Assessment of animal welfare in agricultural settings: welfare criteria and indicators developed in Welfare Quality®

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It is now widely acknowledged that animal welfare is very complex: it can be affected by many factors and it embraces many components such as physical and mental health. Welfare assessment protocols allowing the assessment of all these components are necessary to describe precisely the different risks for welfare in farm animals.

Two main European projects aimed at developing welfare assessment protocols for farm species. (i.e. first Welfare Quality®, then AWIN®). The assessment systems proposed stemmed from the Five Freedoms concept that was extended .

The Welfare Quality® project (2004-2009) focused on cattle, pig and poultry. It drawn together the views of consumers, industry, farmers, legislators and scientists to establish twelve clear criteria, covering all aspects of welfare, and to propose measures to assess how well farms meet these criteria. Then criteria were grouped into four principles which are essential to safeguard and improve farm animal welfare: good housing, good feeding, good health and appropriate behaviour.

The AWIN® project (2010-2015) was built on the same 4 principles-12 criteria. It developed welfare measures for sheep, goats, horses, donkeys, and turkeys.

Both assessment systems emphasise the animal's point of view by placing emphasis on measures taken on animals (e.g. body condition, injuries, fear) in its assessment of the degree of fulfilment of the 12 welfare criteria. By doing so, the assessment is rather independent of the rearing systems. Nevertheless, when no animal based measure is available to check a criterion, relevant resource-based (e.g. space allowance, temperature) and management based (e.g. procedure for dehorning) measures are included.

Collectively, these measures will help to reliably assess the animals' welfare status, to identify causes of poor welfare and to formulate advice for farmers on possible improvements. The Welfare Quality® and AWIN ® projects will be briefly presented: the welfare criteria will be discussed, the process of selection of appropriate measures will be explained and examples of welfare measures will be presented. Then, several examples of field studies using Welfare Quality® or AWIN® assessment protocols will be provided. Their benefits for epidemiological surveys on animal welfare across Europe will be emphasized. Finally, we will discuss practical issues on the use of these welfare assessment systems by vet practitioners or by the food industry.