

Prevent hoof and leg problems to prolong the life of dairy cows

Sustainability is becoming more and more important in the intensive livestock industry. With a population estimated to grow to nine billion people in 2050, the pressure on resources and environment will increase and only sustainable solutions can meet this challenge. To achieve a sustainable dairy chain, extending the lifespan of dairy cows is becoming a top priority. By prolonging the life of a dairy cow, less calves and heifers have to be reared to retain the same productivity. A positive side effect is that the farmer benefits economically.

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There are three main reasons for discharging or culling dairy cows – hoof problems (often indicated by lameness), fertility and mastitis. Preventing hoof problems will increase the lifespan of the dairy cow and this is exactly the core business of Intracare.

Intracare have developed products and treatment programs to prevent claw and leg infections. The programs are suited for group and for individual treatments. In this way good hoof care can support the lifespan of dairy cows.

Figs. 1 and 2 show the actual lifespan of dairy cows (in years) and the total milk production (in kg milk) in the Netherlands from 2006-2012 (WUR Livestock Research).



Some 15% of the cows do not make five years, in contrast to 21% that become 6.5 years and older. The majority (65%) live between 5 and 6.5 years (the Dutch average is 5.9 years with 1,156 days of lactation).

Average milk production is around 30,000kg milk and more than 88% of the dairy cows are producing more than 22,000kg milk during their life. In the last two decades a strong increase in life production compared to a moderate change in lifespan can be observed (Fig. 3).

Since 2008 both are showing a decrease, due to diseases, bans which have an impact on less export of heifers, the quality of roughage and the milk price. In a way the average milk production has remained quite stable during the last five years.

Research by Buiting (2012) on 87,000 dairy cows showed that there are four major reasons to discharge dairy cattle. Fertility (19%), mastitis/high cell count (18%) and hoof and leg issues (16%) are the top three reasons to finish the lifespan of a dairy cow. The fourth reason is to switch the dairy cow for fattening (14%) but, according to the research, this is more of an effect, while

the cause is most probably related to the top three reasons.

The top three reasons are all related to health issues. According to the Dutch Sustainable Dairy Chain (DZK), supported by the Ministry of Economic Affairs and the Dutch Dairy Board, the ambition is to improve the lifespan to 6.1 years by 2020.

Non-antibiotic hoof care

It is important is to prevent claw and leg infections through a regular group treatment schedule and, furthermore, by regular monitoring of the problem cases by individual treatment.

Intracare has developed a unique range of antibiotic-free products with a proven record supported by independent efficacy studies. These antibiotic free products were developed in close collaboration with dairy farmers, veterinary surgeons, farriers and cattle specialists and have been tested extensively in the field.

Their Hoof-fit line has undergone a strong upward development in recent years, in part because of Hoof-fit Gel's recently awarded status as an official veterinary medicine. This makes it the world's first antibiotic-free product that can be officially used to tackle digital dermatitis (Mortellaro). Due to this, cattle farmers, hoof trimmers and veterinarians can now work without antibiotics when tackling these types of problems.

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Fig. 1. The lifespan of a dairy cow in The Netherlands between 2006 and 2012.

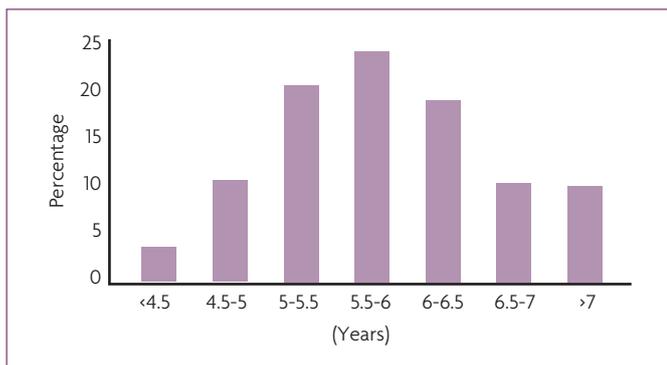
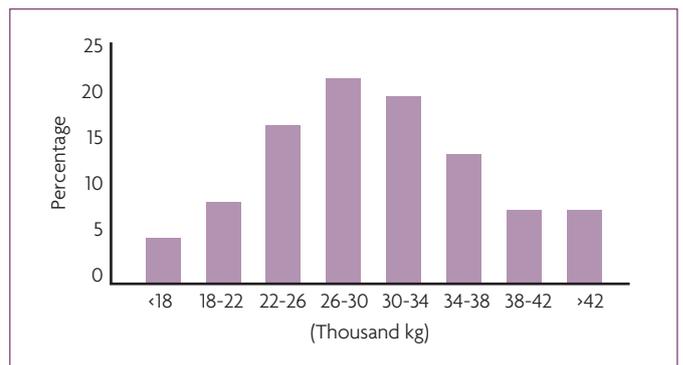


Fig. 2. The average milk production of a dairy cow in The Netherlands between 2006 and 2012.



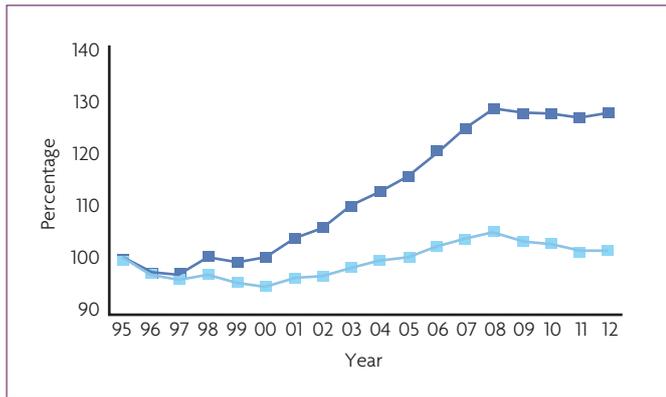


Fig. 3. Lifetime production over the last two decades. The light blue line shows the trend in average life span, while the darker blue line shows the development in average life production.

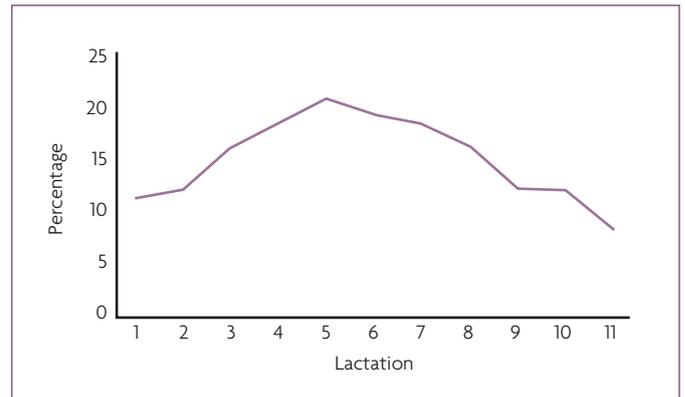


Fig. 4. Percentage of dairy cows discharged due to hoof and leg issues per lactation.

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This fits in perfectly with the philosophy of authorities worldwide to drastically reduce the use of antibiotics within the (intensive) cattle farming sector.

- Intra Hoof-fit Liquid can be used in a low pressure sprayer or a spray pump to apply it on to the back of each claw and into the interdigital space. For the first three treatments apply a 50% concentration and afterwards treat the claws on a weekly basis with a 20% solution.
- Intra Hoof-fit Bath is specially developed for preventive treatments. The routine strategy for two days every two weeks can

keep the hooves in a healthy condition.

- Intra Hoof-fit Gel is particularly suited to curative use. The gel can be used to treat individual cows with severe hoof ailments. Efficacy tests demonstrated that Hoof-fit Gel is 1.57 times more effective than CTC spray (antibiotic).
 - Intra Hoof-fit Repiderma spray is in an aerosol can for individual treatment. The patented concept is to spray a micronised powder to penetrate deeply into the skin in a short space of time. It can be used for both hoof and leg issues.
- The active ingredients in all Intra Hoof-fit products contain chelated minerals which,

in contrast to traditional minerals, can be absorbed much more easily by wounds and infections. Because of this, Hoof-fit is not only active 'on' the skin, but also 'under and within' the skin (epidermis and dermis).

Intracare advise farmers, hoof trimmers, veterinarians and feed companies to create a hoof treatment day in their schedule as they believe the only way to success is to pay more attention to the claws.

The Intra Hoof-fit program has been proven to decrease hoof problems by more than 80%. This fits in with the company's ambition to prolong the lifespan of dairy cow in a sustainable way. ■