CONVINCING FIGURES PROVE PRACTICAL VALUE OF BETTER LIFE FIGURES

CRV’s Better Life figures are proving to be highly effective in significantly improving the technical results of herds. Irrefutable proof has been provided by analysis of 61,000 animals on almost 300 farms in the Netherlands and Belgium.

CRV introduced the Better Life figures in 2013 as practical indicators aimed at helping farmers breed efficient, easy-to-manage herds. Each CRV bull is scored for these traits. Large-scale analysis in practical situations has revealed the huge value of these figures for breeding purposes.

Higher lifetime production per cow
The effect of Better Life Efficiency is immense. For instance, for lifetime production, a rule of thumb generated by this study is that each improvement of Better Life Efficiency by 1% in the herd, results in additional lifetime production of 1,500kg.

A comparison of the 25% highest scoring animals with the 25% lowest scorers also shows:
- 13,086kg higher lifetime production (based on more than 22,000 culled animals);
- 2047kg higher milk production (305 days);
- 16% higher in herd average;
- 146kg extra fat and protein (305 days).

So higher scores for Better Life Efficiency results in huge differences that are highly relevant in practical applications. The 25% highest scoring animals for Better Life Efficiency showed a marginally longer calving interval (+15 days), which can chiefly be attributed to the much higher milk production in this group. Farmers therefore start insemination slightly later.

Better health and fertility
The clearly beneficial effects also apply to Better Life Health, in the areas of both health and fertility. The 25% highest scoring animals compared with the 25% lowest scorers showed:
- 39% lower incidence of sub-clinical mastitis (on average in first three lactations);
- 23% fewer claw disorders (on average in first three lactations);
- 55% fewer stillborn calves at their first calving;
- 57% lower incidence of ketosis (on average in first three lactations);
- 26-day shorter calving interval.

Breeding Data Plus farms
To analyse the figures, CRV used data from almost 300 farms where the performance of the cows can be linked directly to genetic predisposition based on genomic analysis. Better Life figures appear to be an extremely suitable and valuable tool that can be utilised when selecting bulls and young stock.

WHY BREED FOR POLLED COWS?

If you don’t have to dehorn your calves, it directly saves labour and veterinary costs. It also prevents that calves stay behind in growth due to a backlash after dehorning. Dehorning also gets more and more social resistance because of animal welfare. It is not unthinkable that it will lead to regulations in the future. What do you need to know when you want a polled herd? Which strategy is the best for your herd? There are different strategies that will lead to a polled herd. The infographic shows the two most used strategies. Strategy 1 assumes a homozygous polled bull (PP) and the second strategy a heterozygous polled bull (Pp).

Caudumer Lol 306 PP
SUPER STAR BOUKJE: A DIVA WITHOUT THE AIR AND GRACES
Big Boukje 192 is the first Dutch dairy cow to produce 200,000 kilos of milk. This achievement was celebrated in style by the Knoef family in Geesteren. This Cash daughter is a shining example for Jos and Ingrid and the darling of the barn. "Boukje does her own thing. At the feed barrier all the other cows show her respect, and she grazes as long as she can in the meadow," says Jos Knoef. "She is an example for all the others."

Someone was pleased to see the back of all the congratulations, TV cameras and interviews: Big Boukje 192 herself. "She was glad to get back to the herd, that's where she feels happiest," grins Jos Knoef, who a few days later is, together with wife Ingrid, still astounded by the homage paid to their Big Boukje 192. "Boukje is exemplary of her kind for us, but we never imagined so much attention would be paid to her achievement."

In the footsteps of the E3 cows who already produced more than 100,000 kilos of milk, and 23 cows with lifetime production of 10,000 kilo of fat and protein, 18-year old Boukje has pushed the boundaries of the possible again at the dairy farm in Geesteren, province of Overijssel. "Pride is not a word we would use," says Jos. "But we certainly are really happy!"

"As a heifer she just radiated a potential for longevity"

Its all in the genes

Boukje produced more than 200,000 kilos of milk, which in her case translates to almost 17,000 kilos of fat and protein. Jos is convinced that this is all attributable to her genetic make-up. "At production of 100,000 or 150,000 kilos of milk you can still say it’s all down to nutrition, care or herd management. That Boukje managed to produce 200,000 kilos of milk – that’s six full FrieslandCampina tank containers – is thanks to her outstanding genes."

With a pedigree that features in succession Cash, Labelle, F16 and Tops, according to Jos Boukje comes from a ‘dream team’ for durability. "They are all bulls who have proven to breed daughters that achieve high lifetime production." Her dam and grand-dam also set fine examples by producing 10,000 kilos of fat and protein.

Optimal vital statistics

Boukje’s productive life did not however get off to a flying start. As a heifer she calved two months prematurely and her first list noted barely 7000kg. The fate of being sold on to a fellow farmer – like her dam – loomed above her head, but Jos was charmed by her right from the start. "As a heifer she had all the right proportions, the optimal height and width, fabulous udders and very strong, dry legs," says Jos enthusiastically. "A heifer that just radiated a potential for longevity." Patience was rewarded, in the lactations that followed Boukje noted production that varied between 10,500 and 14,500 kilos of milk in 305 days. That is average daily production of 37.5 kilos of milk, with very good contents: 4.61% fat and 3.85% protein.

Youthful and easy

This meant that three days before her 10th birthday in 2007, she smashed through the 100-ton barrier. "She was still very youthful," recalls Jos and points to the large photo of Boukje in profile that hangs on the kitchen wall. "You could see then that with her conformation she could go on for years."

Two years after joining the ‘100-ton club’, as a 13-year old Boukje reached 10,000 kilos of fat and protein. Her vitality was again remarkable. "She has always been a shining example of a dairy cow for us," says Jos. "She is youthful and easy to work with. She blends into the herd, as she never has any problems."

However, Ingrid, who is responsible for milking so many litres from Boukje, says she has never really been one for petting. "Our children couldn’t just stroke her, unlike some of the other cows." Boukje had a character all of her own, and still has. "She is always in the first 20 cows to get into the meadow to graze," says Jos. "She likes to get right to the end of the meadow and returns home last of all, before quickly appearing in the milking parlour. She commands respect from the other cows."

Excellent, including conformation

After giving birth to a red-and-white heifer calf by Kian in July 2015, the durability of her conformation was rewarded with a score of 90 points in early 2016. "Her udder is still excellent above the hock," concludes Jos. "Which is staggering considering it has produced 200,000 litres of milk."

Boukje is currently still producing 25 litres of milk a day. She is not yet pregnant, but has been inseminated with semen from Big Spell. "And she will stay on our farm," says Jos looking to the future. "Even when she no longer gives any milk. But we don’t want age to become a burden to her. An amazing animal like her doesn’t deserve that."

High lifetime production: the ten success factors according to Jos Knoef

What is the secret behind so many cows with extremely high lifetime production? Jos Knoef is often asked that question. He doesn’t have a secret. "But I can list the ten points that are important on our farm." The first point on the list is: LUCK. Jos explains: "A cow has to have the luck to avoid any accidents. Boukje has been lucky in that respect. Aged nine she caught a coli infection during her heat. Thanks to inseminator Jan Schipper we quickly detected it and could treat her. Who knows what would have happened if we only discovered the infection at milking in the evening."

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**BOUW SNOWFEVER**  
*(Snowman x Goldwyn)*

Bouw Snowfever (Snowman x Goldwyn, 292 NVI) received his first daughter breeding values, which are impressive. Snowfever’s daughters have fantastic conformation (114), udder (113) and feet and legs (109). They are very efficient producers of more than 12%, with high values for kg fat and proteins (+110kg), bringing their Inet rating up to more than €336. These are both economic and great-looking cows, with high longevity (+464 days).

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**WILLEM’S HOEVE BROWNING**  
*(Snowman x Ramos)*

The daughters of Willem’s Hoeve Browning (Snowman x Ramos, 292 NVI) are very efficient (+10%) and give extremely high milk yields (+1894kg). He is a bull that is worth his weight for economics – he transmits +117kg fat and an Inet rating (Dutch production index) of as much as €361. Browning descends from the Willem’s Hoeve Ritas, a cow family with very high scores for conformation. With a marvelous total score of 114 and his fantastic udder score of 112 he does an excellent job in improving conformation in the herd. CRV expects a great demand for this top-class bull.

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**NEWHOUSE JORBEN**  
*(Vitesse x Epic)*

Newhouse Jorben (Vitesse x Epic, 357 NVI) produces cows with reserves. This InSire bull passes on an excellent condition score and high scores for udder health (109), hoof health (107), fertility (102) and also ketosis (105). Besides having a Better Life Health score of +7%, Jorben is also a great example of a bull for Better Life Efficiency (+10%). This udder specialist transmits high production, with sky-high fat and protein values (+113kg). Another bonus is the fact that Jorben is a very good bull for mating with maiden heifers.

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**DELTA DEBATER**
*(Debutant x Fidelity)*

Delta Debater (Debutant x Fidelity, 235 NVI) is a star milk producer (+1227kg milk) with milk solids of +0.08% fat and +0.06% protein. What’s more, Debater also passes on an excellent fertility rate (103) and udder health (103), and he is also a very good bull to use with maiden heifers. Debater scores +8% for Better Life Efficiency and for that reason he makes a very attractive InSire bull.

**MUNGO PP**
*(Manitoba x Pontius)*

The April index run has confirmed the high qualities of Mungo Pp. He passes +1215kg of milk to his daughters and a value for better life efficiency of +9% as well as one for better life health of +5%. Next to that he has an excellent conformation and can be easily used for heifers. One more big advantage is that he is heterozygous polled. Pay attention on his milking speed and breed wonderful cows with him that you will love. Go to www.crv4all.de where you find a film about his daughters and some more pictures.

**RUDOLF**
*(Rudolf DN x Manuel)*

Martha’s 287 Rudolf (Rudolf x Manuel, 125 NVI) makes a beautiful entrance to MRY. His daughters produce very efficient (+6%) and give a lot of milk (+575kg). Next to that his daughters combine that with a very good conformation (106) with excellent udders (105) and feet & legs (104).
Derek Haworth owns a farm in Lancashire, United Kingdom. He has a 70-cow pedigree herd, which is a mixture of Red&White Holstein and Ayrshire bloodlines, plus 40 replacements. The cows are milked by a milking robot and in summer a traditional summer grazing system is used. Robust cows with capacity for forage and good teat placement are the key to success of one Lancashire-based dairy business. Derek manages his herd with his 16-year-old son Robert and he’s also keen on the genetics side of the dairy business. What shaped his breeding policy and what are his future plans?

Derek Haworth runs his herd as a ‘typical British’ system. “In other words, I’m making as much of grazing and grassland as possible and, in this tough economic climate, I’m not sure what other way there is to try and stay viable,” he says. He began moving away from pure-bred Ayrshire in the early 1990’s and, in 2002, following the Foot-and-mouth disease crisis, a large proportion of the pedigree Ayrshire herd was sold to a breeder that had lost his herd in the cull.

He kept 33 head of young stock and bought some Black&White heifers in, because he was looking for more milk yield and a slightly bigger version of the Ayrshire cow – more body capacity rather than stature. These cattle laid the foundations of today’s herd. Later on, Derek’s interest was more in Dutch Red&White Holstein genetics, because it was all he was looking for – more milk capacity, but not extreme like the North American Holsteins, but more robust and genetics that could maximise milk from forage. Now he breeds for health, longevity and fertility and also feet&legs are very important while the cows are grazing. He plans to continue to build on the ‘power and strength’ in his herd, much of which comes from the CRV Avoncroft sires he has used during the past two decades. The younger proportion of the herd comprise a number of Topspeed Kodak and Delta Fidelity daughters and they are milking well through the robot and proving to be the kind of ‘trouble free’ cows that he likes to breed and manage. To avoid inbreeding, Derek uses CRV’s SireMatch mating program. Now he has Windstar, Fidelity and Fantasy in his AI flask and also has daughters on the ground by these sires. “And I’m already pleased with what I’ve seen. They’re great looking calves,” says Derek.

Sometimes clients of CRV are very happy with the results. Dutch farmer Eddy van Wezel promised: “When half of the cows are pregnant, I will give CRV a cake.” And this was the result! Eddy, and his wife Linda, still think about a good explanation to the question of their child: “Mom, what are that yellow things behind the cow?” :)
**ROMA MURMUR KINGPIN: STILL GOOD RESULTS IN NEW ZEALAND AND ABROAD**

We continue to hear great things in the field about this boy. As a member of the Jersey Genes team and a former Insire bull, Roma Murmur KINGPIN S3J is a popular choice for Jersey and Crossbred farmers this year for super efficiency and production. Bred by Bob and Margaret Morris in Morrinsville, New Zealand, he produces good sized, well-mannered, robust daughters with plenty of milk and low somatic cell.

![Roma Murmur Kingpin](image)

**EUROGENOMICS: CO-OPERATIVE TO MAKE TESTING BULLS OF THIRD PARTIES MORE EASY**

Seven key players have formed a co-operative with the aim to make it more easy to test bulls of third parties. The co-operative consists of 7 parties from 8 countries: CRV (The Netherlands/Flanders), Viking Genetics (Denmark, Sweden, Finland), Evolution and OrigenPlus (France), CONAFE (Spain), MCB Krasne and PFHBiPM (Poland).

Testing genomic bulls of third parties had been announced earlier, but is now operational. Data from these bulls can be displayed from the next indexrun in August. The tested bulls will have five indexes: Dutch/Flemish, French, Scandinavian, Spanish and Polish. The indexes will be published on the EuroGenomics website. The bulls are tested based on the reference population of EuroGenomics, with data from more than 33,000 Holstein bulls.

“The new legal form of EuroGenomics makes it easier to take decisions together,” says Bertil Muller, spokesman for CRV, one of the seven members of the new cooperative. For example, there are common agreements about the logistics of the genome testing of third parties’ bulls. “This group of collaborative European parties will show what the advantages are of working together in European context,” states Muller.

**GENETIC SOLUTION AGAINST FACIAL ECZEMA IN NEW ZEALAND**

Facial eczema (FE) is caused by a toxin (sporisdesim) produced by the spores of the fungus Pithomyces Chartarum growing on pastures. The fungus grows in the dead litter at the base of pastures in warm, moist conditions and, when ingested by cattle or sheep, damages the liver and bile ducts.

“For every three in 100 cows with clinical FE, it is estimated that up to 70 per cent of the herd may have subclinical symptoms. You won’t necessarily see the disease in cows with subclinical symptoms, but it will be damaging the liver and negatively impacting milk production,” CRV Ambreed’s research and development manager Phil Beatson explains. Currently the most common way to treat FE is by dosing animals with zinc, but Beatson’s concern is that zinc is a heavy metal that will be going back into the environment. CRV Ambreed has a genetic solution to increase FE tolerance in dairy cattle. Using CRV Ambreed’s current FE-tolerant sires will typically breed offspring that are 30% less reactive to an FE challenge, compared to the average bull. Research and development completed by CRV Ambreed and its research partners resulted in the ability to identify FE tolerant bulls, which were first marketed in 2014. As pioneers in this area, CRV Ambreed remains the only provider in New Zealand with a genetic solution to increase tolerance against FE.
10 DAUGHTER GROUPS AT CRV EVENT

During the coming CRV Event at the 11th of June in the IJsselhallen in Zwolle, CRV will show 10 daughter groups. These groups will show that good genetics are the most important in breeding an efficient and easy to manage herd. All the groups will be showed in the ring and during the day they are placed at the meeting place where they are divided over 5 different themes: Longevity, Health, Fertility, Efficiency and Production.

The theme ‘Longevity’ will show a demonstration of older cows that have a high lifetime production (on average 100,000 kg milk). Also the Red&White bulls Bruchter Passe (Kylian x Mr Burns) is a nice example of a bull that can be used for breeding a herd with a high longevity.

The theme ‘Health’ is represented by Delta Alonso, a Black&White bull that will get daughter breeding values in August. Based on the first promising results of his first daughters, CRV will show already a group of heifers. ‘Health’ will also represented by a Fleckvieh daughter group.

At the theme ‘Fertility’ daughters can be seen of the bull Delta Atlantic and also a group of MRIJ daughters.

The theme ‘Efficiency’ is represented by Bouw Snowfever. He inherits +12% for Better Life Efficiency and is, together with Browning the highest daughter tested Black&White bull for conformation. The Red&White bull Cherokee van de Peul will also be showed at the theme ‘Efficiency’.

The fifth theme will be ‘Production’ and will be represented by Willem’s Hoeve Browning. He gives very efficient daughters with extremely high milk yields (1894kg). A daughter group of this bull cannot be absent at the CRV Event. This also counts for Delta G-Force. G-Force stands for economy, he inherits next to much milk (+1015kg) also high components (+0.13% fat and +0.09 % protein).

The daughter groups are one of the highlights of the CRV Event ‘A herd to your heart’. Other highlights are the election for ‘the best herd of The Netherlands’ and the election for ‘Young herd manager of the year’.