

Animal welfare concerning farming of pigs

WELFARE ASSESSMENT PROTOCOL ON FARM

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Integration of animal welfare in the food quality chain:

from public concerns to improved welfare and transparent quality



ANIMAL WELFARE PRINCIPLES

- 
- GOOD FEEDING
 - GOOD HOUSING
 - GOOD HEALTH
 - APPROPRIATE BEHAVIOUR

4 PRINCIPLES (12 CRITERIA)

Principles	Criteria
Good feeding	Absence of prolonged hunger
	Absence of prolonged thirst
Good housing	Comfort around resting
	Thermal comfort
	Ease of movement
Good health	Absence of injuries
	Absence of disease
	Absence of pain induced by management procedures
Appropriate behaviour	Expression of social behaviour
	Expression of other behaviours
	Good human-animal relationship
	Positive emotional state



1. Sows and piglets



2. Growing pigs



1. Absence of prolonged hunger

Body condition
Food provision
Age of weaning



2. Absence of prolonged thirst

Water supply

GOOD HOUSING



3. Comfort around resting

Manure on the body

Bursitis and shoulder sores



4. Thermal comfort

Panting

Huddling

Shivering



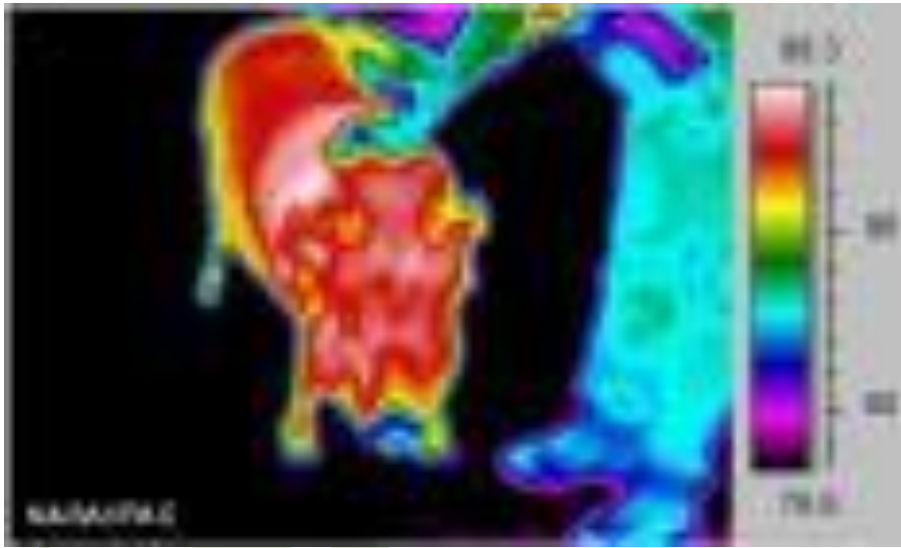
5. Ease of movement

Space allowance

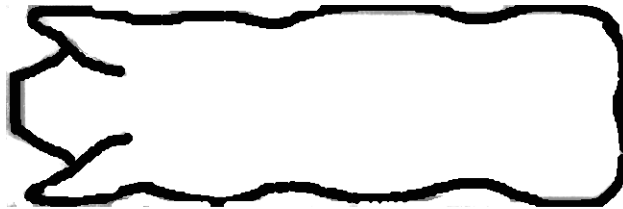
Farrowing crates

Slipping and falling

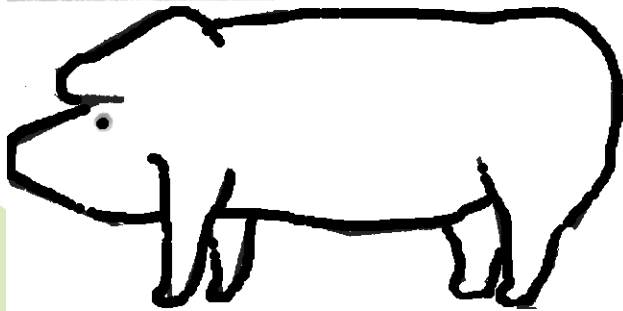
Temperature



Needs of space



0.4 m²



1.0 m²

Volume/surface



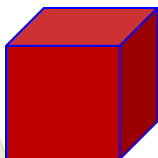
Surface

Temperature losses



Volume

Temperature gains



2 m per side

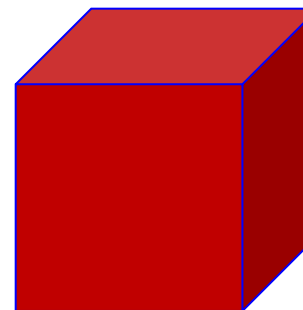
Surface = $(a \times a) \times 6$

Volume = $a \times a \times a$

Surface = $(2 \times 2) \times 6 = 24 \text{ m}^2$

Volume = $2 \times 2 \times 2 = 8 \text{ m}^3$

Surface/volume = 3



4 m per side

Surface = $(4 \times 4) \times 6 = 96 \text{ m}^2$

Volume = $4 \times 4 \times 4 = 64 \text{ m}^3$

Surface/volume = 1.5

6. Absence of injuries

Wounds on the body
Vulva lesions
Lameness

0

1

2





7. Absence of disease

Mortality

Coughing, sneezing, pumping

Rectal prolapse, scouring, constipation

Metritis, mastitis, uterine prolapse

Skin condition, local infections

Neurological disorders, splay leg

8. Absence of pain induced by management procedures

Nose ringing, tail docking, castration, teeth clipping



9. Expression of social behaviour

Social behaviour



10. Expression of other behaviours

Exploratory behaviour
Stereotypies



11. Good human-animal relationship

Fear to humans

In group

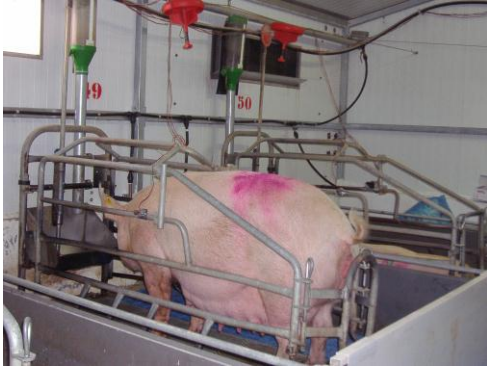


In stalls



12. Positive emotional state

QBA



1. Sows and piglets



2. Growing pigs



1. Absence of prolonged hunger



Body condition
Food provision



2. Absence of prolonged thirst

Water supply





3. Comfort around resting

Manure on the body
Bursitis



4. Thermal comfort

Panting
Huddling
Shivering



GOOD HOUSING

5. Ease of movement

Space allowance



Weight (Kg.)

m² per animal

Until 10

0.22 (0.15)

10 - 20

0.35 (0.20)

20 - 30

0.46 (0.30)

30 - 50

0.65 (0.40)

50 - 85

0.92 (0.55)

85 - 110

1.10 (0.65)

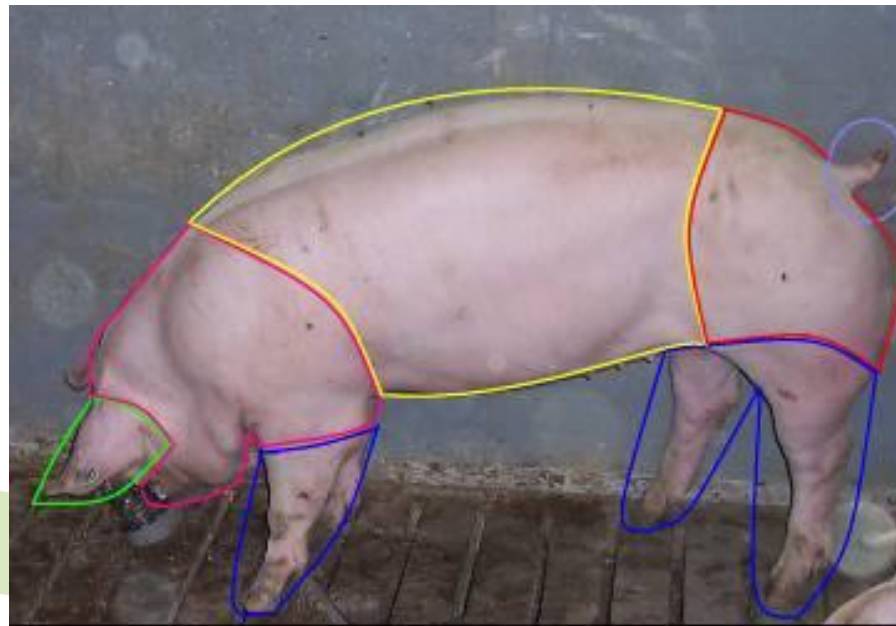
↑ ↑
25°C UE law

6. Absence of injuries

Wounds on body

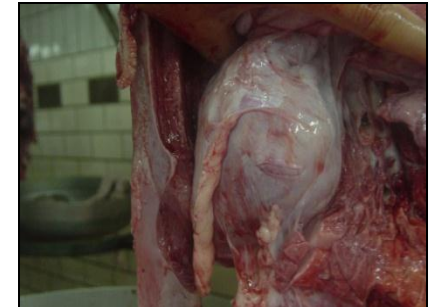
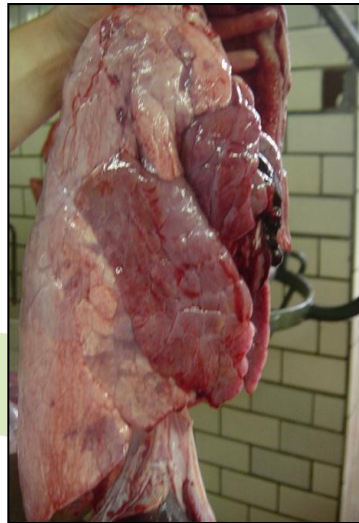
Tail biting

Lameness



7. Absence of disease

Mortality, coughing, sneezing, pumping, twisted snouts, rectal prolapse, scouring skin condition, ruptures and hernias pneumonia, pleurisy, pericarditis, white spots on the liver



9. Expression of social behaviour

Positive



Negative



10. Expression of other behaviours

Exploratory behaviour

1. ACTIVE
2. RELAXED
3. FEARFUL
4. AGITATED
5. CALM
6. CONTENT
7. TENSE
8. ENJOYING
9. FRUSTRATED
10. SOCIABLE
11. BORED
12. PLAYFUL
13. POSITIVELY OCCUPIED
14. LISTLESS
15. LIVELY
16. INDIFERENT
17. IRRITABLE
18. AIMLESS
- ★ 19. HAPPY
20. DISTRESSED

11. Good human-animal relationship

Panic to human presence



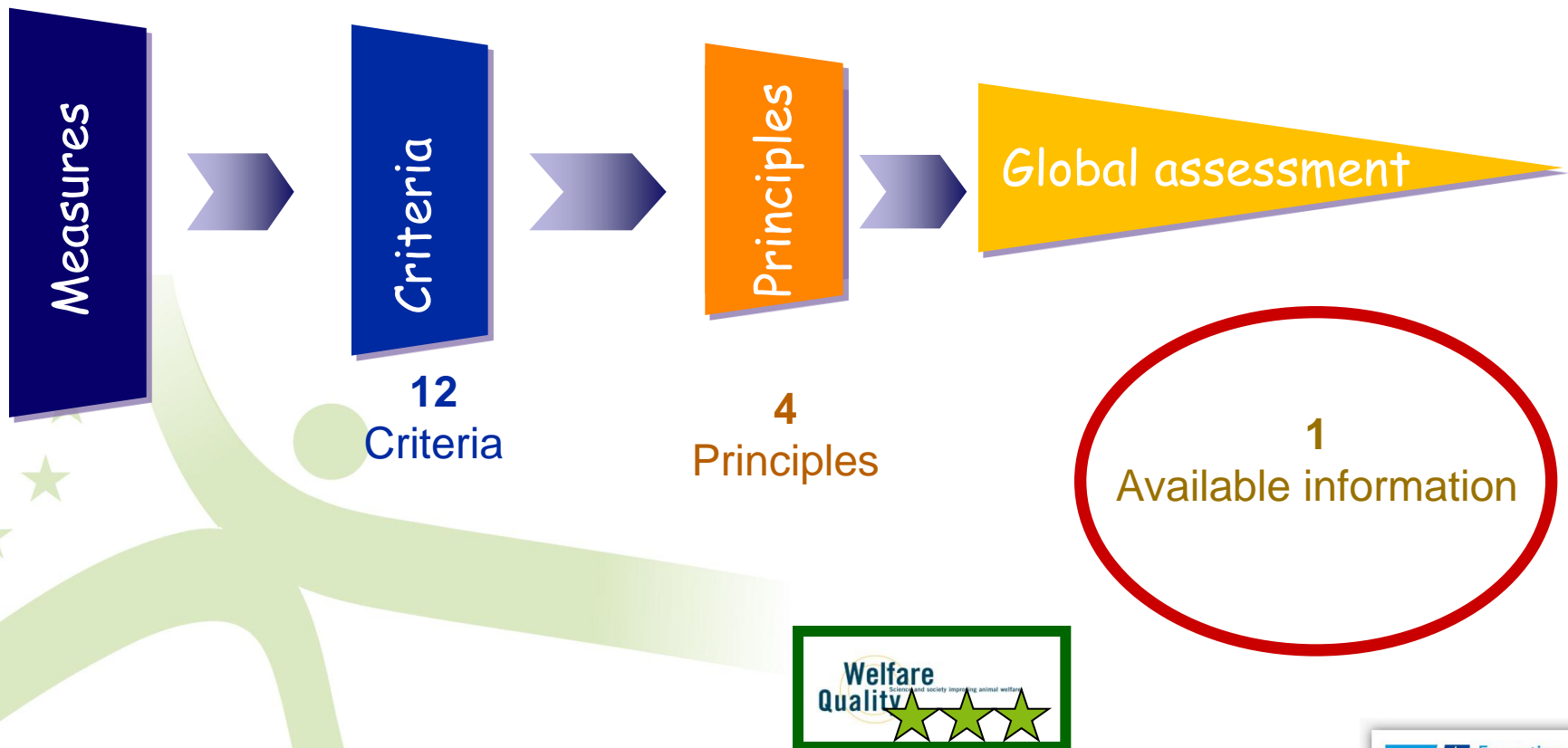
No panic to human presence

12. Positive emotional state

QBA



Integration of the measures



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Welfare Quality is an EU funded project about integration of animal welfare in the food quality chain: from public concern to improved welfare and transparent quality.

Animal welfare is of considerable importance to European consumers. Nowadays food quality is not only determined by the overall nature and safety of the end product but also by the perceived welfare status of the animals from which the food is produced. This project aims to accommodate societal concerns and market demands, to develop reliable on-farm monitoring systems, product information systems, and practical species-specific strategies to improve animal welfare. Thirtynine institutes and universities (representing thirteen European countries) with specialist expertise participate in this integrated research project. The project started in May 2004 and will take five years to complete.

Italian text: [WQ text in Italian language](#)

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Thank you!!!

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