CDH TEST NOW 100% RELIABLE

University of Liège identifies the mutation responsible of cholesterol deficiency (CDH) in the Apolipoprotein B (APOB) gene. The University of Liège has identified the mutation responsible for the genetic defect CDH (Cholesterol Deficit Haplotype) in the Holstein Friesian dairy population. Thanks to this discovery this genetic defect can now be eradicated with the highest accuracy. The discovery of the causative mutation means in practice that animals can now be tested whether they are carriers with a reliability of 100%. An important step in reducing the incidence of this – still recently discovered – genetic defect.

From haplotype to causative mutation

CDH is a genetic defect that causes early mortality of young calves. In the summer of 2015 the existence of CDH was made public by the German animal information center vit (IT Solutions for Animal Production), who discovered the haplotype for CDH (part of the chromosome where the responsible gene should be present). The available haplotype test which was developed in order to identify carriers of this defect has a reliability lower than 100%. With knowledge about the haplotype and a list of known carriers, the researchers of the University of Liège were able to identify the corresponding causative mutation. This research was also made possible by herd improvement organization CRV who provided the DNA samples. Having identified the mutation, the University of Liège can now test animals for CDH with – as mentioned above – a reliability of 100%, avoiding the unnecessary culling of false positive animals. This direct test will be made accessible to the market for commercial use at the Unit of Animal Genomics (University of Liège, GIGA-R). The corresponding information – including sample type and price details – can be downloaded here. The identification of the “cholesterol deficit” causative mutation shows the effectiveness of DNA technology in the identification and eradication of hereditary diseases. The co-operation with chain partners was of great help to speed up this process.

AMS INDEX FOR BULLS AVAILABLE FROM APRIL 2016

The three robot indices robot efficiency, robot interval and robot habituation are combined to one AMS-index from April 2016. GES (Genetic Evaluation Sires) has presented this during the annual GES-day in Apeldoorn, the Netherlands. Gerben de Jong, manager Animal Evaluation Unit at CRV is involved in the development of the AMS-index. He describes that it was a challenge to combine the indices in such a way milk production and udder health were not decreasing. The indices production and udder health correlate in a negative way with the characteristics robot efficiency and robot habituation of heifers. “To balance this, we have put in weighing factors,” Gerben says. “In this way the farmer knows for sure he breeds robot cows that are suitable for a milking robot but not decrease in production and udder health.” The information of these characteristics is coming from the measuring systems in the milking robots.

The characteristic ‘robot efficiency’ is based on kilograms milk per total milking time in minutes. The characteristic ‘milking interval’ is based on the time between two consecutive milkings. The characteristic ‘habituation of heifers’ is based on the equation between milking interval of successful milkings in the period just after calving and the period later on in lactation.
EASY SELECTION FOR A HEALTHY AND EFFICIENT HERD

So many different dairy farms, so many different dairy farmers. And so many different dairy farmers, so many different views of breeding.

“The practical implementation of the breeding goal differs from one farm to the next, but ultimately every farmer has the same goal: breeding a herd that produces milk as efficiently as possible with as few problems as possible,” says Joost Klein Herenbrink. At CRV he is responsible for the global portfolio of Holstein and Jersey bulls and therefore closely involved in innovations in breeding.

To support farmers more easily in their breeding goal, CRV has developed the breeding Indexes Better Life Health and Better Life Efficiency. These indexes summarise the most important traits of a bull that determine the health and efficiency of his daughters. With the Better Life indexes, CRV is the global leader when it comes to offering practical advice for breeding a sustainable herd and developing novel traits like breeding values for Ketosis and Feed Intake.

At a glance

“The Better Life indexes immediately give farmers an impression of the qualities of a bull. In this way, they can quickly and easily select bulls that suit their farm best”, Joost explains. An often-heard comment is that the health and efficiency of the herd are determined by the farmer’s management. Joost is convinced that breeding can also make an important contribution to the sustainability of dairy farming. “If cows do not have the genetic level to produce healthily and efficiently, it will be much harder for a farmer to achieve good returns on his management”, he states.

Continuing development

“CRV will continue to work on the development of the Better Life indexes”, Joost finally says. With the index run of last December, within Better Life Efficiency, the breeding value for age at 1st calving was included in the calculation. A shorter rearing period means a higher efficiency. Bulls with a favourable calving age will therefore achieve higher scores. In addition, CRV includes recent feed intake data, making the calculation of the breeding value for feed intake more accurate. Also, during the index run of April 2016, the breeding value for udder health in Better Life Health will be calculated directly from data about the prevalence of mastitis. “In this way, these breeding indexes will become a more and more complete tool for farmers to breed a sustainable herd”, says the product manager.

What is the yield?

If a bull scores +10% for Better Life Health, his daughters will have more than 5% fewer problems in their lives than daughters of a bull that scores 0 on this breeding index. In terms of money, this means higher returns of 150 Euros per animal.

A higher score for Better Life Efficiency may also be translated into better returns. The lifetime productions of daughters of a bull that scores +10% will be 1,500 l of milk higher with the same amount of feed than daughters of a bull that scores 0. In terms of money this means that returns are 450 Euros higher.

“Better Life indexes are a more and more complete tool for breeding a sustainable herd”

– Joost Klein Herenbrink,
Global Product Manager Holstein and Jersey
**FLEVO GENETICS WHATSAPP RF**

(Supersire x Super)

Flevo Genetics Whatsapp RF scores very well for efficiency (+7%) and health (+7%). Also his components are excellent (+0.24% fat and +0.04% protein). This red factor carrier has a calving ease of 114, so easy calvings and will also give daughters that can produce longer than average with a longevity of 619 days.

- **KG MILK**: 412
- **% FAT**: +0.24
- **% PROTEIN**: +0.04
- **DOODER**: 111
- **FEET & LEGS**: 107
- **LONGEVITY**: 619
- **CALVING EASE**: 114

**WHATSAPP RF**

- **NVI**: 244
- **Score**: 7
- **Score**: 7

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**PEAK AMPLIFY**

(De Su Skyline 1390 x Mogul)

After Jepsen, Judicate and Abil, Amplify is the 4th bull in our active portfolio from the Judy cow family. Amplify is an early Skyline son from a Mogul dam and Freddie Granddam. He checks all the boxes for improving your herd through efficiency. With 132 pounds combined fat and protein and a productive life of 7.3 it’s no wonder that this bull has a better life efficiency of +13%. Daughters of Amplify will be better life efficiency of +13%.

- **KG MILK**: 1,022
- **% FAT**: +0.02
- **% PROTEIN**: +0.02
- **DOODER**: 113
- **FEET & LEGS**: 106
- **LONGEVITY**: 737
- **CALVING EASE**: 106

**AMPLIFY**

- **NVI**: 238
- **Score**: 13
- **Score**: 3

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**BOUW FINDER**

(Balisto x Epic)

With Finder CRV adds another representative of our unique breeding goal, based on exclusive traits and years of experience in breeding. Bouw Finder is an InSire bull that excels on all fronts and stands at solitary height with 376 NVI. First of all Finder inherits a fantastic longevity (+945 days). In practice this means his daughters can produce at least one year and 4 months longer than average. Because Finder also inherits a lot of milk, he gives a boost to the efficiency of the herd (+9%).

- **KG MILK**: 412
- **% FAT**: +0.24
- **% PROTEIN**: +0.04
- **DOODER**: 111
- **FEET & LEGS**: 107
- **LONGEVITY**: 945
- **CALVING EASE**: 114

**FINDER**

- **NVI**: 376
- **Score**: 9
- **Score**: 9

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**ROMA MURMUR KINGPIN**

(Murmur x Manhatten)

Kingpin is the pick of the 2016 jersey graduates, and a great example of the power of cow families. As a member of the Jersey Genes team and as an InSire bull, the Jersey Kingpin has resulted in a high reliability proof backing the genomics and faith from our product development team. He is the no. 1 NZME sire in New Zealand. He combines this with positive capacity, great rump angle and tremendous udders. Add to this his low cell count, high longevity and great farmer satisfaction and you have the makings of a great sire. A quick look at his Better Life Efficiency (TL and Health) further confirm his qualities.

- **KG MILK**: 828
- **% FAT**: +0.76
- **% PROTEIN**: 3.90
- **DOODER**: 108
- **FEET & LEGS**: 102
- **LONGEVITY**: 431

**PEAK AMPLIFY**

- **NVI**: 238
- **Score**: 13
- **Score**: 3

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**ISARIO PS**

(Murmur x Manhatten)

With the Irola PS–son Isario PS, CRV is able to offer a hornless Fleckvieh sire, which is currently ranked among the 10 best bulls of this segment. Isario PS realizes enough milk and outstanding fitness trades as well as great udders. Especially the longevity, persistence and udder health and very easy births are sticking out. With Isario PS one expects medium sized animals with best musculature and excellent udder connection. Isario PS is also a natural hornless bull without Ralmesbach blood and therefore he is an enrichment for the hornless genetics. His characteristics numbers for efficiency +8% and health +4% are at a very high stage.

- **KG MILK**: 575
- **% FAT**: +0.03
- **% PROTEIN**: +0.07
- **DOODER**: 119
- **FEET & LEGS**: 106
- **LONGEVITY**: 703

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**BRUCHTER PASSE**

(Kylian x Mr Burns)

Kian son Kian delivers the new RedWhite top daughter proven bull: Bruchter Passe. Passe is from the Janna cow family, Bruchteover. The Janna family always has high protein and one of these Janna’s is on CRV Satellite farm the Barendonk from the Hermanussen family in Beers. This Passe daughter is a sister of Passe’s dam and belongs to the very best daughters of her father. The production of Delta Janna, udder and feet & legs are eye catching and these are also exactly the qualities of Passe. Udder, feet & legs and production in a very efficient way.

- **KG MILK**: 930
- **% FAT**: +0.18
- **% PROTEIN**: +0.00
- **DOODER**: 108
- **FEET & LEGS**: 117
- **LONGEVITY**: 431
- **CALVING EASE**: 106

**PASSE**

- **NVI**: 200
- **Score**: 10
- **Score**: 0

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**ROMA MURMUR KINGPIN**

- **NVI**: 304
- **Score**: 7
- **Score**: 5

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**ISARIO PS**

- **NVI**: 130
- **Score**: 7
- **Score**: 3

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**Khw Goldwyn Aiko ET (granddam off Whatsapp)**

- **238 13 3**

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**Lucky Holsteins Melanie (s. Passe)**

- **304 7 5**

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**Isario PS**

- **104 7 9**

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**Bruchter Passe**

- **200 10 0**

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**Peak Amplify**

- **376 13 9**

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**Bouw Finder**

- **376 9 9**

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**Flevo Genetics Whatsapp RF**

- **244 7 7**

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**Kingpin**

- **304 7 5**

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**Bouw Finder**

- **376 13 9**

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**Roma Murmur Kingpin**

- **130 7 3**
OVALERT AS A TOTAL SOLUTION IN BRAZIL

CRV Ovalert brings much more than just a fertility solution and a management tool to Brazil! The Ovalert concept is positioned as an integrated solution for which many Brazilian farmers are very satisfied. They have got useful tools to use in their herd management.

THEME MEETINGS IN DENMARK

In January 2016 two meetings were organized for Danish dairy farmers. On the 12th of January about 30 farmers were present in Simested and on the 13th of January about 60 farmers were at the meeting in Hovxborg. The main topic of the meetings was: "how to improve the lifetime production of your herd?" For these meetings Dutch farmer Joop Knoef was invited to talk about his farm management. On the moment he has 62 cows who produced more than 100,000kg of milk whereof 23 cows have produced more than 10,000 kg of fat and protein. He explained the farmers his experiences and his secrets behind the cow's performances.

Also Joost Klein-Herenbrink was present at the meetings. He is Global product manager Holstein at CRV and he told the dairy farmers which tools CRV offers to increase the lifetime production. Joost focused on CRV’s breeding program, genomic selection and the breeding indicators Better Life Health and Better Life Efficiency. The present dairy farmers were very satisfied about the meetings and have got useful tools to use in their herd management.

LEENTJE 510 PRODUCED MORE THAN 100.000KG

This Red&White cow from the family Sint (Markelo – NL), with a little bit of MRy, is a real muscleman. Leentje 510, a daughter of Stadel x Red Mitchell is born in 2000 and participated 2 times in the Dutch biannual NRM show. She already produced more than 100,000kg of milk and ended in the top 100,000kg category at the third place during the NRM. She also ended a few times at the first place at the breeding day in Amst Daelen. On the moment she has 90 points for conformation and already produced more than 10,000kg of fat and protein.

OVALERT AS A TOTAL SOLUTION IN BRAZIL

CRV Ovalert brings much more than just a fertility solution and a management tool to Brazil! The Ovalert concept is positioned as an integrated solution for which many Brazilian farmers are very satisfied. They have got useful tools to use in their herd management.

BIG BOUKJE 192: 18 YEARS OLD AND 90 POINTS

Cash daughter Big Boukje 192 from family Knoef has got 90 points for frame, 92 points for dairy strength, 91 points for udder and 87 points for feet & legs. This resulted in a total score of 90 points.

When Big Boukje 192 was a heifer she was classified with 83 points. Last year she had a total score of 89 points. The cow has a national reputation by her production record for both kg milk and kg fat and protein. A Fatline production of 200,000 kg milk is in view and she already produced a record amount of 16,750 kg fat and protein.

In September 2015 Veeteelt made a movie of Big Boukje 192. Watch it here.

VALUE FROM CRV’S US HOLSTEIN PROGRAM

CRV’s one-of-a-kind US Holstein breeding program makes the sire portfolio of CRV internationally very competitive and lays a strong basis for genetic herd management. Sires from this program not only have a high Total Performance Index (TPI) but also combine this with high values for the CRV exclusive Better Life Breeding figures for health and efficiency. This combination is unique in the world.

The US Holstein breeding program has been expanded by working with Alta Genetics, resulting in larger volumes and better quality genetics. Farmers can count on an even stronger, more varied portfolio of top quality bulls on a gTPI basis. Every year, CRV selects 18 bulls which are offered as InSire top sires. The selection of these bulls is done thoroughly by not only genomically testing them for TPI but also for NVI. US CRV bulls thus boost efficient and easy herd management.

PASSE SHOWS EXCELLENT DAUGHTER GROUP AT HHH-SHOW

Bruchter Passe (Kylian x Mr Burns) showed an excellent daughter group during the HHH-show at 12 December 2015. The HHH-show took place in the IJsselhallen in Zwolle, the Netherlands. The daughters of Passe showed good feet & legs and good udders. The cows were well developed with enough width and a good condition. Cows that fit very well in an efficient and easy to manage herd.

Want to see more of Passe? View the photos of the show or check Youtube.
Are you searching for a bull that gives you efficient and trouble free cows?

WE FOUND HIM: BOUW FINDER!

If you’re raising an easy to manage and profitable herd, whatever its size, CRV can help. With Better Life Efficiency and Better Life Health you can source and identify the best bulls for a healthier and more efficient herd.

With Finder CRV adds another fine example of our unique breeding goal, based on exclusive traits and years of experience in breeding. We stand for cows that provide higher yields without increased feeding, cows that also live longer and enjoy healthier lives. If you’d like to know more about developing a herd that performs better, please visit our website.

NVI     376
RZG     165
NTM     45
ISU     208