Welfare assessment on farm: what’s new?

Monica Battini1, Elisabetta Canali1, Michela Minero1, Silvana Mattiello1, Sara Barbieri1, Valentina Ferrante1, Inma Estevez2, Cathy Dwyer3, Roberto Ruiz2, Ina Beltran de Heredia2, Emanuela Dalla Costa1, Francesca Dai1 & Adroaldo Zanella4

1 Animal welfare, Applied ethology and Sustainable production Lab, Department of Veterinary Medicine, University of Milan, Milan, Italy
E-mail: monica.battini@unimi.it; elisabetta.canali@unimi.it; michela.minero@unimi.it; silvana.mattiello@unimi.it; sara.barbieri@unimi.it; valentina.ferrante@unimi.it; emanuela.dallacosta@unimi.it. francesca.dai@unimi.it

2 Neiker-Tecnalia, Arkaute Agrifood Campus, Animal Production, Vitoria-Gasteiz, Spain
E-mail: iestevez@neiker.eus, rruiz@neiker.eus, ibeltran@neiker.eus

3 SRUC, Scotland’s Rural College, Edinburgh, United Kingdom
E-mail: cathy.dwyer@sruc.ac.uk

4 Department of Preventive Veterinary Medicine and Animal Health School of Veterinary Medicine and Animal Science, University of São Paulo
E-mail: Pirassununga, Brasil.adroaldo.zanella@usp.br

The Animal Welfare Indicators (AWIN) project promoted the development of protocols centred on animal-based indicators to assess welfare in goats, sheep, donkeys, horses and turkeys. An important feature of the project was the adoption of a simple and practical approach to the dissemination of scientific results to general public and stakeholders such as veterinarians and farmers. Six applications were developed for Android devices and made freely downloadable from Google Play Store.

Four apps, based on AWIN welfare assessment protocols, allow and simplify data collection on farm:

– AWINGoat for dairy goats in intensive farms,
– AWINSheep for adult female sheep in milk and/or meat production systems,
– AWINHorse for adult horses stabled in single boxes,
– I-WatchTurkey for intensive growing turkeys.

These apps provide the user with immediate and clear outcomes of the welfare status of the assessed animals and allow comparison with similar farms across Europe. Two additional apps were developed to address other important specific welfare issues: the HGS app was designed to teach users to recognise, assess and manage painful conditions in horses using facial expressions; WelGoat was developed to assess lameness and claw overgrowth in dairy goats. All the apps received a lot of attention (from a minimum of 100 downloads for WelGoat to a maximum of 5,000 for HGS) and they were downloaded both in European and non-European countries. Although the metrics of download and the ratings from the users are good, some improvements could be made. For example, in order to increase the visibility of the apps and to include them as an everyday practice for veterinarians and farmers, the apps should be also developed for iOS devices and translated to other languages.

Keywords: App – AWIN protocol – pain – smartphone – welfare assessment.