EFFICIENT DAIRYING



Efficient dairying is vital in today's economic climate. And breeding highly productive and trouble-free cows is key to efficient milk production. In this article we look at a new tool to help you improve fertility — and health.

Part 1: Lifetime production in the Netherlands

Part 2: Efficient production in block calving systems

Part 3: Fertility: a financial point of view

Part 4: Weight of fertility in block calving systems

Part 5: Dairy management in block calving systems

Part 6: Easy-to-manage Holstein cows

Part 7: Benefits of reliable breeding values

Fertility is important in all dairy herds and now CRV has finally put a figure on it. Fertility is inextricably linked with health and longevity, so it's not surprising that fertility or daughter fertility, which is the breeding value CRV use for bulls, is just part of the overall health of the cow.

It is viewed alongside the other health traits like udder health, hoof health, calving ease, maternal calving ease, and calf vitality.

"If a cow isn't healthy then she won't be fertile and, if she's not fertile, she won't last in the herd," says CRV Avoncroft's David Matthews. "Ask any producer what their priorities are and cow health will be at the top of the list. As herds continue to expand – and labour becomes scarcer – there's a greater demand for 'trouble-free' and easy-to-manage cows and heifers."

Trouble-free cows

To help producers to breed these cows, CRV has developed two new tools – Better Life Health and Better Life Efficiency. These are unique indicators to help producers to improve their herd's productivity and lifespan, as well as the producer's own life. Trouble-free cows are less stressful and more enjoyable to look after.

Prior to the launch of these tools, breeding for a 'trouble-free' herd meant that producers had to take many different factors into account when selecting sires, such as udder health, hoof health and calving ease.

But Better Life Health incorporates all the relevant factors for cow health, Breeding tool highlights the financial benefit of improving fertility

Return on fertility investment

A new breeding tool, that will help producers to select for better health and fertility more easily, will also highlight the true value of the return on their investment. We spoke to a UK breeding specialist to find out more.

text Rachael Porter



Health and fertility improvers: Atlantic and Windstar

The top NVI bull in the Netherlands -Delta Atlantic – also has the highest score for Better Life Health.

This Ramos son adds strength and capacity to herds and he scores well on somatic cell count, fertility, hoof health and calving ease.

These figures make him the perfect bull for producers who want to milk troublefree cows with high lifetime production. For red-and-white breeders, Windstar has to be the first choice for improving health in the herd. Spencer son Windstar (maternal grandfather OMan) excels in udder health, hoof health, feet and legs, fertility, and calving ease.

His breeding value is extremely balanced with production, strong and dairy type and health and efficiency in one package. To accompany this, his daughters also have the right 'equipment' to achieve high production and last for several lactations in the herd.



HJR Windstar

which means that producers can see, at a

glance, which bull will have the most positive effect on the health of their herd. Milking more 'trouble-free' cows should free up more time to focus on herd management.

Many different breeding values are calculated for health traits and the Better Life Health tool sums them up. The new indicator is based on the following breeding values: udder health, hoof health, calving ease, maternal calving ease, calf vitality, and daughter fertility. No weightings are applied to the different breeding values. "This is because a cow with mastitis is just as time consuming and labour intensive for the producer to treat as a difficult calving or a lame cow," explains Mr Matthews.

Different traits

Better Life Health is composed with different traits that are - in isolation very reliable and have plenty of heritability. That's always an important base from which to make breeding improvements. It is the percentage of healthier animals compared to the population average.

"This means that a bull with a higher percentage will sire daughters that are healthier on average. The resulting percentage typically varies between -5 and up to +10 or +15 for the best bulls.

"The higher the number, the higher the percentage of healthy animals compared to the population average. This means that they are trouble-free cows - with fewer disease problems, fewer treatments, and requiring less labour," he adds.

An important trait in Better Life Health is fertility, not least because it is in the top three (along with udder and hoof health) most important reasons for culling cows.

Improving fertility is particularly high on producers' agendas. "For many years, bulls have been selected on production and herd fertility began to decline as a

result. Since breeding organisations have put fertility into their total index, the emphasis on improving fertility has grown. This is logical, because good fertility means high production and more profit per cow," says Mr Matthews. CRV has a lot of reliable data that's available on fertility. The heritability of fertility may be not too high, but it's still well worth selecting bulls to breed more fertile cows, as there is a lot of variation in breeding value for fertility between bulls.

The company puts all the information about calving, inseminations pregnancies together and makes a reliable breeding value for fertility for a bull. "As the focus on fertility grows while selecting bulls, a steady and improved trend has been the result. This is good news and proof that breeding can, indeed, make a contribution to better fertility."

Improved welfare

So, a high score on Better Life Health means that a bull's progeny will have a low rate of health incidents, such as mastitis, lameness, difficult calving or failure to get in calf.

Selecting on Better Life Health makes herds easier to manage. Cows mature 'healthily'; they have a higher lifetime production, fewer medical interventions and improved welfare.

The animals with top scores for Better Life Health will see figures of around +10%, which means that a bull will pass on 10% fewer health problems to its progeny.

If the bull is mated with an average cow, 5% fewer problems can be expected in his daughters, as well as an extra profit of £57 during a cow's life.

In a large herd, this extra profit quickly adds up to quite a tidy sum. |

