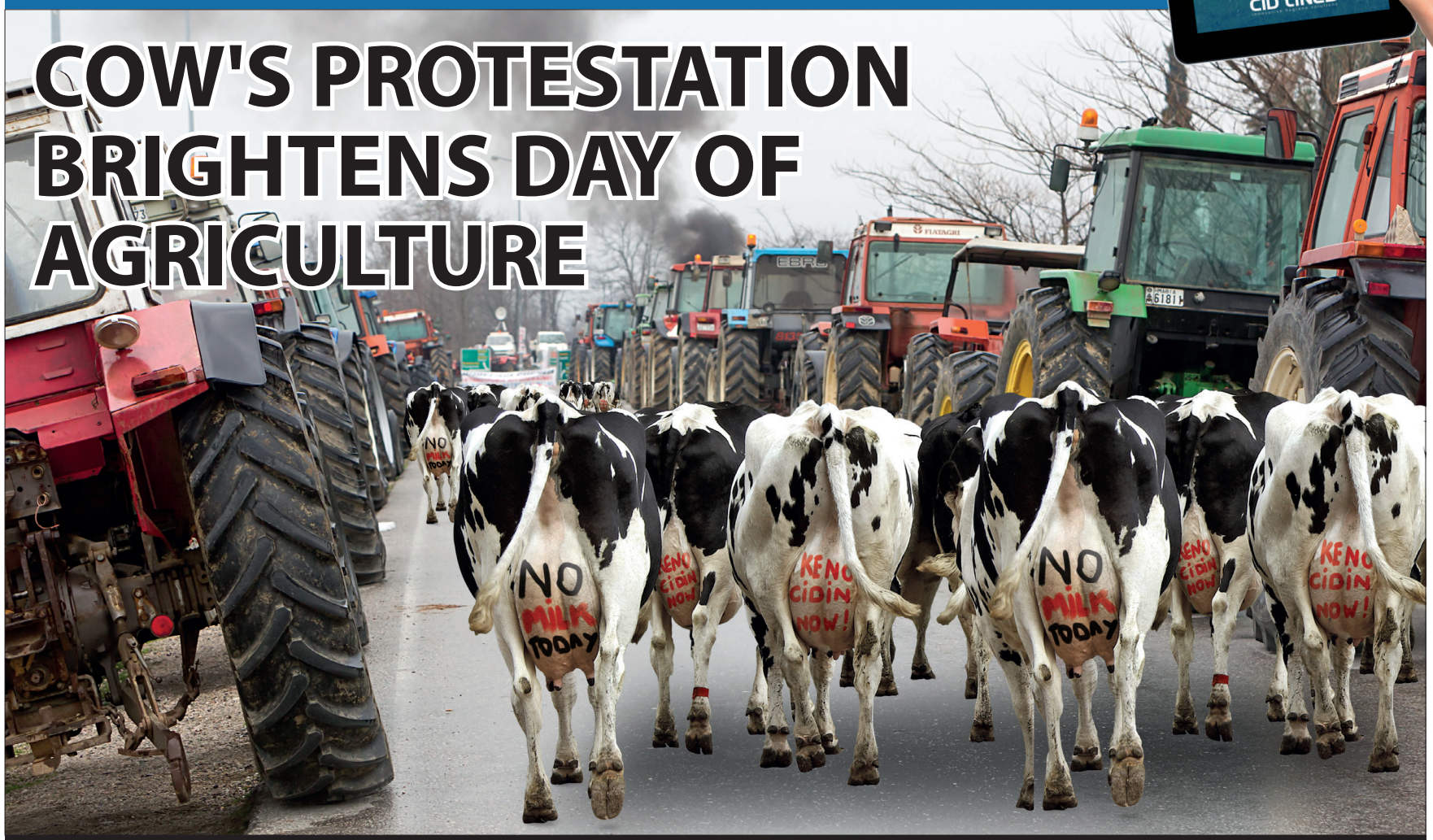
BRUSSELS FEMINISTIC COW PROTEST

Nr. 0002
Half-yearly professional magazine for the dairy industry

Dairy Daily

by CID LINES
innovative hygiene solutions



COW'S PROTESTATION BRIGHTENS DAY OF AGRICULTURE

OUR CELL COUNT IS AN INDICATION OF THE SIZE OF YOUR WALLET!

It would be wrong to state that our latest "Day of Agriculture" was marred by our feministic milk cows' manifestation. They wrote "No Milk Today" and "We Want Keno-M" on their udders and mingled with the many visitors to brighten up the occasion. This fun display hides a more serious problem though and many have heard the cow's messages loud and clear. The cows who were responsible for the action intend to broaden their actions.

The heart of the matter

It is not a new problem. Milk cows produce increasing amounts of milk per cow per year, they are becoming more and more productive. The competition is fierce and hence cows are judged by their productivity. This is very demanding on the udders and hence, mastitis is a frequent problem. Not all dairy cattle farmers do what is necessary to treat or prevent mastitis. Prevention is better than cure, though.

A spokeswoman of our protesting cows, herself a highly productive lady who goes by the name of Annie, is blatantly clear: "Nobody ever asks us how we feel. Do we want to give that much milk? Is it really necessary that we go through so much pain?" Corpulent Rita, who is also a member of the organization committee, clearly describes the heart of the matter: "We do not want war, we are prepared to give milk and even more milk, because the world certainly needs more milk, but we do demand respect. A simple pat on the shoulder will not do. We demand the right treatment for our mastitis and healthy, comfortable housing, a proper treatment when giving milk, dipping and perfect hygiene." Ok, so that much is clear. Annie clarified that there would be more actions if the situation was not taken seriously. "We are thinking about creating a union or some sort of professional group. We are prepared to talk. In addition, did you know that mastitis prevention is very profitable for dairy cattle farmers?" Whereupon our lovely milk cow proudly showed off her udder, on which she had written: "Our cell count is an indication of the size of your wallet!"

In the advantage of the farmer

On a dairy cattle farm near Deinze, we met dr. Sofie Piepers of M-TeamUGent and dr. Joséphine Verhaeghe of CID LINES, who were observing our protesting cows. They couldn't help but smile. We asked them if they had been warned about this action. "Not at all. It was a complete surprise", said dr. Piepers. "They are right, of course. I had never thought these good cows had it in them!" We were curious to find out if the cows were right about their cell count being an indication of the dairy cattle farmer's wallet. "Definitely," said Joséphine Verhaeghe. "The cell count is a reference for mastitis and for the profitability of the company. Per cow, a dairy cattle farmer pays on average 182 euro for mastitis." Sofie Piepers could only confirm: "In Flanders, 17 to 18 million litres of milk are lost per year due to problems with mastitis. Even an average cell count of 200.000/ml leads to a loss of milk of 1.4 litres per cow per day compared to an average cell count of 50.000/ml." Our FEMEN cows have taught us a valuable lesson.

Publisher: CID LINES, Waterpoortstraat 2, 8900 Ieper - Belgium

JOSEPHINE'S MISSION

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MASTITIS MANAGEMENT WITH M-TEAM

For some time, CID LINES has been working together with the M-Team of the University of Ghent. At the end of 2013 they launched the software program Keno M, the integrated concept with dip products as well as company guidance. The M-Team (Ghent University) was founded by prof. Dr. Sarne De Vliegher and Dr. Sofie Piepers. For several years the research unit Mastitis and Milk Quality of the M-Team (Ghent University), in collaboration with national and international partners, has been conducting research into the prevention,... 4

Feminist cows say NO !!!

WWhat a sight! Milk cows showing their discontent by exposing their breasts and writing messages on their udders, just like the FEMEN girls. It was seen all over the country on the Day of Agriculture. This shows a knack for organization and assertiveness we had never expected these girls to have.

Yet now, it all seems so self-evident. Why did they not speak up sooner, I wonder? It is not a new problem and we must admit that a number of institutions like the M Team of the University in Ghent and OSAM of the University of Liège have done research into this problem and are also doing something about it. Then there is CID LINES, with a worldwide manage mastitis program to prevent mastitis. In addition, there are also cattle farmers who are giving it their all to prevent udder infections, in collaboration with their company vets, or to at least treat them efficiently. Also economically speaking, their stakes are the highest. When welfare is concerned, our milk cows are the most important beneficiaries. That is why this unexpected protest is really quite natural.

Black Bella
Editor in Chief

WORLDWIDE DEMAND FOR DAIRY IS RISING. WHAT TO DO?

Because of population and economic growth, the worldwide demand for dairy is rising. That is especially true on the developing markets such as China, India, South America and Russia. Although the local production of milk rises, import is increasing as well. As soon as people have a minimal income, they will consume more animal proteins, including dairy products. Due to the pressure on prices from the distribution sector, that milk will have to be produced in an advantageous way, although quality demands will keep on rising. Who will take care of that? Our cows of course, but that will not be possible without good management from the dairy cattle farmer.

China, the accelerator

China is often described as the accelerator of the global dairy market. Its population (1.36 billion of inhabitants) and especially the growth of the middle classes cause for an increasing demand. Due to its lack of production facilities, China imports a large amount of dairy. According to Renaat Debergh of the Belgian Dairy Confederation (BCZ) that is very important for the increasing demand in 2013 and at the beginning of 2014. China mainly imports large quantities of milk powder. Between 2008 and 2012 the import of full-fat milk powder increased from 46,000 to 406,000 tons. In 2013 another 52% was added and the import increased to 619,000 tons. During the first three months of 2014, the import of full-fat milk powder in China rose by another 72%. We must not forget that the Chinese authorities have made the quality standards for its own dairy production and baby food, e.g., more stringent due to the dairy scandals of the previous decades.

Global offer and demand

It's not only in China that the demand for dairy rises. It is estimated that the Asian population will increase by 42% to 5 billion in 2050; in Africa by 48% to 2.2 billion and in Latin America by 6. In Europe, it will go down by 1%. Worldwide, the consumption of dairy will grow by an estimated 14 to 15%. Michel Nalet of Lactalis, president of the European Dairy Association (EDA) emphasizes the growth of the middle classes in a number of parts of the world such as China, India and other Asian countries, Northern Africa, Brazil, Russia and Eastern Europe.

Kevin Bellamy of 'Rabobank Food and Agrobusiness Research' explains: "More people will consume more dairy products". He claims the worldwide dairy market is driven by population growth, urbanization, globalization and a growing income. It is remarkable that the consumption of dairy mainly rises in countries where there is a structural shortage in the production of dairy. Kevin Bellamy does not think this growth will stop soon. As soon as a population group becomes more affluent, it first aspires to obtain sufficient food (mainly proteins) and then it evolves into mass consumption and convenience. Luxury comes after that. The regions that are producing for exportation, such as the EU, Oceania (mainly New Zeeland), Argentina and Uruguay and since 2006 the USA as well, will have to fulfill the demand in Central America, Brazil and some other countries in South America Russia and Eastern Europe, Asia (China mainly), Northern Africa and the Middle East. Kevin Bellamy indicates this will last for a certain while. In 2024, the EU will produce 25 million ton more than it consumes.

Consequences for our dairy industry and dairy farmers

The commercial dairy flows will be more interesting. We don't really need to export to China, although we must not neglect that market. China mainly sources its milk powder from New Zeeland and Australia. The USA export to Central and South America as well as to China and the Middle East. Argentina and Uruguay largely follow the same export lines. Hence, the Russian and North African markets offer more possibilities for the EU.

Renaat Debergh of BCZ also points out that there is a shift in the milk production within the EU: it rises in Northern Europe and decreases in the South of Europe. Belgium belongs to the Northern European Group. Kevin Bellamy warns that the production costs are relatively high in the North of Europe because of the strict demands where the environment and food safety are concerned, wages, land, etc. In addition, due to the competition from the large distribution chains, the consumer prices are under pressure. Cost savings are in order. Renaat Debergh explains that the milk production in Belgium rises annually by 1.5 to 2% but the number of cows does not follow that trend which means that the production per cow will go up. Cows are under increasing pressure to produce. Since mastitis management can lower many costs, this should become a priority.

JOSEPHINE'S MISSION

Initially, Joséphine Verhaeghe worked as a vet in Lumbres in Pas-de-Calais (French Flanders). "Many of my clients were dairy farmers", she explains. "I got somewhat frustrated because I was constantly putting out fires, treating mastitis I mean. I wanted to have more of an impact on the prevention of mastitis. In 2007, I saw an ad for CID LINES, they were looking for a vet in France. I applied, without any hesitation." Today, she organizes worldwide training in a problem-solving approach to mastitis. In between her trips to India, Ireland and Columbia, we managed to talk to her briefly in Ypres.

Registered Dip Product

CID LINES was the first to register a dip product as a drug within the framework of the drug monitoring system of the EU, in 2006. That registration comes with very strict conditions regarding efficiency and safety. These aspects must be demonstrated by means of a large number of tests. Not only does this registration give the dairy farmer more certainty, it also instills more trust with the accompanying vet. These dip products are preventive drugs. "Compared to 0 hygiene, appropriate dip reduces the risk of mastitis by 50%. Many studies in the USA and Europa have already confirmed that," she says.

For Joséphine Verhaeghe this is the foundation of her mission with CID LINES. At CID LINES, Joséphine is responsible for the mastitis management strategy and she organizes trainings worldwide, teaching a problem-solving approach. "Initially I visited companies, also abroad, to see what could be done in case of problems, often as per the request of the distributors of CID LINES. It is important to act preventively, instead of the traditional cures prescribed by most vets." Joséphine also gives advice and has already done so in more than 30 countries. "There are different types of distributors: they can distribute milking machines, fodder but they can also be part of cooperations. Outside Europe, we often deal with the distributors of drugs. They usually do not apply prevention much there", explains Joséphine Verhaeghe.

Mastitis management with Keno-M

In collaboration with the M-Team of the University of Ghent, CID LINES has developed a software suite, focusing on a reduction of the cell counts. That also deals with subclinical mastitis. "We want to create a collaboration between dairy farmer, vet and distributor", says Joséphine Verhaeghe.The Keno-M program is based on the four to six weekly input of the individual cell counts of cows. Using these data, the partners intend to optimize udder health and milk quality. They want to convert these cell data into specific and practical advice.In practice, it is difficult to follow up on udder health and to interpret the results correctly. That is necessary though in order to be able to give good and specific corporate advice. Using the software, the vet or advisor can see the weaknesses and strengths of the udder health management system.

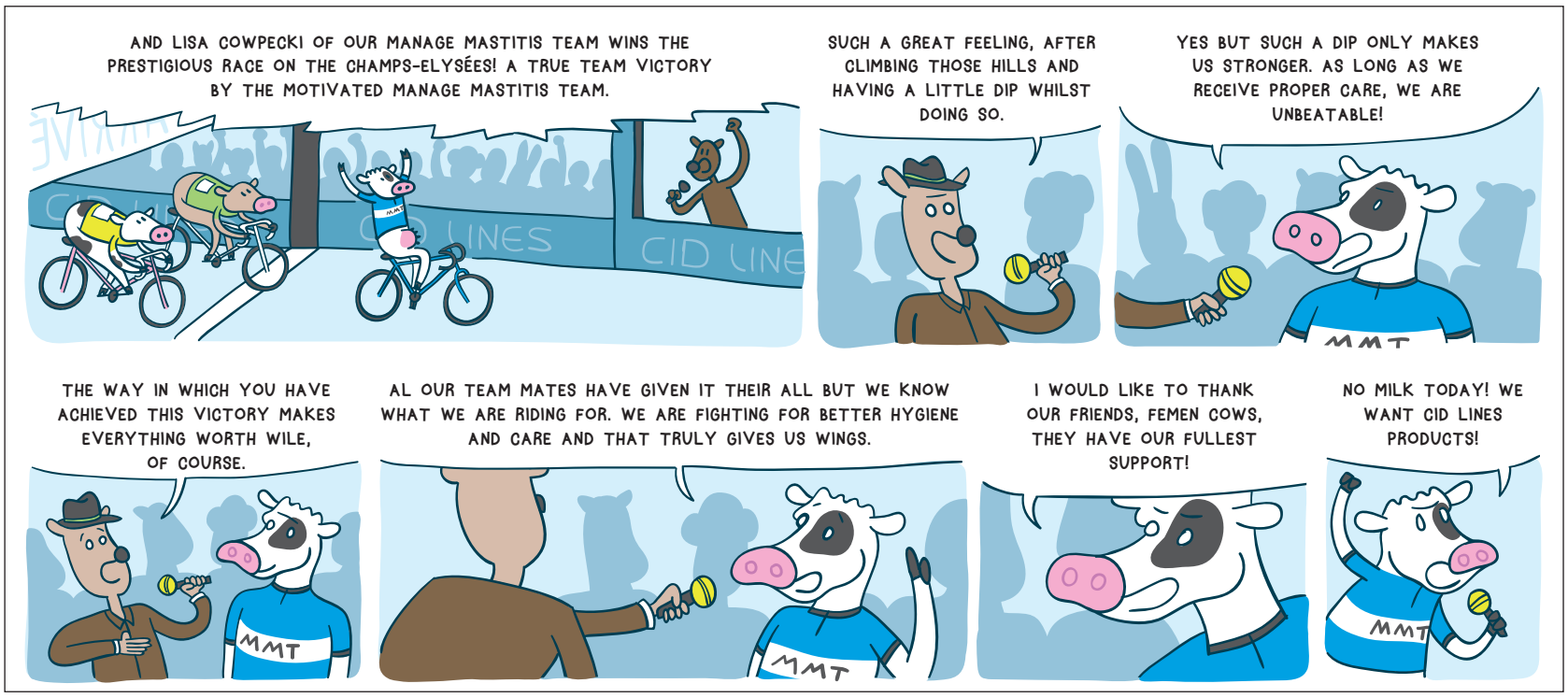
Automatically, a report is made for the client-dairy farmer including the main findings and advice. CID LINES uses this program in all EU countries as well as in China, India, South America and Africa. Soon, it will also be introduced in East Africa, Brazil and the USA. Joséphine Verhaeghe also points out that the USA will reduce the cell count standard from 750,000/ml to EU standard (400,000/ml). "In third world countries such as India and Pakistan we do not always have the necessary information but we try to inform the companies and authorities on the impact of a consistent mastitis management and the increased profitability this entails. We must insist, continuously", she says.

Reducing production costs and the use of antibiotics

"The cell count is the reference for mastitis as well as for the profitability of the company", says Joséphine. And just making the EU standard is not enough to prevent losses. "At a cell count between 150,000/ml and 300,000/ml we already see a 5% loss. Good is not the same as better. The routine needs to be efficient and must show all possible flaws. Often, analysis and interpretation are lacking. Keno-M is an efficient instrument to help with that. The Manage Mastitis program of CID LINES is aimed at clinical as well as subclinical mastitis. It checks hygiene, stable environment, milking routines as well as the individual – subclinical data – for every animal," concludes Joséphine Verhaeghe.

DVM Josephine Verhaeghe

An important goal, next to and in addition to profitability, is the reduction of the use of antibiotics. Preventive antibiotics will have to disappear. "Using the Manage Mastitis programme we want to be able to reduce the curative as well as preventive use of antibiotics", says Joséphine.



MASTITIS MANAGEMENT WITH M-TEAM


dr. Sofie Piepers
M-team (Ugent)

For some time, CID LINES has been working together with the M-Team of the University of Ghent. At the end of 2013 they launched the software program Keno M, the integrated concept with dip products as well as company guidance. The M-Team (Ghent University) was founded by prof. Dr. Sarne De Vliegher and Dr. Sofie Piepers. For several years the research unit Mastitis and Milk Quality of the M-Team (Ghent University), in collaboration with national and international partners, has been conducting research into the prevention, causes and importance of mastitis in dairy cows and heifers and has built a globally recognized expertise on this theme. Thus, the M-team (UGent) proposed a 10-point plan for the prevention and monitoring of mastitis in dairy cows and heifers that is included in the mastitis prevention and monitoring program of the National Mastitis Council in the United States. We spoke with Sarne de Vliegher and Sofie Piepers.


prof. dr. Sarne De Vliegher
M-team (Ugent)

Introduction

The M-Team (UGent) includes, in addition to prof. De Vliegher and dr. Piepers, 8 vets and three support staff. It wants to bring scientific research into practice and more specifically promote udder health and fight mastitis, which is a heavy burden on the dairy farm. To this end, the laboratory provides services (business counseling, training, communication, laboratory analysis, and clinical studies), education and scientific research. It organizes for the first time outside the US in Ghent (4-7 August 2014), along with the US National Mastitis Council (NMC), the annual international conference mastitis.

In 2011, the M-team (UGent), together with the industry, developed the 'Sustainable Dairy Farm' project. The goal was to map the use of anti-microbial products and to instill a responsible and hence durable use of veterinary medicine through guidance and knowledge with a focus on udder health.

The problem of the dairy cattle farm

"Mastitis, or inflammation of the udder is world-wide still one of the most common and one of the most expensive diseases on a dairy farm," says Sofie Piepers. Mastitis causes significant economic losses due to reduced milk production, treatment costs and the early removal of animals. Mastitis also threatens the good image of the dairy sector. The majority of the antibiotics used on a dairy farm are aimed at mastitis control.

It is important to distinguish between clinical and subclinical mastitis. Clinical mastitis is indicated by a red, harder udder that is warm to the touch but especially by the presence of flakes in the milk, or an abnormal appearance of the milk. The cows are usually generally unwell and suffer from fever and decreased appetite. According to Sarne De Vliegher in Flanders in 26% of the cows (40% in cattle and 10% for heifers) per year at least one case of clinical mastitis is established. Then there is the less significant subclinical mastitis which is only recognized by an increased cell count (100,000/ml in heifers; more than 250,000/ml in cows). According to Prof. De Vliegher, 22% of the Flemish cows shows an increased cell count and thus are infected subclinically. In the EU, less than 400,000 cells/ml is standard. The average in Flanders is 210,000 cells/ml, but the number of cases of mastitis is of course still too high.

Keno-M™
MANAGE MASTITIS
by M-team UGent & CID LINES

Economic damage

Sofie Piepers emphasizes the significant economic damage mastitis can cause to the dairy farmer.

There are the direct costs, such as the veterinary costs, the medication costs – most antibiotics in the dairy sector are used for the treatment of mastitis – as well as the quantity of lost milk. But there are also important indirect losses, such as the overall decreased milk production, fines, extra labor required for the treatment of the animals and often the early removal of animals. 17 to 18 million liters of milk are said to be discarded every year in Flanders due to mastitis problems. Even an average cell count of 200,000/ml causes 1.4 liters of milk per cow per day less than an average cell count of 50,000/ml. The average damage caused by mastitis according to a Dutch study would amount to EUR 140 per cow per year.

The reduction of the use of antibiotics

"60% of the antimicrobial agents in dairy farms are used for udder health, preventive and curative use together," says Sofie Piepers. The use of antibiotics will be greatly reduced by new legislation. We must be proactive in this respect because top quality, in addition to cost reduction, is our most important competitive advantage.

"It will be essential in the future to produce each liter of milk efficiently," stresses Sofie Piepers. To achieve this, we need a structured approach. The more prevention you apply, the more efficient your results and fewer antibiotics are needed. "Not only a reduced but also a more responsible use of antibiotics is of the essence.

Prevention is key

The prevention of mastitis in itself is already a big cost saving for the company (both clinical and subclinical mastitis). Dry period, housing, hygiene and udder management are the key concepts here. That brings us to Keno-M, the concept CID LINES developed together with the M-team (UGent). A good measure and a tool for the farmer is also the udder hygiene scorecard of the M-Team (UGent). Research by the M-Team (UGent) showed that in Flemish dairy farms, where more than 50% of the cows show an udder hygiene score ≥ 3 the risk of clinical mastitis is up to one and a half times higher than on farms where less than 50% of the animals has an udder hygiene score of 3 or 4. Hygiene and the disinfection of udders - dipping - is a key component of cost-effective mastitis management.

10 points for a healthy udder

1. A clean, dry and comfortable environment where the cows stay; 2. An efficient remedy against flies; 3. Give your cow enough minerals and vitamins; 4. Reduce the negative balance before and after calving during the food transition; 5. Prevent udder edemas; 6. Avoid calves and heifers to suck eachothers udder; 7. Avoid stress before, during and after calving; 8. Increase the health of your animals and there udders; 9. Protect the teat canal before, during and after calving; 10. Treat calfs before calving to reduce the spread of microbs together with your vet.

THE OBSERVATOIRE DE LA SANTE MAMMAIRE LEADING IN UDDER HEALTH

The Walloon 'Observatoire de la Santé Mammaire' (OsaM), which was created following the initiative of prof. Hanzen of the Veterinary Medicine Faculty of the University of Liège, reunites all the authorities that are involved in the production of milk: the Association Walonne de l'Elevage (AWE), the veterinary and agricultural faculties, the Comité du Lait, ARSIA (Walloon organization for animal health) and private companies such as CID LINES. They want to fight mastitis. We discussed this with Léonard Théron, specialist of OsaM, researcher and doctor in veterinary medicine.

Dr. Léonard Théron: "Udder health is a multifactor problem. Udder infections are a sympton, no diagnostics."

Good udder health requires multi-functional approach

Léonard Théron also indicates that udder health is a multidisciplinary problem. "It is really a symptom", he says. "Sick animals live in a sick system. They are the symptom of a sick system. Every expert suggests solutions on his own level: housing, milking machine, food, healthy weight, healthy blood, balanced energy, clinical rating … But essential is that our livestock is kept healthy. Hence prof. Hanzen's idea to bring all related competencies together. OsaM performs that task on Walloon level and is supported by the Secretary of State for Agriculture."

Perfect milk quality

In Wallonia, the average cell count is 250.000/ml, and only 0,1% of the delivered milk is penalized. On an international level, the quality of the milk is very good. Léonard Théron indicates that the industry suffers losses with cell counts over 400.000/ml. "A good livestock stays under 250.000/ml, a good cow stays under 200.000/ml. In spite of good figures, 25% of our cows suffer from subclinical mastitis which endangers the quality and the production of the milk." A healthy cow, during first lactation, provides milk with a cell count of 50.000 and 100.000/ml, according to Théron. "There is a grey area between 100.000 and 300.000 cells. The cell count will increase slightly with the following lactations. Another important fact is that when udders are under tension, 20% of the cows have wounded teats. Some think that cows with a low cell count suffer from weak immunity. In general a cow with a low cell count will fight infections easier, though.

Good practices

Approximately one third of all dairy farms use good milking practices. OSaM started an observation project in 350 farms in Wallonia, including 400 different parameters (milking, fodder, housing, age of the cows). That has shown that high-risk practices are still very frequent. "70% of the farms use an after-treatment with dip products. Often, the problem lies in the machine. OSaM noted that 50% of milking machines in Wallonia have not been adjusted to the cows of today. Looking for an answer is not easy in view of the different situations: the number of cows, comfort, fodder, … " Théron claims production cannot be intensified without hygiene. Hygiene is absolutely necessary: a free and clean stable as well as a calving area where the animals can be observed. In addition, clean dipping cups and teat sheaths as well as treatment before and after cannot be left out! No after-care increases the chances of penalization due to excessive cell counts.

Cost

Does OSaM know how much the prevention of mastitis costs? Léonard Théron: "Stock with good udder health requires an investment of 70 € per cow annually. Losses are closely linked to care during the dry period. www.mammite.be gives dairy farmers the necessary instruments to devise a good strategy, including the frequency with which teat sheaths should be changed, and how to diagnose udder wounds. OSaM research has shown that a full treatment with antibiotics (intramuscular) and an added anti-inflammatory agent can increase the chances of a cow healing during lactation. Today, treatments are far too often limited to the udder itself. The tracking process should include feeling the udders and testing the first milk. The milk is the clearest indicator, yet only 30% of dairy farmers use this test. There is room for improvement, clearly."

Hygiene

Dr Théron says that hygiene products for the udders are the ideal solution to clean drying cloths and he also recommends treatment before and after with high quality dip products. "They fulfill 3 important functions: disinfection, skin care and the effect of a protective layer. Disinfection is evident. The skin care products are for the teats that are under a lot of pressure during milking and suffer from the change of seasons. The product leaves a protective layer to prevent bacteria and other environmental factors. But that is not all. A combined approach is of the essence. The mastitis issue can only be solved by a well-structured strategy and respect for our animals."

WORD PUZZLE

I	Z	K	R	Q	M	V	P	E	Y	J	O	B	I	T	U	C	O	P	J
H	O	F	G	M	E	T	K	R	T	L	K	K	V	K	L	G	C	X	B
A	V	J	C	V	P	S	F	Y	E	L	Y	R	Z	J	S	V	M	D	Q
W	V	S	G	G	H	W	X	T	I	D	U	M	F	W	Q	R	G	Q	G
K	J	B	C	E	P	E	K	M	N	E	D	N	Y	W	Z	M	U	P	T
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R	M	L	L	V	U	G	F	J	G	M	X	W	E	G	Z	N	O	E	N
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T	V	W	J	N	Y	N	X	T	I	M	J	P	Y	Y	H	S	A	E	P
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E	I	A	A	C	M	A	S	T	I	T	I	S	M	T	X	W	M	S	L
N	F	I	O	E	O	F	R	K	T	J	Y	K	P	O	K	Y	E	E	F
T	Q	W	N	L	X	M	H	Y	N	U	I	E	A	C	C	E	N	E	I
J	V	H	V	F	I	Y	J	Z	A	W	S	I	C	U	D	I	T	A	M

LOOK FOR THESE WORDS

1. Dip
2. Udder
3. Cidlines
4. Hygiene
5. Antibiotics
6. Vet
7. Prevention
8. Mastitis
9. Posttreatment
10. Quarter
11. Cmt
12. Costs
13. Cellcount
14. Kenocow
15. Milk
16. Prétreatment

ENSURE MILK QUALITY THROUGH MILK EQUIPMENT HYGIENE

Opt for the proper cleaning and disinfecting agents for milk equipment

Milk is naturally low in germs. To ensure that this remains so after leaving the udder, the surfaces with which milk comes in contact, should be hygienically clean. On the other hand, milk is also an ideal growth medium for bacteria. Thus, to make sure the few germs existing in the milk do not multiply, the milk must be cooled quickly after milking.

Hence, the legislator prescribes procedures for cleaning and disinfection of milking equipment and the storage containers as well as for cooling. The industry offers appropriate cleaning and cooling technologies in accordance with these requirements. However, hygiene does not only depend on technology, but also to a substantial degree on the chemical products used for cleaning and disinfecting.

Which means should I use?

The success of cleaning and disinfection is the result of interplay of temperature, time, mechanical action and chemical agents. Milk producers have a large selection of products available where chemical cleaners and disinfectants are concerned. The products that used to be applied for milking plants were almost exclusively combined detergent and disinfectant (C+D products). The offer has changed with the new EU legislation on chemicals and now encompasses in addition to the combined products also so-called milking machine cleaners, both acidic and alkaline.

The decision, which products to use, becomes somewhat more difficult for milk producers. Alkaline agents remove the organic pollutants and acid ingredients of mineral soils, the "milk stone". How often cleaning is required, is decided by the hardness of the water used. As before, it is recommended to replace between to milking turns. The disinfection can be carried out both with the alkaline as well as with the acidic product. In both categories, there are C+D products on the market (see list on www.dlg.org/betriebsmittel.html).

The range of C+D products has changed significantly in the last 9 months. The detection of quaternary ammonium compounds (QAC) in raw milk, if only in small and harmless amounts, has caused acidic and alkaline QAC-based agents to be taken off the market. Most alkaline C+D products have chlorine as their active ingredient. But even here there are now restrictions for use in dairy farms. Thus, the milk producers need alternatives. The market has responded and offers new QAC- and chlorine-free products. Other innovative products and product systems are on their way.

In this not so simple situation an independent and competent quality certificate in the assessment, which means is suitable for the practice, is very useful. An independent verification of suitability is a guarantee when deciding which product can be used. Within the framework of the DLG quality label, DLG tests products for their suitability for practical use. In order to obtain the DLG label, products must demonstrate their disinfection and cleaning efficiency and material compatibility. The peculiarity in the DLG Quality Mark is that the tests are not performed just once; the products are inspected annually by the DLG. The samples are taken from the manufacturer and commercially.

TABLE 1. Tests within the framework of the DLG quality mark for products for milking plant hygiene

For the award of the DLG-quality label:

1. Chemical analysis and description of the recipe
2. Effective disinfection according to EN 1276 and EN 13697
3. Cleaning action in a test milking equipment and a cleaning test plant
4. Material compatibility for milk pipes and rubber teats
5. Foam behaviour To maintain the DLG quality label:
6. Chemical analysis on unchanged recipe
7. Disinfection or cleaning effect or material compatibility or foam behaviour

What does „tested according to EN 1276“ mean? The law demands within the framework of the approval of disinfectants, in addition to the safety and environmental efficiency, also a certificate of efficiency and recommends the test according to the European Standard EN 1276. This applies to all disinfectants and combined cleaning and disinfecting agents for machines. Some companies offer their products with this legally required test within the framework of their marketing campaign. They make farmers believe they have special qualities. A closer look is of the essence here. For instance, we should mention that the test is carried out according to EN in the standard version with a temperature of 20 ° C and a contact time of 5 minutes, which is relatively different from the actual situation in milking plants. Other test conditions can be applied. Under what conditions the "EN 1276 products" were tested, is kept secret by the companies, as well as the information as to where the laboratory tests were performed. It also remains unclear how often this examination is repeated.

The DLG has been testing products since 2007, basically on their effective disinfection according to EN 1276 (milking machine cleaner) and EN 13697 (products for manual cleaning and disinfection and means for the intermediary disinfection of milking plants). The test conditions are basically adapted to the conditions in practice. The test for the products for the disinfection of the milking equipment is usually carried out at 40 ° C with a contact time of 15 minutes. If products are recommended in another application, the test conditions are adjusted accordingly. In addition to examining the award of the DLG-quality label, the products are tested annually for compliance with their quality.

Other important criteria for good practices - what is essential?

The legislator also requires that materials that come into contact with milk must be easy to clean and disinfect. In other words, they are installed so that there are no areas that are difficult to reach with the rinse solution, i.e. they have no so-called "cleaning shadow". But this means in particular that the surfaces must be smooth. On a rough surface, residues are set in the bumps that are often not easy to remove. These points quickly become "germ nests". An important contribution to smooth surfaces comes from cleaning and disinfecting agents, which have a corresponding material compatibility. Aggressive products that are geared only to efficacy, have an impact on the materials and significantly shorten their service life and operating time. Unfortunately, dairy farmers are often only made aware of this problem by rising cell counts. The material compatibility of the product used should be absolutely confirmed. Teat cup liners must be replaced regularly due to the high mechanical stress by the pulsation. Aggressive disinfectants would shorten their lifespan considerably.

Whether acid or alkaline, milking system always needs to be cleaned. Alkaline agents are used to remove the organic milk contamination (fat, protein, lactose) and acidic agents are primarily used to remove milk stone (mineral deposits with organic inclusions). Depending on the recipe they are also partially able to remove organic contaminants. Farmers with quality standards should make sure their acidic agent has this cleansing effect. At the end of 2012, the DLG introduced a new test to check the cleaning effect in its testing guidelines. With this test, the cleaning action of the agent is tested in a laboratory test with standardized contamination. Alkaline and acidic agents must prove their cleaning effect on organic pollution and acid agents are also checked for their capacity to dissolve calcium when confronted with mineral pollution.

Safe Hygiene for Safe Food

Milk is high quality, milk is sensitive. Only farmers who keep cows according to their needs and feeds them properly, farmers who are milking udder-friendly and hygienically, and only those who transport the milked milk to the containers and stores it there hygienically, will deliver high-quality milk. The fact that the German milk producers are able to do so, is proven by their results of milk quality testing. However, changing situations require new orientations for farmers. For cleaning products and disinfectants for example, the new legislation for disinfectants (biocides) and a varying range of cleaning and disinfecting agents has caused uncertainty and the providers were called to action in order to exploit these uncertainties in their favour. The DLG adjusts its test contents for the DLG quality mark immediately to each new situation and thus provides the security that the excellent products meet the requirements of practical relevance.

Text Milchpur - Dr. Eise

THE CID LINES APPROACH: *MANAGE MASTITIS PROGRAM*

*FROM BASIC TO **ULTIMATE PROTECTION** MASTITIS MANAGEMENT*

CID LINES developed the Manage Mastitis concept to offer a global answer on the level of the dairy industry and not only on Mastitis on its own. Mastitis is a multiple factor sickness, with the Manage Mastitis program the goal is to implement preventive measures in a company to eliminate vermin, infections and diseases. CID LINES focusses on the 9 points of interests that are specified by the FAO-directions for hygiene during milking. Those 9 points are divided into 4 categories: Milk-proces hygiene, environmental hygiene, Equipment hygiene and individual data analysis.

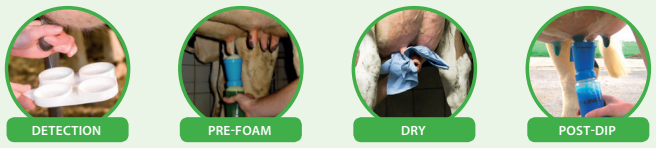
Mastitis
MANAGE MASTITIS PROGRAM
by CID LINES

www.cidlines.com

MANAGE MASTITIS! CLEAN MILK

Protect your cows against infections during milking

MILKING ROUTINE



During and after milking, the sphincter is open. Do not let bacteria penetrate into the canal.

Protect your cows against infections from the milking machine

EQUIPMENT HYGIENE

The milking machine is shared by all the cows (even more for robot milking). Prevent bacteria to spread during milking.

Protect your cows against infections from the environment

ENVIRONMENTAL HYGIENE

Ensure a clean, dry and comfortable barn for an optimum production.

Protect your cows against infections with individual follow-up

INDIVIDUAL DATA ANALYSIS

What is the specific Mastitis pattern on your farm? Do you have chronic cows acting like a reservoir? Do you have high SCC at calving?

Keno-M
MANAGE MASTITIS
by M-Team & CID LINES

A DAY IN THE LIFE OF… A KENOCOW™

Ronny Schelfhout, Sales Manager and cow whisperer for CID LINES, has given us the privilege to go a day along in the field of visiting farms. We had a warm welcome on the farm of Mr. Eddy in the charming village of Kenotown, Belgium. "I got involved with dairy farms more than 20 years ago, I was working as a sales manager at CID LINES and I came across dairy farms daily but I felt the need to do more for these dairy herds." Ronny explains, "when I got in my car after a visit I started thinking more from the point of view of the cows, who are they, what do they need and especially what does it need to make them happy and produce the optimum amount of milk, daily!" On this day, Ronny is visiting dairy farms all over the world; he feels that cows, as well as buffalos need his help to share their thoughts and feelings with the farmers. Today, we'll be part of a day in his life, the life of … the cow whisperer!

How it feels to live in a dairy herd

It has been 5 years since I have been deeply involved with Mastitis Management in CID LINES. The purpose is to optimize the profit on dairy farms. I do not only think from the point of view of the farmers but I try to look at the situation through the eyes of the cow. To be able to do this, I had to seek contact with the cow. Many days and nights I was in this particular barn, observing, smelling, listening, tasting and feeling all the things that the cows experience. I also went along in the routine of milking. The milking parlour is the roundabout of the dairy farm: it is a traffic junction, an obligatory passage, fluent if well managed! Every day, 2 or 3 times, the cows enter the milking parlour to be milked. It is the place where the farmer obtains the milk, the end-product of the dairy farm. Adapted to the cows, the milking parlour is a tool to optimize milk production.

After 2 weeks non-stop living with these sisters – I like to call them a group of sisters – I started to talk to them and I really felt a connection, they were trying to tell me something. Because I was able to place myself in the herd and to think along with the herd, I got a good interaction with the cows and got to feel what makes the cows happy. About 21 hours per day are dedicated to fulfill natural behaviors such as eating, drinking, resting, standing in alleys or perching in stall. Top productive dairy cows spend 3 extra hours to rest compared with average cows. The milking routine has to be integrated in this schedule without disturbing too much the natural behavior. Therefore to make it short: the longer the waiting time, the shorter the resting time… which results in a lower milk production for the cow. The cow has a strong need to rest, and basically the milk is produced during resting time.

I've also learnt that cows are creature of habits. They are reassured by repetition of the same order to enter the milking parlour, by the same milking procedure. Constant change (different milker's practice, different group order) enables the cow to learn the pattern and to be confident. Routine is ideal to optimize the milking process!

From Bella's point of view

It was just a normal day, we just came back from our first milking of the day and we noticed that there was a stranger in the barn. Sometimes children come in and have a look at us, some even start crying. This man was standing in the corner of the barn, it seemed as if he wanted to hide from something. I told my sisters nearby that he was probably lost in translation and we passed on the message to each other that we would ignore him and continue eating. After lunch, I was tired and decided to take a nap to let my hooves rest, I always look for a dry and comfy rubber mat to lie down. Suddenly I noticed that this man was writing things down in a notebook and I couldn't help to get curious… I decided to stand up and check a bit closer. Well, this was not a good idea, because sometimes it can get a bit slippery in the corridor and I had to walk very cautiously to avoid slipping with my two hind legs! I felt ashamed, stumbling in front of strangers, but then something strange happened the guy in the corner walked up to me and greeted me 'Hi, I'm Ronny', he said. I couldn't help stretching my neck to smell him and I even tried to lick his jacket. 'Are you hurt', he replied. Astonished I kept gazing at him, while my sisters started to whisper and moo that I should get away from this strange dude named Ronny. As I'm the leader of the herd, I didn't listen to them and stayed there. Ronny started talking to me. I felt more and more at ease and started listening to his findings, he told me that he figured out that I had a leading roll in the herd – which is true – and he told me that he would stay in the barn for the next two weeks and I shouldn't feel offended, he would only stay to observe the herd. What we've experienced the next two weeks was incredible, each day we discovered something new. One day we went into the milking parlour and instead of immediately feeling the milking tubes, I had a twinkling feeling on my teats. As I watched my sister on the other side, I saw that she had green foam surrounding her teats, which was removed before milking with a blue paper – one paper for each of us. This felt much better than the cold water spray we had before because it never felt that my udder or teats were clean and dry when the farmer only sprayed with water. These thirty seconds are the best, every time I enjoy this new bubbly feeling. Now this start of the milking procedure really rules, each time I get that twinkling feeling on all my teats as a pre treatment before milking. I also noticed that my milk flow starts much easier.

> ***"If you give more comfort to the cow, the cow will give more milk."***

When I walked back in the barn I heard all my sisters giggle and some singing "I'm blue dabe-die-dab-daa". Every time there is a change, they get a bit too excited… we all had blue teats! My Smartass sisters came up to me and explained that after milking our teats were all dipped in a blue liquid. I still remember that a while ago we had a product that didn't feel good at all, it irritated the skin on my teats and I had the feeling that it was drying out my skin. You must know that my teats and udder are my biggest asset which I'm very proud of, so any product that the farmers uses on it, I investigate very good because I only like products of top quality! This blue product is very nice I must say, it gives me a refreshing feeling and the skin of my teats feel really soft and smooth, also my teat end!

I felt happy with the change to a quality product for our teats, so I did not really pay attention to my other sisters who kept laughing and giggling during lunch. When I went searching for my sleeping place – as usual, I like routine - I discovered something much more interesting: normally I had to search around for a dry spot, but I noticed that all of our matrasses were much drier than before. I was very tired and fell asleep immediately. I knew that the next day was my last day of milking before going into my dry period before calving; so then I'm going to the dry cow stall. It is a big change for me, I know it has to be like this – but I don't like to let my milking-sisters behind. Don't get me wrong, I'm always excited to go into the dry pen, because I like the rest as I do not feel that energetic anymore in the last days – I think they gave me something else to eat.

In the dry stable we have a lot of straw to lay on, most of the time I'm sharing this with my sister-from-another-mother. Everyday the farmer checks on me, he also makes sure we have enough clean water to drink from. I don't think about being milked anymore when I'm in the dry stable because I can't hear anything of the milking parlor in this stable. It's always nice to have long chats with my sister who is also excited about the birth, except for that last time when it was a heifer who had to give birth for the first time – she was moo-ing the whole place together!

One time I had a caesarean because the calf was not in the good position to be born naturally, this was a new experience but it was not a bad one after all. For this the vet came and he made sure everything was very clean before he started. Normally the farmer and his son are here for the birth of my calf, they have never missed one, I'm sure!

The farmer is always happy with my daughter and I always hope that she has the same good genetics we've inherited from my grandmother and keep low somatic cell count all the time. You know, our generation has build up a lot of resistance over time and the record of highest yield production is on our name!

After calving I always want to get 'back to work', because being milked is what I want after 6 weeks of dry period and being at ease in the comfortable dry pen. Also seeing my other sisters back, we're very close and nobody get in between this bond. My goal is each time to break my personal record, I know I'm on my best 8 weeks after calving, also last time I broke the record of daily milking yield!

The more comfortable I feel, the more milk I can give. I can only say that I'm really excited about the improvements since Ronny has been part of my dairy herd. I can recommend every leader of a dairy herd to let him whisper to you and be involved in the creation of a comfortable environment for your herd. When my sisters feel more comfortable, they'll give more milk and we can break that daily milking yield – record again!


If you don't know Virocid™
you're probably not from around here ...
Virocid®
CID LINES
There are 15.780.000 every day users in farming, fishing, horticulture, foodprocessing, transports, storage and hospitals. Virocid® is used in more than 85 countries over all 6 continents and has proven strong results against bacteria, viruses, fungi and spores. Securing the bio-safety of animals, houses, materials, buildings, vehicles and people... one could safely say Virocid™ n°1 disinfectant in the world!
CID LINES
innovative hygiene solutions
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Use biocides with precaution. Before any use, read the label and the information concerning the product.


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The missing link in coccidiosis and cryptosporidiosis control!
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Kenofix™
Protective three in one barrier spray
1 Antiseptic (EN 1656)
2 Second skin technology (film forming agent)
3 Prevents tail and ear biting (contains a bittering agent)
Kenofix
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DAIRY HOROSCOPE

Aries *(March 21 – April 19)*
This month features new challenges. You'll have to play all of your assets. Use your big eyes with long eyelashes and throw your full udder in battle. Seize every opportunity and milk it for all its worth!

Taurus *(April 20 – May 20)*
Do not take the stress of the dairy home. Your milk production could suffer. Try to keep work life in the dairy and your personal life on the meadow separated. Staring at passing trains works soothing.

Gemini *(May 21 – June 20)*
The planets are in full alignment for you this month. Luck is on your side. Enjoy it to the fullest. But don't go gambling away that luck in Cowsino's. The steaks are to high.

Cancer *(June 21 – July 22)*
The milk production of this month will earn you a place in the Guinness Book of records. But don't go pamper yourselves to much, you'll get spoiled milk.

Leo *(July 23 – August 22)*
Don't forget to do your daily exercises. A healthy mind is a healthy body. But be ware, making fanatical use of the power plate can cause butter into the udder, … or milkshake!

Virgo *(August 23 – September 22)*
The stars are very favourable this month. Your career is in momentum. Your milk will almost double this month. Watch out for jealous cows. But never take any bull from anybody.

Libra *(September 23 – October 22)*
This month you have a lot of doubts. Those spots are not a disease, but your normal skin tone. Don't forget: The grass is always greener on the other side of the fence. Listen to some country moosic to relax.

Scorpio *(October 23 – November 21)*
Don't go along with that beautifull black bull. He'll break your hart. On the other hand, if you want to score points and impress the other cows, squirt some milk into the bull's eye.

Sagittarius *(November 22 – December 21)*
Always stand in line in the milking factory, but beware of unexpected flatulence. Avoid conflicts and be willing to be milked. Go to the moo-vies for relaxation.

Capricorn *(December 22 – January 19)*
Don't be Mooo-dy. It's no use crying over spilt milk. Don't forget to cow-nt your blessings every day. And maybe you might meet the bull of your life.

Aquarius *(Januari 20 – February 18)*
You cannot always look cow-licious. If you have a bad hair day, avoid reflection in puddles. Also, do not paddle in the pond. It will mess up your manicure.

Pisces *(February 19 – March 20)*
You're in a vegetarian mood. Eat enough food to keep up your strength. If you see pink elephants, stop eating immediately. You're hallucinating and you probably ate the wrong grass.

WANTED...

Healthy white dairy cow with black spots is looking for a black partner with white spots to lovingly blend with each other.

Envious bull looking for neck jewel. More specifically, a cowbell. To always know where my wife is.

Dairy cow is looking for 100% pure cacao to create chocolate milk in a natural way.

Wanted:
Address of Herman's Hermitas. Apparently he has 'no milk today, -because- his love has gone away!'

Man with two left hands is looking for cow with eight teats.

Still looking for the young farmer who milked me on July 12 of 2013. His hands were unforgettable

Looking for the person who – in the night from Saturday to Sunday – thought it was funny to tip cows.

Retired cow seeks green meadow and udder bra to keep hanging out.

Production Company seeks dairy cow to replace a judge from The Voice.

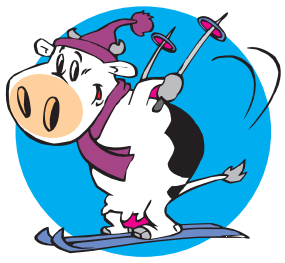
Wanted:
Bull. To play double darts.

Do you like being milked? Call your local Tax Office.

Bull is looking for a milking machine. It's his turn now!

Cow seeks lawyer to sue the Milky Way.

Cow with snow vacation plans is looking for weaning warmers. Reward: frozen yogurt or warm milk. (depends on how well the warmers work)



CID LINES
innovative hygiene solutions

SAFE FOOD FROM FARM TO FORK

1988 — **Pierre Brutsaert** + **Koen Brutsaert**
Product: **Cid 20** (cide = to kill)

1989

1990

1992 — **CID LINES**
SIV (swine influenza) breakout
European Export

1993 — CID LINES **France, Poland**
New CID LINES product: **Virocid**

1997 — New HQ
Waterpoortstraat 2

1999

2000

2003 — **GMP Pharma**
production unit

2004

2005 — **First of 10 consecutive awards**

2006

Cirlam laboratory
founded (GLP accredited)

2008 — Logistics center

2011

2012

2014
in collaboration with M-team UGent, a new management tool was designed
Keno-M MANAGE MASTITIS by M-team UGent & CID LINES

1000 TON week production

154 employees

85 partners worldwide

10 awards

700+ products