#2 GESTATION LENGTH (GL)

**JOUVENCE, CALVED 4 DAYS IN ADVANCE!**

**A TOOL TO IMPROVE YOUR CALVING-CALVING INTERVAL**

- + production
- - unproductive days
- + reproduction control, ideal for grouped calvings
- + comfort
- From 800 to 1500€ stake for 100 cows

**WE GIVE YOU TOOLS TO MOVE FORWARD RIGHT NOW:**

- Our bulls are evaluated with GL proof
- Your females are evaluated by the EVOLUTION genotyping

**PRODUCT SHEET:** UNDERSTAND AND USE THIS INNOVATION IN YOUR HERD
**ISSUES OF GESTATION LENGTH IN HERDS**

The gestation length plays a role in the productive life of dairy cows on 3 aspects:

- The productive days rate: a dry cow consumes 1.3€ per day and 1 housing place.
- Reproduction with calving-calving interval: 1 additional day of CCI (calving-calving interval) costs 2€/dairy cow/day.
- Calving control and comfort: a difficult calving costs 300€.

**A strategic challenge for seasonal systems**

The impact of gestation length is particularly pronounced in seasoned calving systems. Indeed, non-pregnant cows for the targeted period are delayed or culled. It’s between 10 and 15% of incurred culling.

**WHAT IS THE GESTATION LENGTH PROOF?**

This proof is calculated by EVOLUTION’s Research & Development team, following the G-BLUP international indexing methodology, from 476,369 genotyped individuals (401,685 Holstein et 74,684 Normande) of which 347,091 with direct performances.

Heritability is 0.32, equivalent to production, which means that the calves gestation length is explained 1/3 by genetic and 2/3 by environment.

Genetic variability is -10 to +10 days relative to the average of each breed, with a standard deviation of +/- 2.5days.

The proof gestation created by EVOLUTION is expressed in standard-deviation to the breed average

- A bull with a GL proof at -8 days will see her calves born on average 4 days earlier
- A female with a GL proof at + 6 days will see her offspring born 3 days later
- A calf born from a dam with a proof of -8 and a sire with -6 will born 7 days earlier

### Example: Holstein

- **Proof NOUXOR -7D**: 274 days
- **Proof Average calve GL 0**: 278 days
- **Proof JETSET +4D**: 280 days

Mean gestation length of calves (dam + sire)/2

### Example: Normande

- **Proof MANCHESTER -5D**: 279 days
- **Proof Average calve GL 0**: 283 days
- **Proof JUDOCE +4J**: 286 days

Mean gestation length of calves (dam + sire)/2

**WHICH BENEFITS FOR THE BREEDERS? FROM 800 TO 1500€ / 100 DAIRY COWS / YEAR**

Using short gestation length bulls, in average -4 days, on a 100 dairy cows herd could improve by 2 days its gestation length for 4 benefits:

1- Economy in feed costs of 2.6€/dairy cow ie 260€/year
2- 2 days improvement in the calving-calving interval for 2€/dairy cow ie 400€/year
3- In a strict grouped calvings system, 2 cows not culled and 2 less heifers to raise represent 2 x 300€ less additional cost ie 600€/year or 6€/dairy cow/year
4- Calving better controlled during the birth period and better calving ease, facilitating daily work with time savings

*Bibliographical references: Dechow T, Hoards Dairymen, Oct 2017*