## **HOLSTEIN / RED HOLSTEIN PROOF EXPLANATION**

April 2024

# New Holstein Hoof Health - ISU

### Importance of Hoof health: the 2<sup>nd</sup> pathology in herds

Hoof lesions have severe impacts on cows such as lameness:

- Less locomotion ability, decrease of feed intake and production.
- Loss of body condition, overall health and reproductive abilities.
- Health treatments: impact on organization, time, costs, antibiotics use.

Moreover, some infectious hoof lesions such as Dermatitis do not have efficient treatment to protect the herd, remaining most of the time in the ground.

#### Hoof Health have a heavy impact of 6000€ per 100 lactating cows.

#### How to Genetically Select for Hoof health?

In 2017, SYNETICS elaborated a private Hoof health index through the innovating R&D program Génosanté, joining Industry, Research, Genetic Selection and Advising organizations.

After setting-up a reference population of genotypes and standardized phenotypes, Genosanté was able to deliver the 1<sup>st</sup> hoof health traits for infectious hoof lesions and mechanical hoof lesions?

#### What is the New Hoof health National index STPI, SLI and SLM ?

In 2024, hoof health becomes an Official French proof, strengthened by the Single Step evaluation method deployed in 2023. As benefit, breeding values are more differentiated and provide more genetic progress.

#### In Holstein, Hoof health index is expressed as:

STPI: Global Hoof Health 60% SLI **SLM** (infectious lesions) 40% SLI 40% SLM 60% (mechanical lesions)

SLI = 60% DER + 30% LM + 10% ERDER = Dermatitis - LM = Interdigital Hyperplasia - ER = Hell horn erosion **SLM** = 40% OLB + 40% US + 10% BLC + 10% BLD OLB = White line separation – US = Sole hemorrhage – BLC/BLD = Sole Hemorrhage localized/spreaded

## Hoof Health integrated in ISU 2024

As an important economical trait, Hoof health have been integrated is the new ISU 2024 formula with a significant weight of 6%.









