ScorWelCow project: towards recording of animal welfare

J. Leblois[1*], N. Gengler[2], F. Lepot[1], X. Massart[1], C. Bertozzi[1]

[1] ELEVEO by awé groupe, Innovation & communication department, R&D unit, Ciney, Belgium
[2] Gembloux Agro-Bio Tech, University of Liège, Animal Science Unit, Numerical Genetics, Genomics and Modelling, Gembloux, Belgium
* jleblois@awenet.be

Avec le soutien de la Wallonie

| Background

- Animal welfare gains more and more interest for consumers, authorities and farmers
- Defined by FAWC as complying with 5 freedoms (FAWC, 2009*)
- Objective methods for farm animal welfare assessment are scarce
- European reference = Welfare Quality® protocol but time and resources-consuming
- Providing farmers an easy, fast and cheap tool to assess the welfare of their animals at an individual level is desirable.

| Objectives of the project

- The objective of the project is to produce an individual welfare score for dairy cows, using existing data
- This welfare score could be used as a management tool for the farmer, to point out problems related to the barn or to the animal itself (non-resilient animals)
- A welfare score at the individual level could be very useful for genetic selection, and the use of this score in the calculation of the breeding value is considered.

| Methods

Welfare Quality® Science and society improving animal welfare

Selected farms (18):
- Participation in milk recording
- Equipped with monitoring systems

Individual data

- Body condition scoring
- Avoidance distance
- Cleanliness
- Lameness
- Lesions, hairless patches, swellings
- Clinical signs

Production of gold standard

- Delphi survey with experts

Correlations with existing indicators

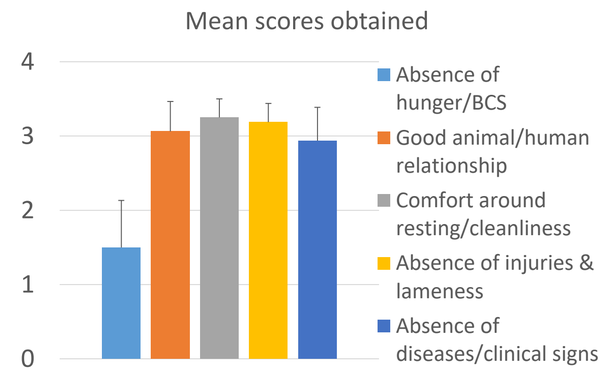
- Milk composition and MIR predictions: Fat, protein, acetone, citrate, fatty acids, lactoferrin, blood BHB and NEFAs
- Future MIR predictions: Stress and disease-related molecules
- Diseases and treatments recording
- Monitoring systems: Activity, rumination time

Production of **individual welfare score** based on existing indicators

- Management tool
- Use in breeding values

| First results

- Calculation of scores with the WQ® protocol
- Most cows present injuries and lameness, with a poor relationship with humans; they are fed correctly
- 1= excellent, 4= unacceptable.



| Conclusion

So far, the farm visits (maximum +4 days after milk record) have been carried out and the Delphi survey is in writing phase. The purpose of the project is to end up with a easy management tool for farmers that could in addition be used in the calculation of the breeding values.

*FAWC, 2009. Farm Animal Welfare in Great Britain: Past, Present and Future