



Welfare of farm animal

Definition and evaluation

Modern animal husbandry technologies create completely different environmental conditions than what are in the wild or in the traditional farms.

At the same time with the intensification of livestock breeding through the use of high concentrations of animals and the industrialisation of breeding, efforts to maintain the so-called **"animal welfare" began to be actively promoted in the 1960s:**

Every human-reared animal is housed, fed and cared for (with regard to species, biological characteristics and degree of adaptation) in a manner appropriate to its needs in accordance to physiological and ecological knowledge and experience. The freedom of movement inherent in the animal according to its species shall not be restricted in such a way as to cause suffering or injury to the animal.

On the intensive farming often inappropriate housing solutions are used, living space is restricted. We are saying that the welfare of the animals is bad. Although feed barriers are offered as a suitable solution for housing dairy cows, we see that animals cannot stretch out comfortably and prefer to lie across.

There must be comfort even during feeding. Each animal must have comfortable access to the trough to avoid restricting weaker or inferior (submissive) animals.

Animals do not have the opportunity to express their natural behaviour, so on the contrary, often we see **abnormal behaviour**.



hypersalivation, chewing and licking of cage barriers in
SOWS

The origin of the word „welfare“

Velferth – old Norwegian word derived from the word „good“ (val) and „way“ (fara), similar word is used today in German = **wohlfahrt**, in English – **farewell**

in romanic languages – the term is based on „**beeing good**“ – in Spanish– **bienestar**

in French– **bien-être**

in Portuguese– **bemestar**

in the USA – **well beeing**

In the USA, the word is used with a similar meaning in the context of people.

Study this topic!

Ruth Harrison – „**Animal Machines**“ (1964) – English activist, opening the way for discussion.

The Brambell Commission was set up (1965) inspected the welfare of farm animals suggested that animals should at least have the freedom to "stand up, lie down, turn around, clean their bodies and stretch their limbs" = 5 freedoms

1993 – Farm Animal Welfare Council (FAWC) – set the provisions of the 5 freedoms and defined the ideal state of animal welfare

Comparison of the welfare of laying hens in battery cages and free-range using the five freedoms concept

	Battery cages	outdoor enclosure
hunger and thirst	satisfied	satisfied
comfort: - thermal - physical	good bad	variable usually good
health: - diseases - pain	rare feet and legs	parasites (?) injury
behaviour	very limited	cannibalism(?)
fear and stress	frustration	agoraphobia

- **Study these issues!**

Importance of the five freedoms

Welfare definitions and their development

Welfare is the science relating to biological disciplines

**Popular scientists in the field of welfare:
prof. Broom, prof. Webster, Marian Dawkins,
Fres Toates, prof. Fraser...**

European Agreement on the protection of animals kept for farming purposes (1976) – Europe Council. The Czech Republic acceded to this agreement in **1998**.

Welfare is the most accurate way of expressing an animal's quality of life. This is expressed in the EU **Animal Welfare Strategy 2011-2015** - the aim was to ensure that all animals in Europe have a life worth living

Welfare assessment

- A large number of methods have been developed in the past to assess the welfare of livestock. Some are based on the assessment and compliance with **minimum standards** regulated by legislation, where limits are set for each species of livestock. Another type is **index-based approaches**, the main principle of which is to evaluate the multifactorial nature of welfare. These index concepts result in a final welfare score for the assessed livestock farm, which determines whether the assessed farm is excellent or unsatisfactory in this area.
- **Part of these concepts are used to compare farms with similar animal husbandry technologies.**

Welfare assessment methods

- ▶ use of the „5 freedoms“,
- ▶ methods based on assessment and compliance with minimum standards regulated by legislation,
- ▶ index concepts.

Indicators for assessing animal welfare

1) Indicators at herd (stable) level - based on environmental factors

In the 1980s, methods for assessing animal welfare at the herd level were developed in Europe. These methods were developed for sometimes substantially different objectives and relied on a wide range of animal welfare indicators. Environmental factors, which described features of the environment in which animals were kept such as length of boxes, feeding and watering facilities, space requirements, litter quality and access to grazing. Assessments against these factors were easy to record, could be repeated without difficulty and the data recorded was often central to solving animal welfare problems.



resting boxes - uncomfortable mattresses causing bedsores in the animals

2) indicators at individual animal level – based on measuring animal responses to specific environment - animal behaviour, health and physiological parameters

Examples of these parameters were **stress hormone levels, aggression, fear, abnormal behaviour, signs of acute disease and mortality.**

These parameters had the advantage of recording the specific welfare status of **individual animals**. On the other hand, these parameters were difficult to obtain and often the results of the measurements were difficult to interpret.



affected health status

Reasons why stall evaluation is unsatisfactory:

- It always depends fundamentally on the breeding responsibility, knowledge and skills of the farmer - a significant role is played by the farmer's attitude and attitude towards the animals (stockmanship).
- Different farming systems can guarantee the same level of welfare, but in each of them different key aspects are important, which the farmer must get into his blood in order for the system to reach its potential in terms of both performance and welfare. For example, **free-range housing systems** can simplify the work on the farm, as the animals will come for many of their own needs, but on the other hand they require more attention from the farmer to the social relationships in groups of animals.

In welfare, it is **always about animals**, then the quality of their lives should be determined directly according to their actual condition, and technical regulations should play a rather secondary, auxiliary role.

European and our welfare legislation is still **based on stall measurements**, i.e. it prescribes what animals should be provided with.

Why? Study!

The welfare level can be also measured according:

- 1) Welfare evaluation by animal production
- 2) Veterinary issues
- 3) Physiological approach
- 4) Evaluation in terms of animal behaviour

A practical view on welfare assessment

Parameters of the external environment (features of the environment and management)

- Length of the box,
- space,
- the quality of the lying space,
- access to grazing,
- cage size,
- number of feeding places and watering facilities,
- temperature requirements...

Parameters based on animal responses to the environment - husbandry, health, physiology

- Health (diseases, injuries, mortality),
- physical condition/appearance (cleanliness, lesions on skin),
- behaviour of the animal when exposed to stimuli (ease of movement, signs of pain or fear)...

These parameters, focused **on the external environment**, are convenient to record and form a good basis for problem solving. The disadvantage is that it does not really assess welfare, does not take into account the level of care, the influence of the breeder, does not pay attention to details.

Animal-based parameters advantage - direct measurement of welfare, flexible in terms of housing type and management. Disadvantage - can indicate a problem but not the source, results are difficult to interpret, demands to record large numbers of sources.