the dairy herd was dispersed, we also sold the pasteuriser, which was by then more than three years old, but still fully functional. There was a lot of demand for it and we recouped quite a high percentage of the initial purchase price," says Kevan.



COUE CI. in

**Pasteurisation** removes Johnes, TB, Salmonella, **Rotavirus and** Mycoplasma Call 01772 690131



Due Ci Inox bespoke pasteurisers made from 70L to 550L

- Feeds upto 275 calves
- Volume 75 550 Litres (milk or colostrum)
- Automatic calf milk pasteuriser
- Electronic warming and water cooling
- Electronic control panel
- Customized to suit your calf rearing operation with wheels for transport and pumps for easy feeding



400 ltr with pump

300 Itr

#### **COLOSTRUM AND MILK PASTEURISATION**

Client: George Perrott, Clinton Devon Estates,

Budleigh Salterton, Devon

Dairy herd: 500 black and white cows, split into two

herds

**Product:** DT30 batch colostrum and milk

pasteurisation machine

Used since: 2009

George Perrott bought his colostrum and milk pasteurisation machine, as part of an overall programme to tackle the level of Johne's disease present in the two dairy herds under his management. Within four years, the number of positive-test cows had fallen from 55 to just over 30 and the figure continues to decline. Equally importantly, the new regime has removed the risk of disease being transferred to the youngstock through early feeding.

Calf rearing on the organic farm had always been subject to strict protocols, to protect the health status of replacement heifers. However Mr Perrott was aware that the pooling of colostrum and milk from the adult cows, to feed to the calves, was a possible source of Johne's infection.

"It got to the stage where the number of positive reactors was increasing and the issue was becoming really serious," says George. "I did not want to stop using pooled colostrum and milk, but I realised that feeding it raw was too great a risk to take.

"In some cases, feeding raw milk was leading to calf health complications, resulting in increased mortality levels. Looking after sick calves was taking up a great deal of time and the vet bills were much higher than I would have liked. The routine use of antibiotics was not an option, because of the farm's organic status, so pasteurising seemed like the best solution."

Mr Perrott at first bought a continuous-flow pasteuriser from a milk bottling plant. But the machine proved complicated to operate and was also difficult to clean.

"I wanted a fairly simple pasteurisation unit, which came with a brief set of instructions that anyone who was feeding the calves could follow. Another requirement was easy cleaning; I ruled out any machine with a network of pipes and plates that might provide a breeding ground for harmful bacteria."

His next purchase, a DT30 batch pasteuriser, proved to be a much more satisfactory investment.

"The milk is put in the machine in the evening and by morning, it has been pasteurised and chilled, ready for reheating to the optimum temperature at the press of a button. It has both standardised and simplified the process of calf feeding. As the unit uses a water bath, only the cylinder requires daily cleaning.

"Pasteurisation not only controls Johne's disease, it also kills off harmful bacteria and viruses, which means that calves receive a sterile, homogenous product. The machine is also used for the processing of colostrum; this is usually taken from older cows, which tend to have the highest antibody levels."

Other measures to minimise the spread of Johne's infection to the young calves include calving positive reactors on a separate farm, with all suspect cows put to a beef breed bull. Mr Perrott does not vaccinate his animals to protect them against the disease; he believes that the live vaccine can produce confusing test results. Instead, he uses a 'traffic lights' system, to track Johne's-infected cattle.

"The milk is tested for Johne's every three months," he explains. "Reactor cows are freeze-branded with a letter J on their rumps and given a red ear tag. This allows for easy identification by all the staff, including the relief milker. If a cow has two tests which show a score of more than 100, in terms of failure, she will be culled. This rule applies to animals at all stages of lactation; it is expensive to cull cows, but unless I take action the whole herd will become infected."

#### Unit running costs have been minimal.

"I expected to see a sharp rise in the electricity bill, but this has not happened; in fact the unit has turned out to be very cheap to run. I think it is unlikely that I will ever manage to eradicate Johne's disease completely, but I will persist with the current policy; herd health status is improving all the time

"Everyone who works with the calves agrees that if we could no longer pasteurise colostrum and calf milk, we would have to go back to using milk powder, which thankfully we have not had to buy for many years now."



# **Testimonial**

"By using the Colostrometer & Perfect Udder Colostrum Management System, we have greatly improved the health of our calves. We check the quality of the colostrum and only use good quality for the first two feeds. The convenience of having colostrum bagged-up ready and being able to feed from the bag makes it easier to get adequate colostrum into the calves. Blood samples from the calves show higher antibody levels since we started on the Perfect Udder system and the calves have generally been in better health."



#### **Perfect Udder**

#### **The Complete Colostrum Management System!**

The Perfect Udder® Colostrum Management System,brought to you by G Shepherd Aminal Health, centres around its revolutionary 2.7 litre and 3.8 litre bag designed specifically for:

- Rapid Cooling and Heating of Colostrum for Improved Management
- Pasteurisation of Raw Colostrum
- Storage of Raw or Pasteurised Colostrum
- Feeding Directly from the Clean, Disposable Bag

The unique bag construction provides optimal heat transfer which permits complete pasteurisation and faster cooling of the colostrum. Once capped, these bags can be rapidly cooled and stacked in a refrigerator or freezer for future use, or fed immediately by simply attaching the nipple or esophageal feed tube directly to the bag. Use as a solo feeding system or with a Dairy Tech, Inc. batch pasteuriser.

#### **4 Reasons This is Critically Important:**

- 1. Stops new growth of bacteria when cooled promptly
- 2. Destroys harmful pathogens when pasteurised properly
- 3. There are no opportunities for recontamination of the colostrum
- 4. The calf is sure to receive the ideal amount of colostrum
- 3.8 litre within 2 hours for large calves like Holsteins
- 2.7 litre for smaller calves like Jerseys

#### Plus:

- Allows pasteurisation of the smallest volumes of colostrum
- No more dirty bottles or the labour wasted trying to clean them
- · No more waiting 2 hours for colostrum to thaw for feeding.
- · Thaw in MilkWorks or use our Thawing Element

Price: £89.00 (for 50 bags, 3 teets and 3 tubes)



#### **Perfect Udder Filler Bracket & Funnel**

- · A metal bracket, painted/coated in white, that attaches to a bench
- · Supports the neck of the colostrum bag and supports a funnel
- Now complete with funnel and wood screws

**Price: £25.00** 

#### **Luxury Long Feeding Tubes**

- 130cm long stomach tube and pipe
- Includes Colostrum flow regulator

**Price: £25.00 (per box of 5)** 

#### Perfect Udder Bag Caddy- New design.

The Perfect Udder Bag Caddy turns any 2.7 ltr or 3.8 Itr Perfect Udder bag into a rigid bottle for easy handling at the calf. The spout of the bag locks into place to provide rigidity to the nipple or oesophageal feeder so your hands can be free to restrain the calf or guide the tube into correct position. The shoulder strap supports the assembly until you are ready to let the colostrum go. It works with the teats, tubes and extra long tubes.

Price: £35.00

#### **Electric Thawing Element**

Heating element for water bath to defrost frozen Perfect Udder bag

Price: £240.00

# **Colostrometers**™

The Real McCoy the trademarked Colostrometer

G Shepherd Animal Health have the UK distributorship. Please be aware of cheap imitations

A simple way to measure the antibody level of colostrum, a simple red-amber-green system

On page 10, Tom Foot of Prospect Farming has told us how he uses the Colostrometer with the Perfect Udder Colostrum Management System to measure antibody levels, easily feed enough colostrum and the herd health benefits thereafter.

**Price: £40.00** 



Donal and Sandra McSweeney Ballyadeenbeg, Blarney, County Cork Dairy herd: 70 Holstein Friesians Products: Dairytech calf coat/blanket

Purchase date: 2012

Donal and Sandra McSweeney are great believers in rearing calves in an environment that is draught-free, but with plenty of fresh air. During the cold winter of 2012/2013, they found the calf coats invaluable. They helped to prevent the calves from using too much of the energy from their feed to maintain body temperature. The youngstock are housed in well-ventilated buildings, which are bedded with straw.

"The coats are good, because they keep the calves feeling warm and comfortable and that helps to speed up growth rates," says Mrs McSweeney. "We had never used coats before, but we now think they are very useful and we will always put them on if the weather turns cold."

# **Calf Coat/Blanket**

OUR CALF COATS provide extra thermal insulation, thus diverting energy to growth and reducing cortisol/stress and so preventing disease. The coats have a water resistant nylon outer with a quilted, insulated and breathable lining.

Dairy bred calves are often lean with thin skin, and the amount fed often does not exceed maintenance by much! A young calf's thermo-neutral zone (it doesn't need to spend extra energy on heating or cooling) is approx 10C - 25C. For calves over a month, its 0C -23C.

Every 1 degree C below the thermo neutral zone requires 2% more energy, so a young calf at freezing requires 20% more energy = 20% more milk/milk solids.

Also ensure the feeding is promoting the rumen development, so the rumen provides its heat.

2 sizes - Machine washable

**Larger "Holstein" size Price: £28.00** 

Smaller "Small Holstein" or "Jersey" size Price: £27.00



### Research

Research conducted at North Dakota State University found that in cold weather, blanketed calves gained 1.35 pounds daily compared to just 1.06 pounds for their un-blanketed herdmates during the first 21 days of life.

Graham says "Considering that the first six weeks of life is the crucial period for developing milk producing tissue in the udder, this will have a big effect on lifetime yield."

**David Jones** 

Church Farm, Magor, Monmouthshire Dairy herd: Sahara pedigree Holstein

Products: First Thirst IBR Elite Colostrum Powder

Purchase date: since Autumn 2013

The Sahara herd of Holsteins is renowned for the high quality cattle it produces and farm manager, David Jones is rightly proud of the fact that 20 young bulls have recently been sold into AI studs over a two-year period. High health status is the number one requirement for the breeding bull market and that is why he uses First Thirst IBR Elite Colostrum Powder.

"The bulls which are selected for AI studs must pass rigorous health tests, before being accepted on to the programme," says Mr Jones. "We carry out a lot of ET work and we sometimes buy in recipient females. It is vital that IBR antibodies don't show up on screening and using the Elite powder avoids this potential problem. It is also free of the antibodies and viruses associated with EBL and Johne's; two other very important diseases.





#### Colostrum

#### **First Thirst IBR Elite Colostrum**

Totally unique to the Colostrum market

Purely 250g of pure dried colostrum, but WITHOUT IBR antibodies, important for calves in cattle health schemes, or that may require a negative blood sample for AI studs or international trade

However, calves may acquire IBR antibodies from dams colostrum or natural infection

Each First Thirst IBR elite batch is tested by an independent laboratory for IBR antibody negativity & high Immunoglobulin quality

To be given to the beef or dairy calves as soon as possible after being born - as soon as the calf is seen!

Use one sachet as a supplement to dam's colostrum, or 2 sachets as a replacement.

However, the diseases on your farm may not be covered by the particular antibodies in our product if no dams colostrum is available or given.

Therefore if the calf is destined for the AI industry or for export then isolation, disinfection and high bio security is of the upmost importance.

Available within Sachets or sealed within Perfect Udder bags

The Perfect Udder bags allow you to mix in the bag and then feed from the bag using the screw on teat or feeding tube, therefore reducing the risk of introducing harmful bacteria to your valuable calves.

Two teats and two tubes included with each 4 x Perfect Udder pack

Boxes of 4 sachets Price: £140.00 (£35.00 each)
Boxes of 4 Perfect Udders Price: £160.00 (£40.00 each)

Tom Richardson

Sturzaker House Farm, Garstang, Lancashire

Suckler herd: Beef Shorthorns

Products: First Thirst Calf Colostrum- Double dose

in Perfect Udder Bags Purchase date: since 2012

Tom Richardson is in the process of expanding his herd of Beef Shorthorns and currently works away from the farm during the daytime. He uses Double Dose Colostrum Powder sealed in Perfect Udder bags, which come complete with a screw on teat & feeding tube. Mr Richardson fully understands the importance of making sure that every calf receives the correct volume of high quality colostrum within the first three hours and finds that the combination of colostrum ready packed in hygienic feeding kit suits his requirements very well.

"I need to know that a newborn calf has received adequate colostrum when I set off for work and used together, this product offers a good solution," he says. "It's a simple procedure to add warm water at the right temperature to the powder in the bags and tube-feed the calf.

"Ideally, it will suckle its mother while I'm away at work, but if that does not happen for any reason, then I can rest assured that it will have received the protection it needs to get it off to a good start."

Premium calf Colostrum from ONLY

**£11.25 Der calf** Call 01772 690131 Tony Rigby, Lancashire

Products: First Thirst Calf Colostrum Supplement

Purchase date: 2011

Tony Rigby, who manages the youngstock for a large, highyielding dairy herd, was looking for a good quality colostrum powder, to feed to the calves.

"We have a lot of high yielders and younger cows and I was concerned that the quality of their colostrum was not good enough to give the calves the level of disease protection they needed, to keep them healthy," he says.

"First Thirst Colostrum Powder may not be the easiest of products to mix, as the added water has to be quite warm, but the quality of the feed more than makes up for that. We used to blood test the calves regularly and we have noticed a distinct improvement in their antibody levels, since we started using First Thirst. Blood testing is no longer routine practice here, because we have a lot of faith in the product and we believe it gets the calves off to the best possible start in life."



#### Colostrum

#### **First Thirst Calf Colostrum Supplement**

- An easy mixing PREMIUM colostrum powder for newborn calves
- If disease precautions allow always feed as much colostrum from the calf's own mother as possible
- For use as a supplement to maternal colostrum if there is not enough dams colostrum or it is of weak quality- say it has run out or another calf has been sucking her before she calved! Also handy if you can't get near the dam to milk her or you want to go to bed!
- Just add warm water, mix and feed. Often the powder is added direct to dams colostrum, if the Colostrometer reading is weak.
- Premium quality EU dried colostrum, sterilised by radiation, not heat
- Guaranteed free of IBR virus, EBL virus, EBL antibody & Johnes Disease

Available within 10 calf, 44 calf or double dose within Perfect Udder

Double dose within "Perfect Udder bags":- similar packaging to the colostrum product on page 13, sealed in single use bags-

- · Simply add water up-to the fill line,
- · shake to mix, and
- feed through the screw on teat or tube
- Ideal for late night calving & ensuring that hygienic equipment is always used.

2.25kg bucket - 10 calf dose bucket Price: £125.00

10kg bucket - 44 calf dose bucket Price: £500.00

Double dose within "Perfect Udder" Price: £29.00

New "First Thirst Total 150" Replacer dose Price: £45.00



# The Calf's Digestive System/Preventing Calf Scour – with advice from Graham Shepherd MCRVS.



All young animals are prone to digestive upsets and infections. Their body has a higher water content than an adult, so dehydration takes longer to correct. We focus on prevention by lowering exposure to bugs and improving resistance. We also have our own high quality electrolyte product, for those cases that we will always get.

To minimise the risk of scour, firstly, **KNOW YOUR ENEMY!** Is the scour nutritional, management-related or infectious?

Nutritional causes could be varying quality of raw milk, poor quality raw milk, poor quality milk powder, poor mixing of powder or wrong feeding height. Management causes could be too little or weak colostrum, inadequate disinfection, or adding young calves to groups of older calves.

Infectious causes could be Rotavirus, Coronavirus, Cryptosporidium, Salmonella, Coccidiosis, E.coli etc. Don't bring in someone with a test kit, but use your Vet or myself, and test at least five fresh, untreated cases via a proper lab. Remember, you can find bugs even when the root cause is nutritional or management.

Recent scour survey results show that Cryptosporidium and Rotavirus are the most dominant calf scour-causing organisms on UK cattle units. Calf faecal samples showed that over 32% tested positive for Crypto, with more than 29% positive for Rotavirus. These are aggressive bugs, but their effects can be reduced by:

- Good colostrum management
- Disinfection with appropriate detergent & disinfectant combination
- Increasing immunity through vaccination or individual dosing



# **Yolk-Ay Calf Paste with Iron**

Yolk-Ay Calf Paste with Iron is a two-dose, oral probiotic paste to promote gut health in new born and young calves. It also contains egg proteins from hens vaccinated against E coli, Cryptosporidium, Rotavirus, Coronavirus and Clostridia. The good probiotic bugs colonise the bowel and provide competition against bad bacteria. The pastes also contain soya oil, for energy and vitamins and minerals. But it is not a replacement for good colostrum management!

Please note: only the highest quality ingredients are used in the Yolk-Ay manufacturing process. This product is made to our own recipe by the owner of the vaccinated hens; having fewer people in the marketing chain allows us to make it available at a highly competitive price; it comes to us and then to you.

**How to use -** dose the calf with half a syringe as soon as it is born and give the rest of the syringe 12 days later. For bought in calves, give half a tube on arrival and half a tube, 12 days later.

**Packaging: Boxes of 6 x 33g syringes** 

Price: £90.00 (per box of six). Bulk deals available

# **Life-Guard Calf Electrolyte**

This is a high specification electrolyte powder for calves. A very effective way to treat scouring animals. Although Life-Guard and other sachets contain sugars, the gut and the animal as a whole require more complex nutrition. Therefore, after the first day of treatment it is important to give some milk between the electrolyte feeds, or allow restricted suckling. Milk & electrolyte feeds should be separated by 4 hours. How to use – mix one sachet with 2 litres of warm water. Do not feed mixed with milk and follow the instructions for feed timings.

Packaging/Prices: Comes in boxes of: £18.00 (12 sachets): £48.00 (48 sachets): £90.00 (96 sachets)

Richard, Harry and Nancy Gardner, Lancashire

Dairy herd: 120 pedigree 'Garmoss' Holstein Friesians

Products: Total Kill (TK) disinfectant package

Purchase date: November 2013

The Gardners had been having problems with severe calf scours. There had been two mortalities and many more calves which failed to perform to their potential, suffering general unthriftiness and poor growth rates. The farm Vet, identified the cause as Cryptosporidium.

Costs associated with losses, treatments & time were high. Richard & their Vet came to the conclusion that the cleaning and disinfecting routine needed to be changed. In particular, it was felt that the standard, iodine-based disinfectant used for the calf housing between batches was not effective.

They now use GSAH's 'Total Kill'(TK) hygiene package. It provides a special foaming lance for the power washer, plus a foaming detergent called TK Foam Clean. Once dry, it is followed by the GSAH disinfectant, TK Swordsman. Along with viruses & bacteria it also kills Oocysts (protozoal eggs).

"We have adopted this strict routine, which starts after the last calf from each group is weaned," says Richard. "It has been very successful at killing Crypto and protecting our calves from any other infections that might be present in the housing. It is working well and the calves have remained healthy since we put our new system in place."



# "TK" Hygiene Range

Last year we created TK200, which has been very well recieved as a general purpose detergent+disinfectant.

Since then we have expanded the range:

- an effective Foam Lance to fit your power washer for initial cleaning
- TK Foam Clean- a heavy duty caustic foamer, used through the lance to remove infectious grime.
- TK Swordsman- a anti-viral and anti-OOcyst disinfectant, particularly effective against bugs and protozoa that cause Calf scours

 TK GoldDust- a unique bedding powder- drying and disinfecting. It absorbs a lot of moisture, which activates the high level of DEFRA approved disinfectant. Used a lot on cubicles as it is kind to use, kind to teats and effective. It is also good in calf pens and bedded areas

**Price: We can sort delivery of any quantity** 



#### **TK GOLDdust**

**Drying Disinfectant Powder** 

- Improves general hygiene of cubicles and bedded pens
- Reduces the viral & bacterial populations
- Contains specific minerals and fibres for their drying actions
- Contains DEFRA approved disinfectant that is activated by moisture
- Cow Cubicles- use at 70g per cubicle "udder region" daily or 140g every other day. Calculate 500g/cow/week
- Calving boxes, Calf pen, Lambing pens -100g/ sqm/ every day
- Free samples available please call

Packaging: 25kg sacks on half and full tonne pallets Price: Please call for prices

#### **Vulkamin Bedding Powder**

Great for lambing pens, calving boxes and cubicles, Vulkamin can be used instead of lime and unlike lime it is not caustic, so it is much more pleasant to use. It is a naturally active antiseptic bedding powder, for use on cubicle and loose housing. Vulkamin creates a rapid rise in pH, an action which kills off many harmful organisms, including microbes which cause mastitis, scours and navel infections. Fast drying and also reduces fly infestations.

Vulkamin doesn't release ammonia from the dung & urine, so the air is more pleasant and a real financial benefit is the saving in lost Nitrogen. Every tonne of lime can waste upto 180kg of Nitrogen, worth say £250

How to use - treat it just like lime.

Packaging: 1 Tonne tote bag or 20kg buckets Price: £465.00 per tonne tote bag



# **Rumen Health**

#### **Rumen First Live-Yeast**

A live yeast which increases the number and activity of the rumen bacteria associated with acid reduction and fibre digestion. This specific strain of yeast will improve fibre digestion in all ruminant livestock and also reduce rumen acid content in cattle on a high concentrate diet.

#### Benefits:

- Around 5-10% improved weight gain
- · Reduced lameness and other acidosis problems
- · More efficient digestion all round

How to use – large cattle 10g/head/day, beef youngstock 5g/ head/day; calves under four months 2g/head/day.

#### Ostrea

Ostrea is a rumen buffer which helps to prevent acidosis, by promoting rumen health through the neutralisation of acids. It also encourages intakes and reduces the risk of laminitis. rumenitis and liver abscesses. Contains calcium and other minerals.

How to use - 50-100g/head/day, mixed with the feed.

**Packaging: 25kg bags and 1,000kgs tote bags** Price: 2.5p to 5p/head/day

#### **Microsafe Max**

- Dual Action Mycotoxin Binder.
- A good product to mop up hazardous fungal toxins

#### **Microsafe Gain**

Mycotoxin binder + Stabilised yeast to enhance rumen function.

#### **GoldShake Silage Inoculants**

A range of three products. One for enhancing preservation of grass, one for grass silage if stability has been a problem before or is expected e.g. drier crop, and GoldShake Arable for wholecrop and maize to improve stability after opening.

#### SlurryGain

A potent bacterial culture and a bug-booster to improve the quality and characteristics of your slurry, saving you diesel and fertiliser.

**Please call for advice and prices** 



with advice from Graham Shepherd MCRVS.

So, you've done all you can for your dry cow?

Maybe you did a full DCAB- analysed all the forages, kept the forages identical, mixed in the special bespoke DCAB pack?

Maybe you did the part DCAB? Which shouldn't work, but often does!

Maybe you include a calcium binder to lower the calcium available to the cow while dry?

Maybe you do nothing special? Which shouldn't work

Anyway, in every situation the cow needs plenty of calcium as soon as she calves. This calcium definately needs to be in the diet, whatever else you do, as that is where a lot of the calcium comes from. Calcium and Phosphate also come from the bones. All the special dry cow regimes attempt to keep the cows calcium gut absorption and bone mobilisation in good order.

#### What exactly does Calcium do?

All muscle in the body is similar to the slide on a trombone. The muscle shortens by sliding into itself. Calcium is vital for the 'power' in this sliding action. Calcium basically acts as a 'ratchet' mechanism. So, low calcium gives low power to the muscle ratchets.

#### The end result is:

- · weak limbs wobbly cows and down cows
- weak heart poor circulation
- weak gut movements poor appetite, and maybe twisted stomachs
- weak womb slow to calve and cleanse and clean
- · weak teat end mastitis risk

Down cows are only the tip of the ice-berg. Many more cows are affected in some way to prevent a good start to the lactation.

That is why we have a range of nutritional products to boost the cow immediately after calving. Please call Graham for advice on your particular situation.

# First Thirst Fresh Cow Drink for Rehydration & Calcium after calving

A flavoured powder, to be mixed with 20 litres of warm water and presented to the cow IMMEDIATELY after calving to provide energy, calcium, magnesium and electrolytes PLUS the cow gets 20kg of warm water and WEIGHT into the rumen and/or abomasum

#### Ingredients:

- Calcium in four forms to provide fast, medium and slow calcium release
- Sodium and Potassium to help to replenish and rehydrate, along with the water and sugars
- Propionate, lactate, glucose and lactose are included as energy sources
- · Flavoured & sweetened, so most cows will drink

Price: £120.00 (30 dose bucket = £4/cow )





Mark Crowther,

West Trailtrow, Lockerbie, Dumfriesshire

Dairy herd: 200 black and whites
Products: Ener Bolus and Fosfor Bolus

Purchase date: July 2013

Mr Crowther had historically used a standard drench, to treat any cow with a suspected nutritional imbalance immediately after calving. This event happened more frequently than he would have liked, and he was also aware that his cows were at risk of being short of phosphorous.

In June, 2013, the number of affected cows peaked and Mr Crowther decided to take a fresh approach to the problem. While looking for an alternative product, he came across the Ener Bolus and the Fosfor Bolus.

"The first few sick cows that I dosed with a combination of an Ener Bolus and a Fosfor Bolus picked up very quickly. I have been using this treatment on any cow which looks as if she requires extra help ever since and it is working extremely well," he says.

#### **Calcium Bolus Extra**

Calcium Bolus for dosing at calving and 12 hours post calving with easy and quick administration compared to bottled calcium

Bolus dissolves quickly within the rumen giving cows a quick boost of calcium to help stimulate appetite

Sub Clinical milk fever can affect up to 50% of cows at calving so boosting post calving appetite will enable the cow to achieve her true calcium requirement from her diet

Recommended dosage is one bolus at calving and one bolus 12 hours later. Big or high risk cows can be given double dose

Pack size: Boxes of 12 boluses

# Price: £54.00 Fosfor Bolus

Unique Phosphorous bolus for fresh cow supplementation

Fosfor bolus helps assist cows post calving when they at their peak time of risk for down cow syndrome/creeping cow

Please see Testimonial for on farm experiences

Recommended dosage is 1 bolus at calving and 1 bolus per day thereafter till cow is through risk period

Can be given to support therapy by injection

Pack size: Boxes of 12 boluses

Price: £54.00

#### **Ener Bolus**

Energy stimulant by a bolus to be used in cows suffering from energy deficiency

- Enerbolus is easily swallowed
- · Release of energy metabolites over a couple of hours
- Quick absorption
   Positive effect on appetite
- · Important minerals and vitamins
- Promotes cellular energy cycle Safe

Recommended dosage is 2 boluses when energy is needed and 2 boluses the day after

Pack size: Boxes of 12 boluses

Price: £54.00 Bolus Gun

A metal bolus gun for Calcium Bolus Extra, Fosfor & Ener Bolus

Price: £20.00



# **Enerboli & Ketone Testing**

NEW MILK TEST FOR KETONES - No need for refrigeration! Are your cows mobilising too much bodyfat in early lactation? We now have a cow-side testing kit which measures ketone levels in milk.

Testing is quick and easy, and it takes only a minute to get an accurate assessment of the presence of subclinical or 'hidden' ketosis.

Porta BHB Ketosis-Test uses colour-graded dipsticks to measure the levels of the ketone, betahydroxybutyrate (BHB) in milk.

The higher the concentration of BHB in the milk, the deeper the colour purple on the test strips, and the greater the level of ketosis.

#### HERE'S THE PROGRAM:

To monitor herd levels of ketosis, a test should be carried out on the same day of the week on all cows in the first and second week of lactation.

But don't test cows in the first 48 hours after calving as it is high anyway. So each cow gets tested twice, after the first 48 hours of lactation on two consecutive weeks.

Herds with more than 15% of cows in early lactation with ketosis have a significant problem and therefore need to re-assess feeding and other management pre and post calving.

#### Instructions:

No need to refrigerate. Store strips at 2- 25Celcius. Don't keep in a hot car or on a sunny windowsill!

- Collect milk sample from a quarter or a mixed sample from the cow. Discard the first few draws
- 2. Take the strip from the vial and close the vial tightly
- 3. Dip the pad of the strip in the sample
- Remove the test strip from the milk sample and shake off the excess milk
- 5. Wait one minute and compare with the colour chart

#### **ACTIONS TO TAKE:**

The colour of the strip relates to levels of BHB

0-99mmol/L NORMAL = no action

100-199 mmol/L SLIGHT KETOSIS = give her 2 day of Ener-Bolus

200-499 mmol/L sub-clinical KETOSIS at the very least give 3 to 5 days of Ener Bolus & veterinary attention if any other condition or no improvement

If more than 15% of tested cows are in this bracket or worse, then it is a matter for your Vet & nutritionist to re-assess feeding and management before and after calving

Over 500 mmol/L VERY HIGH - definitely clinical ketosis = Veterinary attention needed!

1 Box - 25 Tests Price: £37.50

# NEWPRODUCT



# "Sort your Milk!" (SYM!)

Background: The jargon slurry spreader has hit the fan lately! RUMA (Responsible Use of Medicines in Animals) and AMR (Anti-Microbial (drug) Resistance) are hot topics. As is REAM (Random Exposure to Anti-Microbials). So calf feeding milk is under the spot-light as a potential route to REAM. I'm not saying what is right or wrong and to be honest, research is conflicting at times. But it makes sense to Sort Your Milk.

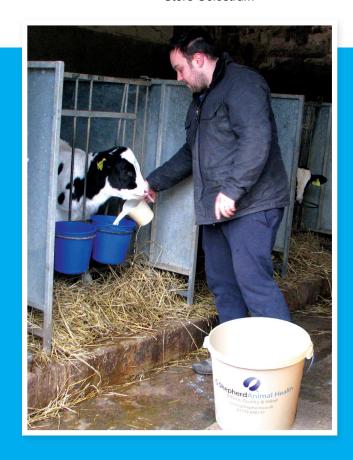
So, we have put together a simple system to:

- easily separate different categories of calf feeding milk
- keep dung and other contamination out of colostrum and calf milk
- Demonstrate to your milk buyer that you have a system

We have 30 litre buckets with metal handles with colour coded lids:

- YELLOW lid for Colostrum
- · WHITE lid for calf feeding milk.
- RED lid for reject milk.

Price: Six (6) buckets with lids of your choice for £50.00



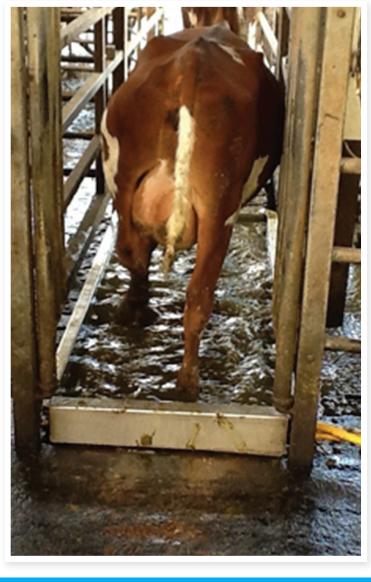
Hoof Care
with advice from Graham
Shepherd MCRVS.

"Lameness has been targeted by milk buyers because they found that the public found it distressing, and rightly so. Obviously, some

lameness is inevitable but we need to minimise it."

"As with everything, foot health is multifactorialbreeding, rearing, floor quality, building layout, cow tracks, feeding, trimming, cubicle comfort, and lastly infections."





## **Hoof Care**

We supply all the kit from crushes to knives and discs, but our main sellers are:

#### **HoofCount**

Automatic Footbaths made to measure from stainless steel, automatic filling, chemical diluting & flushing clean after a programmable number of cows. It then refills with clean freshly diluted chemical solution. It is great for regular use to keep the feet cleaner and disinfected. Please enquire.

#### **Healmax Footbath Concentrate**

This is very effective against dermatitis. Four passes, then a three day gap, repeat and you should have good control. Then follow up the four passes in say a fortnight.

If "dermi" is a problem, then Healmax is a must to get on top of it! If it doesn't, then you need to look at your shed cleaning and if your cows are walking through pools of slurry too much. In between Healmax sessions, you can use an 'everyday' product such as "TK Everyday" in between as a general footbath.

#### **Healmax Gel Spray 500ml**

Healmax also comes in a gel-spray. Two treatments will blacken and dry up dermatitis.

#### **Footbathing**

Footbathing is like Teat-dipping, i.e. the most effective product is the one that covers all of every teat after every milking!

#### **More Hoof Care Products**

#### **Moo Gloo**

Moo Gloo is a very effective, economical and popular fast setting block adhesive for wooden blocks. We do the gun, tips and blocks.

#### **Hoof Wraps**

Hoof Wraps are an excellent quality self adhesive wraps for £1 a roll if bought in bulk.

#### **Please call for price**



# **Sheezabullin™**

#### **Rub-Off Heat Detection**

Sheezabullin™ brand heat detectors reduce labour expenses. With only one application, you can manage a more effective heat detection program in less time.

#### **Key Benefits of using Sheezabullin™ brand heat** detectors

- The new and improved Sheezabullin™ heat detector features a top surface that rubs off instead of scratching off.
- Our improved "Peel & Stick" adhesive keeps the tag on the animal.
- Sheezabullin™ is now available at a much lower price.

#### **Rub-off vs. Scratch-off**

All other "scratch-off" heat detectors are plagued by the same false positive readings and ineffective adhesion issues. They "scratch-off," "fall-off," and "cost too much." Those problems are now a thing of the past with our new and improved rub-off Sheezabullin™

#### Take the test and prove it to yourself:

If the top surface of the of the tag scratches off with your

# thumbnail, you are using old scratch-off technology.

#### **Improve your bottom line**

- · Fewer missed heats
- · Lower semen costs from fewer wasted Al's.
- Higher milk production
- · Labour savings for other activities

#### **Two Easy Ordering Options**

Sheezabullin™ brand heat detectors are available in two convenient order options: Peel & Stick and Tear & Glue.

#### **Option A: Peel & Stick**

Our convenient Peel & Stick tags come on flat sheets perfect for carrying aroundand don't require any additional adhesive.

#### **Option B: Tear & Glue**

Our Tear & Glue tags come on rolls that allow you to tear off tags as you need them and allow you to use your favorite spray-on adhesive.

#### **Price: Call for competitive prices.**

Free Delivery (subject to T&Cs)



# **Testimonial**

"An excellent product! ICEMINT definity reduces swelling faster than similar products we used previously and without the skin irritation that we got following application."

Richard & Matt Fisher, Penrith

# **Fresh Calved Cow Therapy**

#### **Ice Mint**

- First COOLS then HEATS
- · Softens hard and swollen udders
- Supports therapy for mastitis and udder oedema
- Reduces conductivity in milk
- Unique blend of horse chestnut and arnica oils act as a pain killer and anti inflammatory
- Drug free No milk withdrawal
- Unique sizes: 1000ml hang up bottle & 5 litre upright pump.

Single Tube Price: £25.00 (per 1000ml hanging tube)

Box of 6 Price: £22.00 (per 1000ml hanging tube)

5 litre upright pump dispenser: £95.00





# How to buy:

on-line shop: Easy to use website... pay by card, cheque or BACS

on-line enquiry service: Ask for advice, we'll get back to you

Over the phone: Call 01772 690131 for advice and to order

If you don't see what you need, please call us, as we probably have it or can get it!

More information & products available at www.gshepherd.co.uk



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