September & October 2017 *31th Edition*

Lionel's News

Dear Business Partner

Herewith we bring you our monthly newsletter, containing up-to-date articles, tips & advice on improving different aspects of farming and relevant information on trusted, innovative products supplied by us.

True to our vision, we strive to deliver excellent service in the provision of products that contribute to the enhancement of animal health, well-being, and performance.

We hope you find this edition of our newsletter informative & worthwhile to read.

Thank you for your continuous loyalty. Feel free to contact us if you have any specific topics you would like us to cover in our future editions. Your inputs are welcome.

Visit our website: WWW.LIONELSVET.CO.ZA

e-mail: info@lionelsvet.co.za **; Tel:** (021) 932 2019

Sandringham (on the R304, Exit 39 on the N1 towards Stellenbosch)

Kom besoek Lionels en PIC se stalletjie by P55,P56,P57,P58

PIC®

LIONEL'S
VETERINARY SUPPLIES

6,600 NZ dairy cows en route to China aboard world's largest livestock carrier

Tuesday, August 1st, 2017 Source: AgriLand

http://www.thebullvine.com/news/6600-nz-dairy-cows-en-route-to-china-aboard-worlds-largest-livestock-carrier/?utm_content=Ezine%202016-09-18

Around **6,600 dairy cows** from New Zealand are currently en route to China aboard the world's largest livestock carrier, the Ocean Drover.

The **176m long vessel** collected the first half of its cargo at Timaru port in New Zealand's southern island, before travelling north to Napier port to collect the remaining cows.

It was scheduled to depart New Zealand shores on Friday, July 31. The shipment is currently travelling across the Pacific Ocean; it is approximately half way through its journey to China.

The arrival date and time of the livestock carrier at a port in China are unknown, as the journey time will depend on both weather and sea conditions.

The Ocean Drover, which was built in 2002, is believed to be the world's largest livestock carrier. It measures 176.1m in length and is 31.1m wide; the vessel tips the scales at just under **13,500t** deadweight.

It is believed that these New Zealand cows will be transported to farms owned by dairy giant Fonterra.

NZ named as China's 'most important' dairy partner

The news of the Ocean Drover's departure to China coincided with New Zealand being described as China's "**most important**" dairy partner at the China-NZ Dairy Forum.

The forum was co-hosted by Fonterra and it aims to promote the **exchange of ideas** between the two countries.

At the forum, the Chairman of the Dairy Association of China (DAC), Gao Hongbin, praised New Zealand while recognising the role international companies play in the domestic industry.

"New Zealand is China's most important overseas dairy partner and this partnership will keep strengthening," he said.

Sharing knowledge on effluent management systems, which is an important part of delivering sustainable dairy systems, was a key theme at this year's forum, Fonterra added.

Flies and Avian Influenza

https://www.canadianpoultrymag.com/business-policy/farm-business/flies-and-avian-influenza-1187?sthash.FJy3N3n6.mjjo

Houseflies can be a dangerous insect to bird health; fly management is essential

May 28, 2008

By Dr. Kai Sievert, Dr. Roberta Alvarez, Raul Cortada, Dr. Martin Valks, Novartis Animal Health Inc., B

A DANGEROUS INSECT
The common housefly can be a transmitter of the avian influenza. Having an integrated fly control program in place is an essential tool for prevention.

Avian influenza (AI) is currently of major concern since the disease caused the death ofcountless wild birds and hundreds of millions of chicken. It has a huge impact on the economic situation of poultry farmers and can even threaten their health. Recently, in the EU a budget of 1.9 billion euros has been allocated for the prevention of the disease.

Houseflies can produce huge economic and sanitary problems, especially in modern farm animal business. As an example, the annual damage in Georgia (3.3 million cattle and 27 million poultry) caused by houseflies alone was calculated to be around 2.4 million USD per year.[1] The major damage in livestock is caused by the transmission of various diseases. Among them as one of the most threatening diseases not only for the animals but also for human beings is avian influenza (AI).[2] Other diseases transmitted by flies are tuberculosis,[3] coccidosis,[4] cholera,[5] helminthiasis,[6] PRRS,7 and approximately 100 further diseases.[8]

Therefore, the housefly Musca domestica is definitively one of the most dangerous insects. Millions of humans and countless animals are suffering and even dying from diseases transmitted by flies. They continuously fly between clean, hygienic domains in houses and farms and critical areas such as feces, waste, and carcasses. This is the way flies become mechanical vectors for several infectious bacterial, fungal,protozoal and viral diseases.

Fly control programs can reduce the risk of infection. Treatment schedules are available in the fly brochures of Novartis Animal Health, as well as recommendations for fly monitoring and other measures to improve efficacy of such programs.

OUTBREAKS OF AVIAN INFLUENZA

The strain (H5N1) currently spreading from Asia to Europe is not only highly pathogenic for poultry, but has the potential to infect humans, and a number of fatal cases linked to backyard poultry have been reported.

The virus was first identified in 1996 in China. Since then millions of birds and 109 people (World Health Organization (WHO)) have died. Independent from this serious H5N1 epidemic, several outbreaks of AI occurred in the past. Between 1959 and 2001, a total of 18 primary outbreaks of highly pathogenic AI in poultry were recorded. Millions of birds were killed each time to stop the spread of this virus, always resulting in immense economic losses for the farmers and national economy.

For example, 30 million birds were killed to stop the spread of this virus (virus isolate H7N7) in the Netherlands in 2003. In Italy 14 million chicken were killed in 2000 (H7N1) and in the mid-90s the avian influenza A subtype H9N2 raged in many countries all over the world such as the United States, Germany, South Africa, Iran and Korea.

FLIES AND AVIAN INFLUENZA

In the scientific literature the connection between the AI virus and houseflies as transmitter is reported several times:

• Houseflies seem to be one of the predominant vectors that can transmit AI in poultry farms. An outbreak of AI (H5N2) in Lancaster County, Pennsylvania, USA, in 1983-84 lead to the death of countless birds. Up to 90 per cent of the flocks died. Transmission of the AI virus was suspected to occur in several ways. Apart from the direct contact between the birds and contaminated mechanical vectors such as man, one of the major transmission routes seemed to be insects, especially houseflies. Fifteen different species, mainly flies and beetles, were collected in 324 pools (each with 10-60 insects of one species). Among them were 72 pools only with Musca domestica as the dominant insect and 49 with two other fly species samples.[2]

• Flies (121 samples of three species): In more than one third of the adult Musca samples, the virus of avian influenza could be identified. Also 1/3 of samples of less abundant fly species (Ophyra and Coproica) were positive.

• Beetles and other insects: In the remaining 203 species specific samples, only two further insect samples (one of litter beetle Alphitobius diaperinus and one of hide beetle Dermestes maculates) were positive. No one of the other species sample was AI virus positive.

• An H5N1 bird flu strain was found in blow flies caught in 2004 near a poultry farm in Kyoto in western Japan that had seen an outbreak of the virus in the previous months.[9]

• The AI virus was isolated from houseflies in chicken houses.[10]

These results show the potential of flies in general and Musca domestica in particular to carry avian influenza viruses!

INTEGRATED PROGRAM TO CONTROL FLIES

An integrated farm fly control should always be an important tool to reduce the threat of AI in poultry farms and to avoid the economic disaster caused by such outbreaks. It is part of the general recommendations to prevent the spread and introduction of AI virus. Based on the three key principles of biosecurity: isolation, traffic control and sanitation, a series of recommendations can be made to prevent the spread of AI between poultry premises by flies:

ISOLATION
The mechanical transmission of AI has to be avoided. Be aware that flies can easily fly distances of several kilometres.

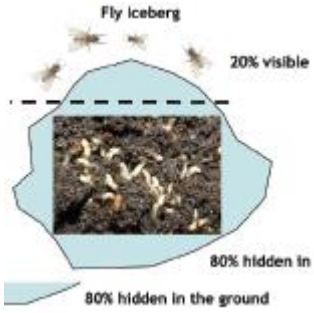
TRAFFIC CONTROL
The spread of AI often follows the movement of people and equipment. Flies can be present in feed trucks, during transport of poultry from the hatchery or to the slaughterhouse and on and in cars of visitors. In this way, flies can be easily transported from one farm to the other.

SANITATION
The removal of manure destroys the breeding sites of the flies.

POPULATION AN 'ICEBERG'
The fly population is like an iceberg. The visible part, the adult flies, are the top representing approximately 20 per cent of the total population. They are causing the problems. But the bigger part, 80 per cent of the population (eggs, larvae, pupae) is hidden in the manure, dung, spoiled fodder and other suitable places for development of the larvae. This continuously supplies new flies.

The treatment of the adult flies alone addresses only a small part of the problem and can’t solve it satisfactorily. It is essential to start the fight by using larvicides in conjunction with an adulticide treatment scheme.

An integrated anti-farm-fly program concept consists of two major aproaches:



USE OF LARVICIDES AND ADULTICIDES

Larvicides target the hidden majority of the fly population. They usually interfere with the hormone system of the insect larvae (e.g., methoprene), with the chitin synthesis (e.g., lufenuron) or interfere with the moulting process (cyromazine). This ensures the selectivity of the larvicides. Compounds like cyromazine (e.g., Neporex®) are even more selective since they kill only the larvae of flies. Beneficial insects like parasitic wasps or beetles – but also mites feeding on eggs, larvae and pupae of flies – are not affected. These modes of action lead not to an immediate death of the larvae but kill the larvae at the moulting stages or when they develop into adults at the pupal stage. Larvicides have no direct effect on adult flies and are thus summarized as "Insect Growth Regulators" or IGRs.

Editor's note: Please note that the products mentioned above are not registered in Canada; these are products currently used and available in Europe. Please consult with your local dealer/supplier for assistance with determining a larvicide or similar product that is registered for use in Canada.

Larvicides are applied to the breeding sites of the fly larvae either in granular form, as a spray or poured on the manure. Spillage areas under feeding troughs, moist areas beneath drinking troughs, around pillars and posts are the most critical areas as well as edges and anywhere else manure accumulates.

Adulticides are used to control the adult flies. The majority of the insecticides in current use against flies act on molecular targets in the insect nervous system. There are several well-established compounds out of different chemical classes (e.g., carbamates, pyrethroids, neo-nicotinoids, spinosyns). The main targets are nicotinic acetylcholine receptors, GABA receptors, glutamate receptors, cholinesterases and sodium channels.

The adulticides are available in different forms:

• As sugar containing baits mixed with an insecticide, sugar and some further attractive substance such as the fly pheromone tricosene and a yellow or red dye. The products are designed as ready-to-use, "attract-and-kill" granular baits. The flies are attracted by colour and tricosene, consume the sugar and thus the insecticide. The products mainly act as stomach poison.

• Due to the sugar matrix the baits can also be dissolved in water to be painted on pillars, posts, window frames, milk pipes or as spots on the walls where flies normally tend to gather.

• Very popular is the use of surface sprays which provide a long-lasting toxic surface. They are applied where the flies prefer to rest (e.g., on walls, posts and ceilings). The products act as contact poison.

RESISTANCES

The great potential of flies to develop resistances always has to be considered by using chemical means.

The alternating use of insecticides from different insecticidal classes with different mode of action (e.g., pyrethroids and spinosyns) in a monthly manner is highly recommended. This rotation management prevents the development of resistances (Table 1).

TABLE 1: TREATMENT SCHEDULE (SOUTHERN HEMISPHERE) WITH MONTHLY ROTATION, BEGINNING EARLY IN THE SEASON WHEN FLIES START TO DEVELOP

	September	October	November	Continue until end
Adulticide	Product A	Product B	Product A	of the fly season;
Larvicide	Product L	Product M	Product L	normally March

Additionally the parallel use of adulticides and larvicides is of great importance. Since the molecular targets of IGRs (larvicides) are always different from those of adulticides it also helps to prevent the development of resistances.

Uitstalling in Vryburg by Noord-Kaap lewendehawe in samewerking met Suidwes Landbou.

Mcdonald Mpharo adviseer die Tswana boere in hulle eie taal.

Dankie vir al die navrae en ondersteuning

Swartland Skou 2017

Baie geluk aan alle vertoners

WESFED
FEEDS / VOERE

LIONEL'S
VETERINARY SUPPLIES

Happy Lines: A Window to Cow Health

Author Jim Vanderlinde Posted on August 11, 2017 https://www.cowsignals.com/blog/happy_lines_a_window_to_cow_health

Happy Lines: A Window to Cow Health Guest blog by Jim Vanderlinde, Dairyhack

What is the undeniable sign of a person in excellent shape?

That one thing that we can unanimously agree that if you have one you are in excellent health. It's the one visual marker that is never contested. You don't need to take their blood pressure, have them list off their family history, and submit a urine sample for confirmation.

Certainly you could make a long list, but the hardest parts to achieve and first area to let go are six pack abs.

I bet you can even remember a time when you had a nice stomach and how now it's harder and harder to maintain, isn't it? At first you tried to keep it, and gradually, you started to settle for bigger shirts. It's scary to admit these things but every time you pass the mirror you can tell. You don't need anyone else's confirmation. You certainly don't need to see a doctor just so they can tell you to exercise more and eat some lettuce.

I bet you can even remember a time when you had a nice stomach

We have all experienced some version of that. The fact that we know what a really healthy person looks like yet we make excuses for our own selves. Your cows are no different. You already work with a nutritionist and a vet for your cattle. You already prescribe when they eat, what they eat, when they go to work, and what they sleep on. So what is your report card? How can you tell if it is all going right without seeing any stats like milk production and reproduction performance?

Even if you are on a farm for the very first time there is one cardinal sign, that without a shadow of a doubt, will clue you into how the herd is fed and cared for. An instant report card from the past several months of nutrition and husbandry that you can spot at the blink of an eye.

Happy lines.

Happy lines are not a myth. They do exist. Not everyone can agree on exactly what they do or how they are formed, but the general consensus is if you see happy lines you have happy cows.

What are happy lines?

For hundreds of years, before pedigrees, before milk testing, before genomics, cattle have been selected based on hair coat condition. You are well aware that healthy, shiny, clean hair coats are only on the healthiest cows. Happy lines are the horizontal folds across the ribs typically on the middle to lower third of the rib cage. Chances are you have seen them and just passed them off as a fat cow, but they have a story to tell

Can you see at least four happy lines on this bull?

Are happy lines muscle or fat?

There is some belief that these lines are a conglomerate of skin muscles and are only visible when the cow has a full rumen and a shiny haircoat. Steve Campbell, a bovine linear measurement consultant, believes these lines are a glandular expression of peak nutrition and health. In Mr. Campbell's line of work, he predicts future performance based on reading adrenal swirls in hair coats and linear measurements of key performance indicators, like relation of length of top line to heart girth.

From all appearances happy lines are hard ridges in the skin. The bigger ones you can easily grip and the smaller ones feel like running your hand over a pencil lodged in the skin.

Glandular expression wasn't enough of an answer for me so I went further. I came across this statement from Dr. Paul Dettloff. Dr. Detloff is the consulting staff veterinarian for the CROPP Cooperative

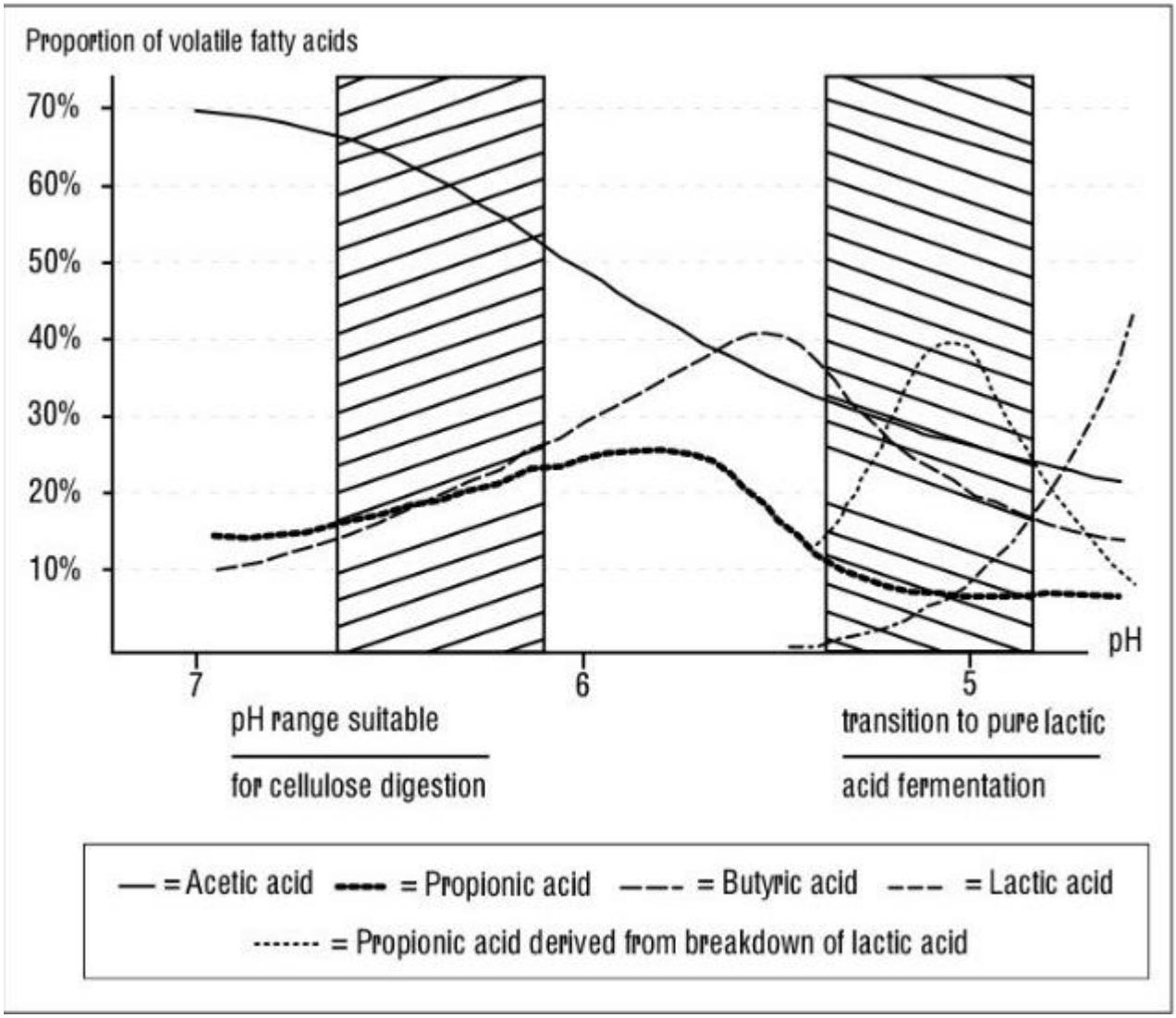
Happy lines are not a myth. They do exist.

According to Dr. Dettloff-

"Lines may appear in the mid-thoracic region. These are known as happy lines and are the sign of a healthy animal on a high-forage diet. What these lines are, he said, are deposits of volatile fatty acids, high in acetic and propionic acid, with little butyric acid."

Now, pay attention here, because that is a potentially very powerful statement on what is going on inside the cow that you can physically see on the outside of the cow.

I contacted Dr. Dettloff directly to confirm this statement. He still stands by it. He is not sure of the exact ratios of volatile fatty acids that make up the happy lines but he does figure they play a large role. For myself, I don't quite understand how volatile fatty acids escape the rumen and lodge themselves in the skin. Let's set that aside for a moment, and focus on what we do know about rumen function. We know a healthy rumen would be higher in volatile fatty acids as rumen pH comes closer to 7.



This graph from the Australian Veterinary Association shows the levels of Volatile Fatty Acids at different rumen pH levels.

If Dr. Dettloff's comments are correct that happy lines are made up of volatile fatty acids, high in acetic and propionic acid, with little butyric acid then happy lines should be a direct correlation to rumen pH.

We know that rumen pH needs to be between 6 and 7 for optimal forage digestion. Once you add silages and grains to the mix the buffering capacity of the saliva and volatile fatty acids the cow produces herself can be compromised.

As more grain and silage is fed it is possible to drive rumen pH low enough that lactic acid starts to be produced by the rumen. Now- get this- lactic acid is known to be ten times stronger than the three main volatile fatty acids that are present in normal rumen fermentation. This is why sudden feed changes can wipe out the good rumen bacteria in a hurry.

As lactic acid production increases from a low rumen pH, the cow can no longer balance the rumen herself. This is when you see her go for the free choice sodium bicarb. This is where you start to head down the road of acidosis.

Butterfat production.

We can all agree that breed can influence butterfat, but feeding also is a large player. This explains why we can see a wide variety in fat test between farms that milk the same breed. With those assumptions in mind that a cow with happy lines has an ideal rumen environment, and she is producing plenty of acetic acid to aid in forage digestion. We should also be able to draw the conclusion that cows with happy lines should be above average for butterfat test.

Acetic acid is used to produce over half of the butterfat the cow makes. This is why long stem dry hay is always thought of to improve butterfat tests. In order to have a high butterfat test you need a balanced rumen pH. With a balanced rumen pH you get lots of acetic acid production and the cow can convert to a higher fat test.

Grass fed Florida beef - photo by Mace Bauer

Happy lines are almost always thought of as only being found in grazing herds. It makes perfect sense that well managed grazing herds should exhibit more signs of happy lines than

their confined counterparts. They simply eat less stored grains and silage that could potentially drive rumen pH away from the ideal 6-7 range.

So happy lines could be an indicator of rumen pH. That's nice, but that doesn't explain why we see more prominent happy lines in well managed grazed cattle than we do in well managed, confined, TMR fed cattle.

This is a dry cow housed in a bedded pack system with no outside access. Can you see her happy lines?

The truth is they can be found in all herds, not just cows on grass based diets. When asked to explain happy lines, Dr. Hue Karreman admits that "they are also known as "health stripes" on the healthy, shiny cow. They are related to essential fatty acids of the cows. They can be seen in totally [confined] as well as organic grazed herds and are based on good nutrition."

Ok, so we have our first disagreement.

Vets are like that.

Dr. Dettloff is citing volatile fatty acids and Dr. Karreman is calling them essential fatty acids. Volatile fatty acids are produced in the rumen. Essential fatty acids are not. Essential fatty acids are your Omega-3 and Omega-6 fatty acids. Essential fatty acids are not naturally produced by the cow. These are altered by what she eats. Typically, essential fatty acids

come from your vegetable oil products like soybeans and cottonseed. Rumen microbes turn these into saturated fats. For essential fatty acids to escape the rumen microbes some must be bypassing the rumen. We know that diet affects the ratios of Omega-3 and Omega-6 but we don't know if they directly correlate to happy lines.

Happy lines on a cow in a free stall environment

Well managed confined cattle do show signs of happy lines. They are just not as distinct. You have to look close. Once you train your eye to spot them you will have no trouble finding them in well managed herds of all types. The cow above doesn't graze at all, but you can tell by her coat condition and obvious happy lines that she is in good health and on a high plane of nutrition.

Other thoughts on happy lines

There are plenty of myths around happy lines. All of them have a valid belief and they all tie directly to cow health.

Ok, so we have our first disagreement. Vets are like that.

- Sometimes referred to as protein lines
- Only extreme fat cows show them
- More lines are better
- They demonstrate the ideal ratio of protein to starch in the diet
- Only see in cows with ideal glandular function
- Milk of superior taste

I don't believe any of these are really myths. They can all be related back to a cow in optimum health. A cow doesn't have to be extremely fat to show happy lines but she does have to be in positive energy balance and gaining condition. Cows with happy lines have felt good for a long time to form those lines.

Happy lines can go away and come back. At least it appears that way. One organic grass-fed producer I interviewed, Rob Moore of NY, USA. Claims his herd has the lowest numbers of happy lines in early spring when the grass is lush and low in energy, but they rebound and become quite noticeable as the season wears on. Dr. Detloff echoed these same sentiments that and organic grass-fed herds will have more pronounced happy lines.

Some of the very earliest methods of selecting cattle are strictly from hair coat and condition. Smooth, shiny hair coats have been the norm well before computers and genomics. Happy lines takes judging a cow by her haircoat a step further. As you have noticed, no one can quite agree how they are formed. It seems unanimous and unquestioned that if you find a herd of cows with these pronounced stripes that extend across the middle of a broadside cow, then she is a happy cow with very astute caretakers.

We can all agree that happy lines gives us a glimpse of what is going on inside the cow's rumen and a quick guide to her previous nutrition level. This is very similar to how you feel when you can spot someone that works out and eats right to someone who has let themselves go and just opted for a bigger shirt.

For more articles like these and other powerful techniques for Dairy Herd Managers visit Dairyhack.com

Keeping Calf Dehydration in Check

http://www.dairyherd.com/advice-and-tips/calf-and-heifer/keeping-calf-dehydration-check

By Jennifer Bentley, Iowa State University August 11, 2017 | 8:00 am EDT

Photo by Maureen Hanson

Oral rehydration solutions, or electrolytes, are an effective way to replenish fluids lost during the course of dehydration in calves with diarrhea or heat stress. However, are we recognizing the signs of dehydration early enough?

There are some quick and simple ways to evaluate dehydration levels of scouring or heat stressed calves by examining skin tenting, gum condition, attitude, and ability to stand or suckle. For example:

· A calf with diarrhea but no other clinical signs and a strong suckling reflex could be 5-6% dehydrated.

·Calves showing mild depression, weakness and sunken eyes but still sucking is 6-8% dehydrated.

· A calf that will not stand and has cool extremities is in serious condition with a dehydration level of 10-14%.

·Death usually occurs at 14% dehydration.

Skin tenting is a quick way to evaluate hydration. Pinch a fold of skin on the neck and count the number of seconds it takes to flatten. If the skin flattens in less than 2 seconds, this indicates normal hydration. If the skin takes 2-6 seconds to flatten, the calf is about 8% dehydrated. Over 6 seconds would indicate severe dehydration over 10%. Gum color and

moisture can also be evaluated. Normal gums will be pink and damp; white and dry gums indicate dehydration.

Finally, calf attitude is often the best indicator even if they are showing no other signs. If calves need encouragement to get up or drink, monitor them closely for scouring or other illnesses.

Calves receiving electrolytes still need milk or milk replacer to supply energy and protein. The University of Illinois studied the following milk and electrolyte therapies:

(1) Electrolytes only for two days, with slow incorporation of milk for 7 days;

(2) Partial removal of milk during therapy; and

(3) Full feeding of milk and electrolytes for 7 days.

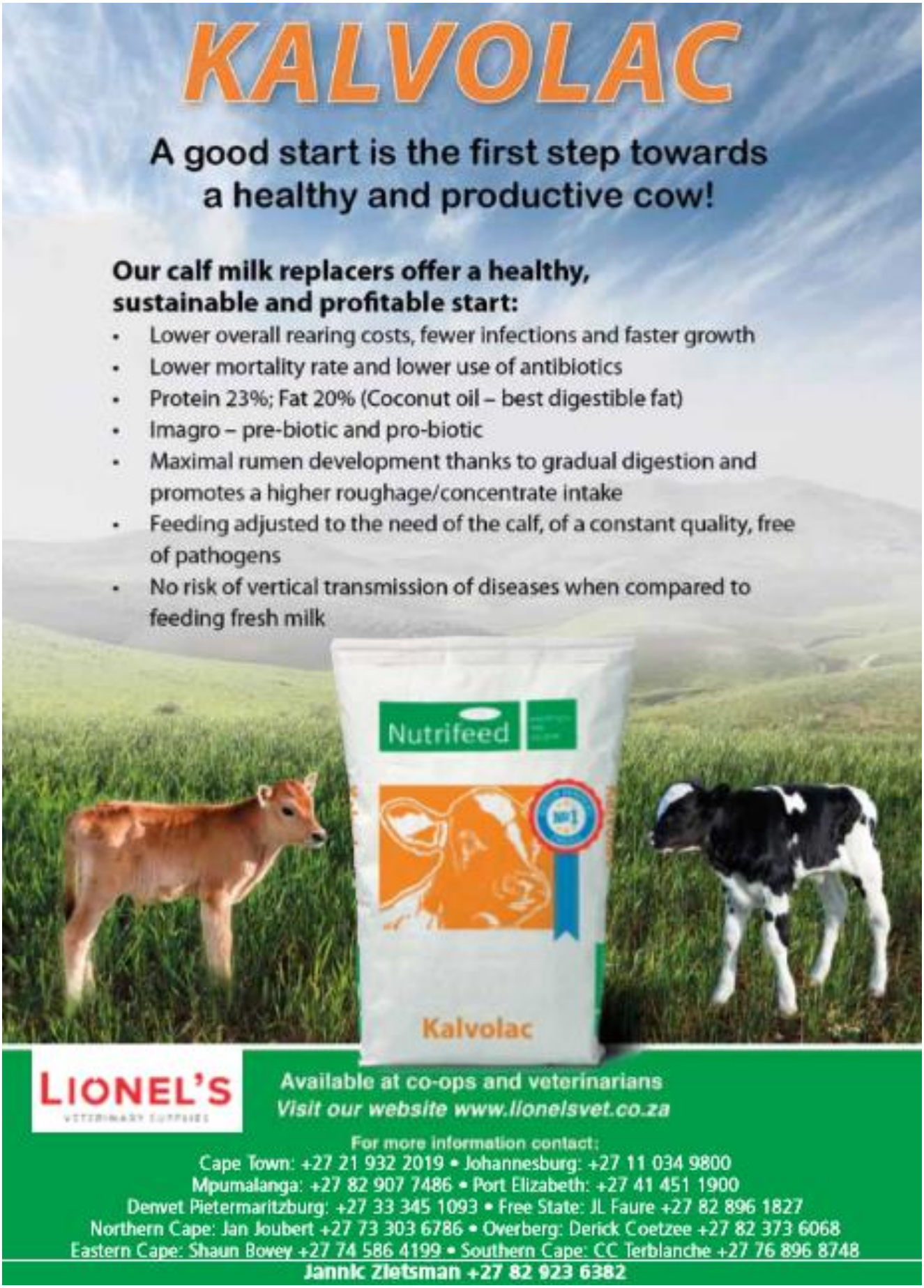
Fecal scores did not differ between treatment groups, although bodyweights were higher for treatments that included milk in some way. Calves benefited the most when full milk feeding was followed by daily electrolyte therapy.

It is nearly impossible to feed the calf too much electrolytes, but feeding too little is quite common. To determine the amount of electrolytes to feed, multiply weight of calf by the percent dehydration, and then divide by 2 to get quarts of liquid needed. For example, if a 100-lb calf is dehydrated 8% (100 x 0.08), 8 pounds of liquid divided by 2 equals 4 quarts needed per day in addition to normal feeding of milk.

These calculations are affected by the summer heat. When temperatures are over 90 degrees, increase the amount above by 50%. If temperatures are over 100 degrees, double the amount. Severely sick calves under heat stress can sometimes require up to 20 quarts of water daily to replace the total amount lost, so don’t be afraid to be generous with the fluids! Healthy calves under heat stress will drink between 6 and 12 quarts of water daily just to maintain normal hydration.

Alexanderhoek SAVM

Baie geluk aan die verkopers en kopers


KALVOLAC
A good start is the first step towards a healthy and productive cow!
Our calf milk replacers offer a healthy, sustainable and profitable start:
• Lower overall rearing costs, fewer infections and faster growth
• Lower mortality rate and lower use of antibiotics
• Protein 23%; Fat 20% (Coconut oil – best digestible fat)
• Imagro – pre-biotic and pro-biotic
• Maximal rumen development thanks to gradual digestion and promotes a higher roughage/concentrate intake
• Feeding adjusted to the need of the calf, of a constant quality, free of pathogens
• No risk of vertical transmission of diseases when compared to feeding fresh milk
Nutrifeed
Kalvolac
LIONEL'S
Available at co-ops and veterinarians
Visit our website www.lionelsvet.co.za
For more information contact:
Cape Town: +27 21 932 2019 • Johannesburg: +27 11 034 9800
Mpumalanga: +27 82 907 7486 • Port Elizabeth: +27 41 451 1900
Denvet Pietermaritzburg: +27 33 345 1093 • Free State: JL Faure +27 82 896 1827
Northern Cape: Jan Joubert +27 73 303 6786 • Overberg: Derick Coetzee +27 82 373 6068
Eastern Cape: Shaun Bowey +27 74 586 4199 • Southern Cape: CC Terblanche +27 76 896 8748
Jannic Zietsman +27 82 923 6382

Lionel's Choice Dogfood

http://www.lionelschoice.com/

The Sales Team

Naam	Sel nommer	E-pos adres	Area
Andreas du Toit	082 641 8944	andreasdtl@gmail.com	Karoo
Anita Loxton	072 231 6454	hcloxton@gmail.com	Noord-Kaap
BH Botha	079 885 7421	bh@xseed.co.za	NKZN
Byron Ott	072 668 0860	byron.ott@lionelsvet.co.za	Wes-Kaap / Swartland
Carli Bezuidenhout	072 415 9680	carli@lionelsvet.co.za	Wes-Kaap
CC Terblanche	076 896 8748	cc.terblanche@lionelsvet.co.za	Suid-Kaap
Debbie Elliott	082 376 3702	dmelliott@netactive.co.za	Midlands
Derick Coetzee	082 373 6068	djcoetzee@telkomsa.net	Suid-Kaap
Gavin Dargie	072 246 7750	gavdargie1@gmail.com	Oos London
GJ du Preez	082 042 3303	dupreez.gj@gmail.com	Oos-Kaap
Jaco Swanepoel	072 658 2960	jacoswanepoel@outlook.com	Noord-Wes
Jan Joubert	073 303 6786	jan_safp@yahoo.com	Noord-Wes
Janique Fourie	083 603 3323	janique@lionelsvet.co.za	Oos Kaap
Jannic Zietsman	082 923 6382	jzietsman@lionelsvet.co.za	Oos-Kaap
Jenni Soutar	082 783 8513	jennisoutar@gmail.com	NKZN
Johan Botes	073 925 2382	johan@lionelsvet.co.za	Wes-Kaap (Varke)
Johan du Plessis	072 806 7266	johandup@lionelsvet.co.za	Noord-Kaap
Juan Welman	082 907 7486	juan.welman@vodamail.co.za	Mpumalanga
Jacques Faure	082 896 1827	jacquesfaure@mweb.co.za	Vrystaat
Karin van der Merwe	082 851 9474	karin.vdm@vodamail.co.za	EG & Underberg
Matthew Elliott	078 552 2400	mpjelliott@hotmail.com	Nth & South Coast (Varke)
Neville Brown	084 577 1721	nevillebrown1234@gmail.com	EG & Underberg
Nico Vorster	082 782 3710	nicosmail@webmail.co.za	Vrystaat
Riaan Momberg	+264 81 124 0288	riaanm@mweb.com.na	Namibië
Sarah March	082 771 1809	sarahmarch@vodamail.co.za	Midlands South
Shaun Bovey	074 586 4199	shaun@lionelsvet.co.za	Eastern Cape
Warnich Biersteker	082 414 7293	warnich7@gmail.com	Pluimvee Adviseur
Werner van Rooyen	083 462 0474	wvrvers@mweb.co.za	Suid-Kaap

Meet the team!

DenVet

LIONEL'S
VETERINARY SUPPLIES