

# Fewer stillborn calves thanks to breeding

**The number of stillborn calves can be considerably lowered thanks to breeding. There are bulls available that give considerably fewer difficult births. The Netherlands do have indexes for vitality and calving ease with cows. They are renewed.**

**F**ifteen percent of the heifer calvings result in a stillborn calf. With cows this

percentage is considerably lower: about five percent. The whole world is confronted

with this problem. The percentages across the prominent dairy farming countries are comparable. It is also a known fact that the potential for heifers to produce a vital calf (the so-called maternal effect) has worsened. This step backwards only half explains the total decline in the number of live-born calves from 1st-calf heifers. There is no sound scientific research on this subject. The weight of the calf, the heifer's age and the length of the gestation period play a role, however, genetics do too. It is known that bull selection can be an important factor to reduce the number of calves that are born dead or die within 24 hours. Economically this is important too because every stillborn calf costs a dairy farmer money, not only in the calf's value but also because of loss of milk production and progress. Reason enough to pay every possible attention to this aspect by means of breeding.

## For heifers too

The Netherlands has had access to breeding values for vitality and calving ease for years. Calving ease says something about the ease or difficulty with which calves are being born, while vitality is an indication of the chances of obtaining a live calf.

New is that these traits are now specifically calculated as well for 1st-calf heifers. That's the real problem area, because the number of stillborn calves from 1st-calf heifers is more than twice as high as from cows. The breeding goal is to reduce the number of stillbirths and the number of difficult births. Dairy farmers can contribute positively by opting for a calving-ease bull. For the differences in this area between bulls can be substantial. A difference of seven or eight points is no exception. If a bull has 104 for calving ease, it means that by using him you reduce the number of difficult births by almost a fifth (20%). With cows that effect is smaller: a reduction of one tenth (10%). Not only does a bull have a direct influence on whether a calf is born alive, he also exerts influence as the sire of the cow that is giving birth. The influence of the dam on birth is called the maternal effect. It is important to breed cows that have a bigger chance of producing a live calf. For this purpose a special breeding value has been developed called maternal calving ease, or daughter calving ease. The other index pertains to the calving ease of the heifer that is in-calf to the bull.

## Vitality

Directly connected with both calving-ease indexes is the breeding value for vitality. By using specific vitality bulls a considerable step can be taken to get more heifer-born calves that survive. A bull with a breeding value of 104 will see

	calving ease (direct)	vitality (direct)
Timmer Tyson	115	107
Timmer Finesse	112	104
Woudhoeve Estate	112	102
Delta Urocal	112	102
JGS Hibernian	112	101

Table 1 • Top 5 black & white

	calving ease (direct)	vitality (direct)
Horst Guuscaro	112	103
Diska London	111	104
Welberger Sonlight	111	107
Lowlands Fabian	111	109
Eshof Kodiak	111	103

Table 2 • Top 5 red & white

calf vitality improve by 3.2 percent; with the daughters of this heifer the improvement is even 4.8 percent. That is a considerable genetic effect. With cows this effect is much smaller with an improvement of only 0.7 percent. These adjustments to the breeding values are possible because GES, which calculates the indexes in the Netherlands, today has access to much more data. As a result the reliabilities of existing indexes for calving ease and vitality have increased considerably. Since 2007, Dutch dairy farmers report on calving ease via voice response or via their farm management program to their breeding organizations. This results in calving-ease information becoming available now every year from more than 100,000 heifers and almost 320,000 cows. Ten years ago these numbers were 4,000 and over 12,000 respectively. In those days only the births of calves from an AI bull's 1st-crop

period were registered. Especially the amount of heifer information was insufficient. For vitality (the number of live calves born) GES refers to the Identification and Registration System, in which all dairy farmers have to mandatorily register every birth. On a yearly basis 850,000 births are recorded of calves with a recognized pedigree. There can be big differences between bulls. A black & white top bull such as Timmer Tyson (by O-Man) scores with heifers 115 for calving ease and 107 for vitality, just like his sire. The worst performing bulls are at 87 for calving ease and 90 for vitality. For the red & whites, Lowlands Fabian is a great bull with 111 for calving ease and no less than 109 for vitality. |

*On the internet the information per bull can be found at: [www.gesfokwaarden.nl/fokwaarden](http://www.gesfokwaarden.nl/fokwaarden)*

## New breeding goal

The Dutch dairy farming industry is going to determine a new breeding goal. What is the ideal cow for the future that breeders have to focus on today? It will be important to know what kind of cow the dairy farmer will require when the milk quota disappears in Europe. That will be in the year 2015. From that moment on dairy farmers in the EU will be allowed again to produce unlimited milk. A very high milk yield with high percentages will be very important then. Other subjects that will be part of the discussion about the new breeding goal will be an easy cow that handles her own in large herds, health, animal welfare, but also a cow that emits little methane/CO<sub>2</sub>. In the course of this year the discussion will take place. The last time a new breeding goal was determined, was in 2006.

There are many beautiful cows in the Netherlands. Every year, Veeopro Holland publishes a special calendar with a different 'calendar girl' for every month of the year. In each issue the editors introduce one or two of them.

This time two girls: Hendrikje 72 (gracing the calendar in June) and the red & white Beukenhof Ruthje. (featured on the September page).



Hendrikje 72

Look at her: Impuls daughter Hendrikje 72. She has a tremendous will to milk. And she shows it. In her first lactation she produced 20,330kg milk. She combines this with outstanding type. Hendrikje 72 is classified VG 86. Her sire comes from the world-famous Woudhoeve herd which, besides top bulls in the Netherlands, also supplied influential sires to Denmark, England, and South Africa. Hendrikje's granddam already produced more than 87,000kg milk and is still in the herd. She is due to... Impuls.



Ruthje 205

Beukenhof Ruthje 205 is a copy of her sire. Beukenhof 346 Ideal is a Talent son who transmits very good udders and high percentages. And Ruthje 205 shows it. She has an outstanding udder (VG 87) to go along with her very nice type. In her first lactation she produced 9605kg milk with 4.80% fat and 3.82% protein. The bull Ideal inherited the high percentages from his dam. And this dam is still around in the herd of J. P. Bontekoning. She has already produced more than 63,000kg of milk with 5.73% fat and 3.99% protein.