

Better Training for Safer Food Initiative

Relevance of animal-based indicators for pig welfare assessment (part II)

Training course on "Animal Welfare in pig production"

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Pigs: origins and strategies

Social species

Exploratory behaviour

Forestry habitat

Social behaviour

Remember:

- Appears mainly as an antipredatory strategy
- Avoid isolation in pigs
- Implies competence for resources
- Needs of communication among individuals

Conflict resolution → hierarchies

Hierarchies

1

2

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Competence for resources

Space allowance

Area to rest

Active area

Area to eat

Dirty area

Temperature and density can change this distribution

Observe animal behaviour and state

Exploratory behaviour

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Lack of stimulation

7

Tail Biting

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EXPLORATORY BEHAVIOUR REDIRECTED IN PIGS

Concrete floor or slat does not allow the behaviour

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REDIRECTED EXPLORATORY BEHAVIOUR

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Tail biting

(Redirected exploratory behaviour)

Lack of a substrate to explore

↓

Redirected behaviour (initial phase)

Inadequate ventilation Nutritional deficiencies

High density ↓ ←

Severe tail biting (second phase)

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Stereotypies in sows

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Stereotypies: common traits

Oral behaviours

Locomotive behaviours

Higher proportions in:

- Poor environments
- Adult animals
- When food is restricted

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Possible functions

To provide sensory stimulation

To avoid frustration

(Sham chewing reduces the blood cortisol concentration in pigs)

Auto-narcosis

(When naloxone is administered to block the endorphins effect the stereotypies decrease)

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Restricted food and stereotypies

Appleby & Lawrence, 1982

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STEREOTYPES at GESTATION (comparison crates-groups)

(Broom et al., 1995)

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Solution

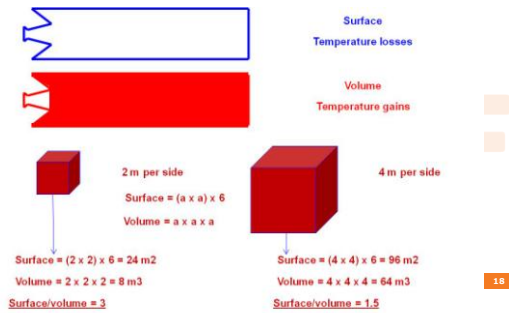
- Sows housed in groups
- To provide enrichment material
- To increase the fibre levels in the diet

Chains?
Pneumatics?

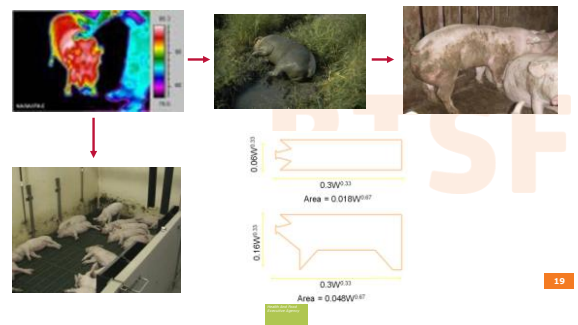
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Thermoregulation



High temperatures



High temperatures

Technical requirements in conditions of thermal stress

Body weight (Kg.)	Space allowance (m²/animal)
Up to 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)



Low temperatures



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THANKS!!!

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