



ANIMAL GENETICS – A Tool to improve Health & Welfare and Sustainability

Strasbourg, December 18th, 2025
Sustainable Livestock intergroup's meeting

Dr. Saskia Meier

saskia.meier@synetics.world



SYNETICS eG
Osterkrug 20
27283 Verden
Germany

www.synetics.world



SYNETICS eG was built on the trust of 35,000 French and German farmers



SYNETICS

PURPOSE

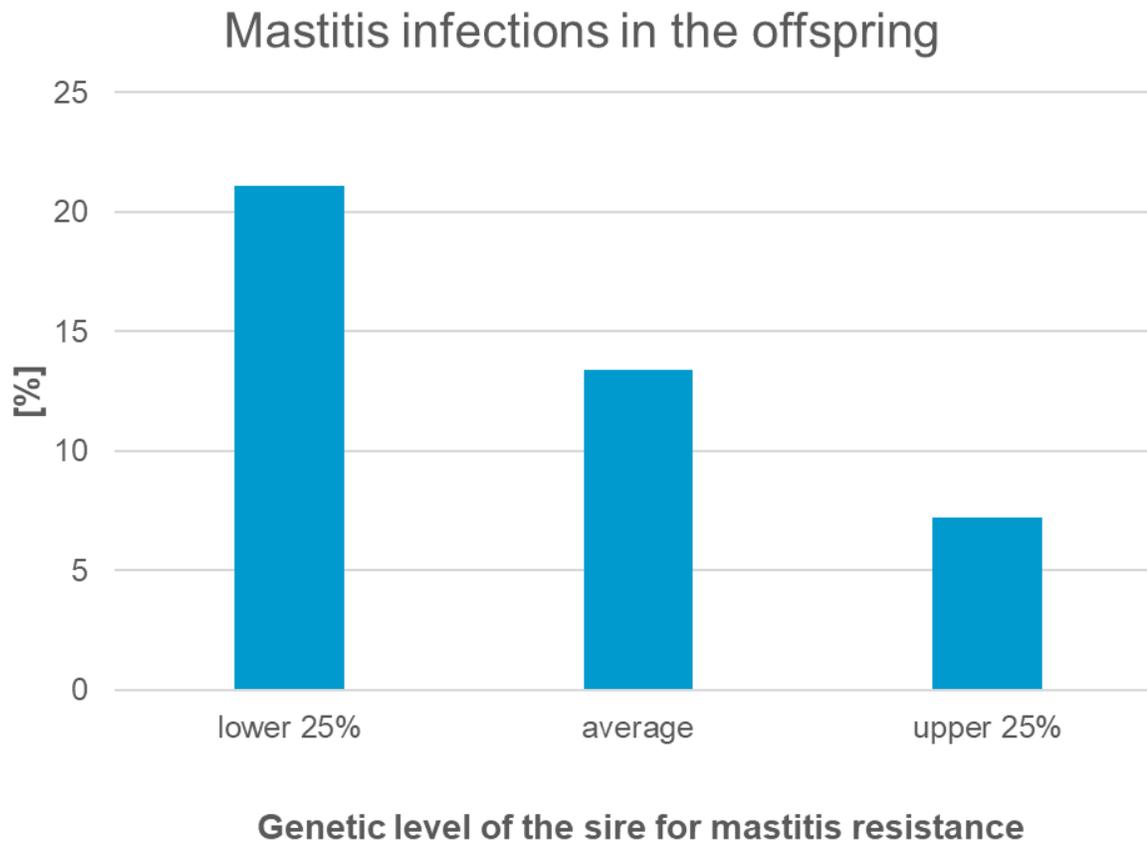
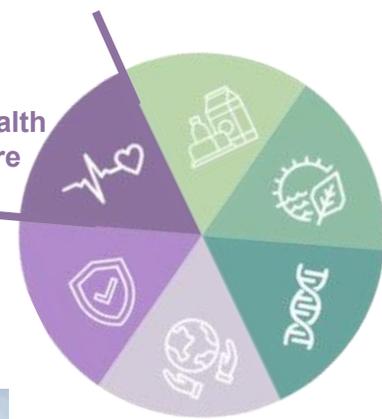
**A HEALTHY COW IS
ALWAYS BETTER**
Improve Animal Health,
reduce Antibiotics' use



Animal breeding as part of the solution

A healthy cow is always better

Improved animal health and welfare



<https://richtigzuechten.de/allgemein/rzgesund.html>

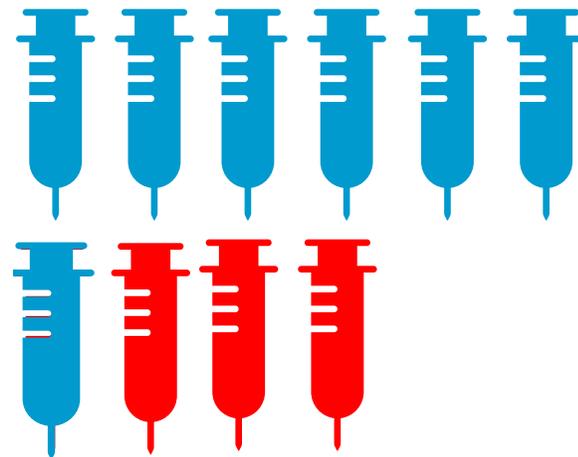
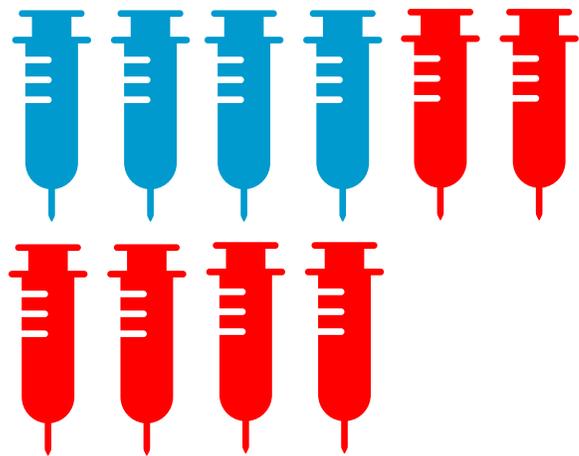
Udder infections are the most prevalent disease in dairy cows.

We can breed for disease resistance

Decrease on mastitis treatments
between 2008 and 2018



% of treatments per 100 cows



- ✓ Less antimicrobials use: 4,270 kg
- ✓ Less discarded milk: 17.2 mill. kg
- ✓ Less permanent milk loss: 54.9 mill. kg

We can breed for disease resistance



- Lameness is one of the **most frequent** culling reasons of dairy cows
- By selecting for fewer claw infections, we can improve animal health and **prevent early culling**

A woman and a man are walking down a long, clean concrete aisle in a modern dairy barn. On the left, a row of black and white cows is visible, some with yellow ear tags. The barn has large windows on the right side, and the background shows a lush green landscape with mountains under a clear sky. The overall atmosphere is bright and professional.

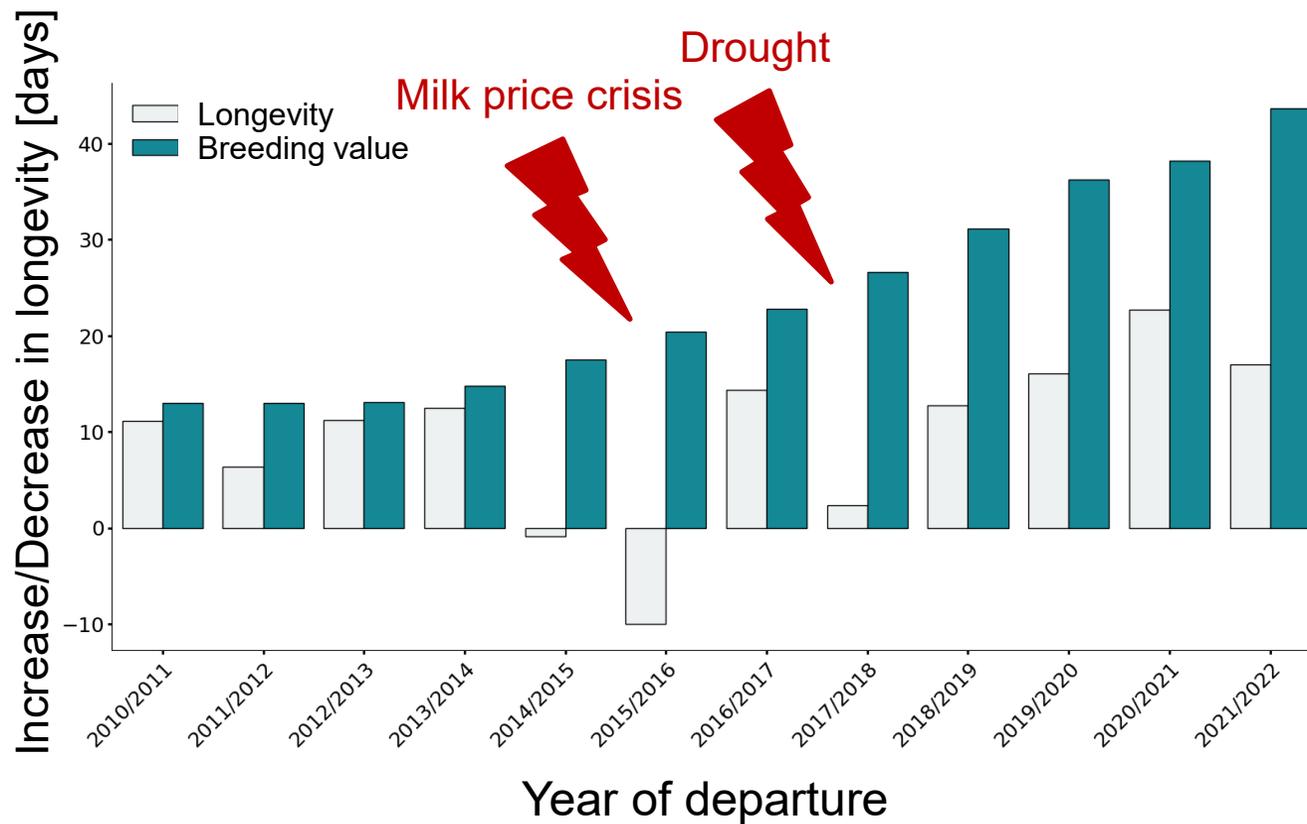
Increase **LONGEVITY**

LONGEVITY – A MULTIFACTORIAL TRAIT

Increasing longevity is dependent from external effects, political framework, farm management, replacement strategy, insemination management, farm size, region

Increase longevity – only with genetics?

Phenotypic longevity is strongly multi factorial



Maintain DIVERSITY



Keep genetic
diversity

Avoid Inbreeding

Due to high quality ancestor
data and advise based on
individual mating

Rear the right animals

Purebred female calves for milk –
crossbreds for fattening



- Farmers decide **which animals to keep** on the farm and mate them
- Farmers select the right product to determine the **future genetics** and even the **sex of the offspring**
- This ensures **sustainability** and **progress** in each generation



Crossbred calves realize higher feed conversion and are more sustainable for fattening compared to purebred dairy calves.



European

FARMERS

**OUR FARMERS ARE MANAGING
DIFFERENT FARMING
CONDITIONS AND CHALLENGES**

The future of cattle breeding in Europe?

Optimized replacement planning

Strategic use of resources

Strategic breeding goal of the herd, number of replacement heifers needed defined

Selection intensity

Knowledge of genetic level of females and selection decisions

Sustainability

Mating bottom line with Beef breeds (Beef on Dairy)

Productivity

Mating with purebred dairy breeds for the highest genetic females (heifers) / sexed semen

The Perfect Fit

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