Better early-life growth

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Better early-life growth results in an increased lifetime yield

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Customised portions for each calf

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The advantage of access to milk portions throughout the entire day that are geared to the age and needs of the calves.

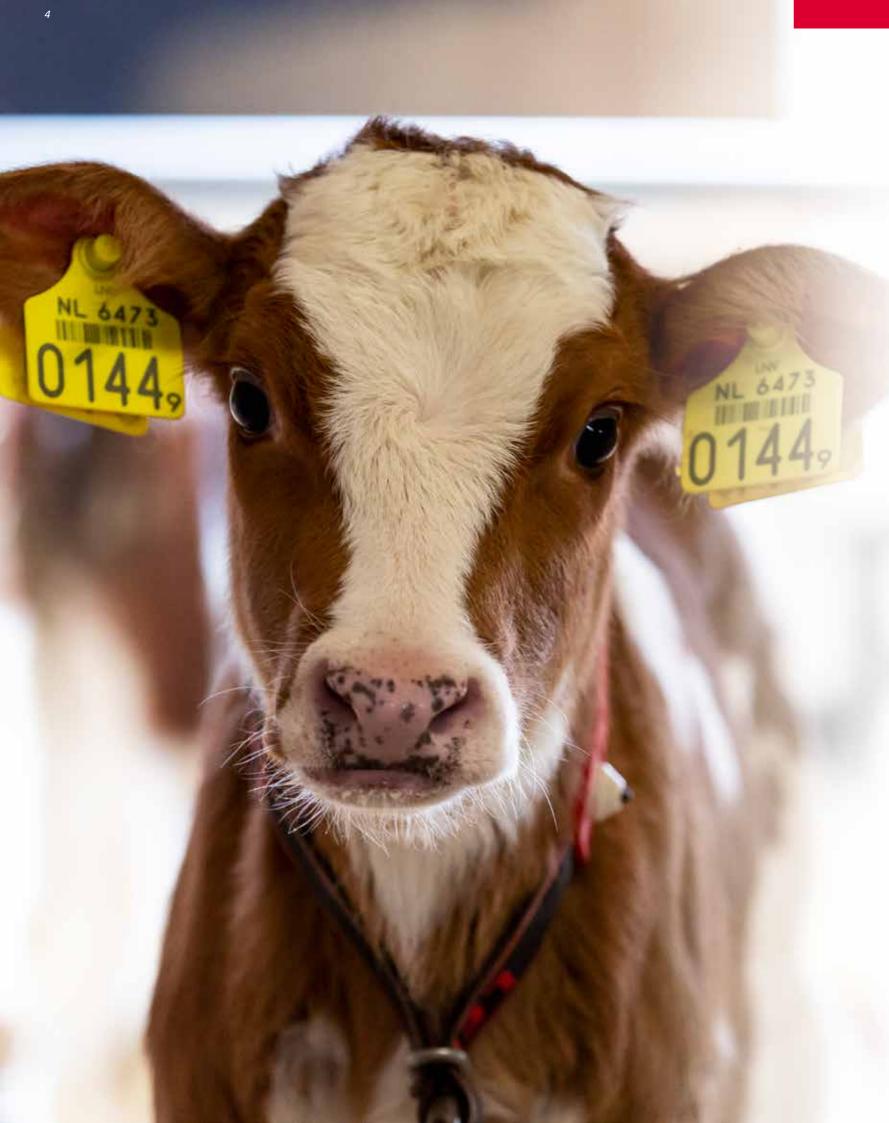
Healthier calves through quick insight

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Thanks to intelligent software you have real-time insight into the drinking behaviour of your calves.







# A smoother transition from milk to solid food

It's natural for calves to drink various portions of milk from their mother throughout the day. Both the rumen contents and development are aligned with this natural drinking behaviour. Because the calves can drink fresh milk at the right temperature throughout the day, they grow rapidly. This has a positive impact on dairy cows' vitality, fertility, milk yields, and longevity.

#### Doubling the birth weight.

Calves have a high growth potential during the milk period. It has been suggested that after the milk period calves should at least have double their birth weight. This can only be achieved with a customised feeding schedule for the calf which meets the natural needs of the calf and is geared to the rearing objectives of the dairy farmer. This will lead to not only a maximum daily weight increase, but also a good rumen development and a high feed intake at a later stage.

### Less milk, increased intake of roughage and concentrates

The feeding schedule can be set in such a way that at the end of the milk period, the milk intake is reduced and the calf is stimulated to eat roughage and concentrates. The rumen develops gradually and healthily by slowly increasing the portions of fodder and decreasing the portions of milk. In addition, a weaning dip and stress are avoided if the calf has time to slowly get used to less milk and more roughage.

#### Rumen development

The rumen develops in response to the presence and fermentation of fodder. Providing the correct relative amounts of fodder and concentrate ensures for a well-developed rumen and rumen papilla. There are various ways of offering concentrates, including the Lely Calm concentrate feeder, the concentrate feeder bin, and the automatic concentrate dispenser. A concentrate feeder bin is a stocked feeding system, and provides unlimited fresh concentrates at all times. An automatic concentrate dispenser allows the intake of concentrates to be adjusted to the needs of a calf, and monitored in the CalfCloud.



# The advantages of automated calf feeding

Feeding calves more frequently better suits their natural drinking behaviour. A calf feeder is the best solution for feeding calves frequently and automatically. It benefits a dairy farm in various ways; healthy growth of calves, optimum hygiene, and lower expenditure on labour. In addition, it prepares calves for their future.

#### Healthy calf growth

The capacity of the abomasum is only 1.5 to 2 litres per portion. Milk absorption and digestion are aided if multiple, smaller portions are provided throughout the day, rather than a bucket of milk in the morning and evening. This results in optimal utilisation of all nutrients and a more daily weight gain.

#### Optimal hygiene

Feeding calves via an automated system improves hygiene and therefore reduces risks to overall animal health. The Lely Calm cleans itself automatically, in contrast to the manual cleaning of buckets and teats. This reduces the growth of bacteria as the machine is cleaned and rinsed with effective agents several times a day. A cleaner system ensures better milk quality and consequently improved calf health.

#### Saves labour

No more filling and carrying heavy milk buckets and feeding calves by hand. All the feeding facilities no longer have to be cleaned every day. An automated calf drinking system therefore eliminates a large number of repetitive tasks, and makes the working day of the dairy farmer more flexible, with more time for other tasks around the farm.

#### Extra insight thanks to data

Another important advantage is that the Lely Calm can be connected to a management tool; CalfCloud. This page provides a useful insight into the drinking behaviour and performance of each animal, which helps to identify any health deviations at an early stage. This information also allows the entire rearing period of the calves to be analysed, and thereby ensures an optimal rearing period.

#### Group housing

Group housing helps calves to learn how to behave in a herd. Calves learn already at an early age about competition and dominant behaviour. If they learn how to walk into a drinking box for milk, it is easier to also get them to the milking robot at the later age.



## Lely Calm calf feeder

### Successfully rearing each calf

The Lely Calm is aimed at every livestock farmer who wants to raise their calves to become successful dairy cows. Small tailor-made portions are continuously and accurately dispensed to meet each calf's needs. This allows the calves to develop into strong, healthy dairy cows with maximum yields.

#### **Advantages**

Feeding with the Lely Calm results in healthier calves and - in the end - productive dairy cows. Both results are a direct result of: limited or unlimited access to freshly prepared milk in small portions, with a consistent concentration and at the right temperature; undisturbed drinking thanks to simultaneous preparation and feeding.

The Lely Calm also ensures a good throughput and mixing ratio This ensures a good weight increase, even if there is a large number of calves that need to be fed. The CalfCloud management tool provides perfect insight into milk intake. And finally, the Lely Calm is a customised feeding system thanks to the wide range of accessories.

#### The machine

The automated feeding system consists of various components.

- 1. An automatic feeder, available in two models, each of which in various versions.
- 2. A drinking station that consists of a hygiene box reader and teat unit.
- 3. Special products for daily cleaning to ensure excellent hygiene.
- 4. CalfCloud and CalfApp, the management tool for real-time insight into the drinking behaviour of your calves.



## **Options**

All models and versions comprise a complete feeding system, but there is still much to choose from. Thanks to a wide range of options and accessories, the feeding of calves can be made even more easy and specific to your situation. Your Lely Center will be happy to advise you on this.

#### Lely Calm cooling tank

The Lely Calm cooling tank ensures that the Lely Calm is provided with fresh milk in an efficient and hygienic manner. The robust stainless steel tank, available in a 100 litre and 300 litre version, is fitted with automatic cleaning and cooling, including agitator. Depending on the needs of each calf, the Lely Calm draws a certain amount of milk from the tank and heats it to the ideal drinking temperature.

#### Synchrofeed

Only available for the Lely Calm Vario Smart when two or more drinking stations are used. The powerful peristaltic pumps simultaneously supply up to a maximum of four drinking stations with fresh milk as well as support the youngest calves with drinking.

#### Automatic calibration

The calibration scale under the mixer bowl calibrates the feed component during feeding and makes adjustments were necessary.

#### Second detergent

The second detergent guarantees excellent hygiene for the dispensers. Both acidic and alkaline products are used for the automatic cleaning.

#### **Electronic scales**

Regularly weighing the calves provides extra insight into the development. The electronic plateau scales weighs the calves automatically during feeding and registers the weight development in the CalfCloud.

#### Lely Calm concentrate feeder

The automatic concentrate feeder registers the intake of concentrate for each calf and makes it possible to wean the animals individually, depending on the feed intake. The feed intake is also displayed in CalfCloud. This data provides in-depth insight into the feed intake and consequently also the health of the calves.

#### Fly protection screen

The fly protection screen prevents flies from getting into the food which ensures optimal freshness. The perforated surface provides optimal air circulation.

#### **Additive Dispenser**

The powder and liquid additive dispensers provide additives and electrolytes completely automatically in exact doses for each individual animal.

## A user-friendly, hygienic drinking station

The drinking station is the connection between the calves and the Lely Calm. This is where the calves come to drink freshly prepared milk at the right temperature. The drinking station is easy to use. The calves can easily drink or even learn to drink here; the daily cleaning per calf is also automated, so saves time.

#### Read-out unit for insight and customised portions

The drinking station is equipped with a reader, which is connected to the calf's transponder. Through the read-out unit and the transponder, the Lely Calm knows precisely the needs of the calf and ensures it is given a customised prepared portion of fresh milk. All the data concerning the amount of litres of milk consumed, the drink frequency, etc. are stored and are accessible via the CalfCloud and CalfApp. This gives you as dairy farmer a clear insight into the drinking behaviour of the calves. If the drinking behaviour changes, you can immediately check the calf in question.

#### Hygiene box

The most important part of the drinking station is the hygiene box. This box is an extension of the Lely Calm with a fully automatic cleaning process for the milk supply hose and teat.

The hygiene box is designed to minimise residues between feeding rounds.

Pathogens cannot grow if there are no milk residues left and the calves are fed in a hygienic manner. In addition, the entire hose system can be cleaned automatically up to four times per day.

#### Automatic teat cleaning with fresh water

After a calf has come into contact with the teat in the drinking station, it is sprayed with clean water. The spray time, as well as the nozzles for the teat cleaning, can be set manually In combination with the strong dirt-resistant properties of the teat, this contributes to the general cleanliness and reduction of the cross-contamination between the calves.

#### Automatic cleaning of the hoses

In addition to the cleaning of the teats, the internal mechanism of the system is also cleaned. This guarantees optimal hygiene.

A pre-rinsing phase with clean water is always a first step in the internal cleaning process. Afterwards the entire internal mechanism and all milk supplying components are thoroughly cleaned with a cleaning agent. One or two cleaning agents (alkaline and/or acid) are used to achieve optimal cleaning, depending on the model and version. The cleaning process is concluded with a second rinse with clean water.

The fully automatic, thorough cleaning process prevents milk residues. As there are no residues, microorganisms cannot grow; this ensures safe and successful feeding. This all leads to the better hygiene, which ensures the milk quality and health of the calves.

#### Self-learning function

The hygiene box is also equipped with a self-learning function, which allows calves to become familiar with the feeding station more quickly. If a calf goes to the station to drink and comes near the teat, a small amount of the milk is discharged. This method means the calf understands that she can drink; this supports natural drinking behaviour, and promotes feed intake. At the same time, the self-learning function saves time; manual training is minimised.



#### Other versions

Instead of the hygiene box, you can also opt for a standard teat bracket or a tilting teat bracket. The tilting teat bracket tilts forward when the calf is not drinking and can be secured when desired. This teat bracket is supplied as standard with a draining bowl. This tilting teat bracket in combination with the draining bowl makes it possible to keep the area around the drinking station as clean as possible as any milk and cleaning residues are transported into the draining bowl. With both variants, the supply hose to the teat has to be cleaned manually.

#### YelloTeat

The teat of the drinking station is made from hygienic material that is strongly dirt resistant. This results in excellent hygiene, and cross contamination is kept to an absolute minimum. The YelloTeat can also be attached to the standard and tilting teat bracket.



## Alternated cleaning for optimal hygiene and calf health

The innovative hygiene box guarantees optimum hygiene. Two specific agents can be used for the cleaning process: Lely Calm Cid and Lely Calm Lin. Both cleaning agents have been specifically developed for the Lely Calm in order to ensure a hygienic and safe processing of the delicate feed ingredients.

The alternated use of both cleaning agents once a day guarantees an excellent hygiene of the inner mechanism of the feeding system. In this way, any lack of hygiene would not threaten the calf's health.

#### Lely Calm Cid

This acidic product is ideal for effectively removing lime, iron and milkstone deposits. Lely Calm Cid contains not only phosphoric acid but also a large amount of surfactants, which can penetrate dirt. In addition, the combination of phosphoric acid and surfactants clears away organic residues, such as fat, protein and sugar.

#### Lely Calm Lin

This non-chlorinated alkaline product has an effective penetrating effect and removes fat, protein and sugar residues from the milk in the Lely Calm. The composition of Lely Calm is enriched with sequestering agents and surfactants. The sequestering agents improve the cleaning and also prevents limescale build-up during the alkaline cleaning.

#### Alternated cleaning

An alternated use of Lely Calm Lin and Lely Calm Cid is the best for an optimal hygienic milk supply. The best results are achieved with a combination of interval cleaning: a clean surface with excellent hygiene.

Other products are recommended:

#### Lely Calm bodywarmer

The bodywarmer keeps the body temperature of the calf stable and thereby reduces energy loss.

#### Lely Calm concentrate feeder

The concentrate feeder bin allows three calves to be fed a small portion of concentrate from the stocks at the same time. This dosing method keeps the concentrate fresh and tasty, but unlimited concentrate can still be provided.

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