Changes: Risk assessment

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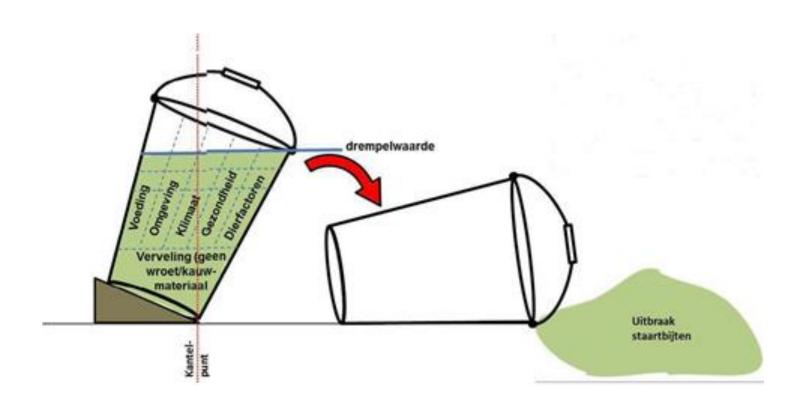








Start biting behaviour





- Aim of development
 - Win situation for the farmer
 - Biting behaviour is a sign of an underlying problem
 - If we reduce biting behaviour we improve animal welfare but often also animal health or production



- Objective:
 - Insight into risk factors biting behaviour on the concerning farm
 - What is in my bucket?
 - Monitoring instrument
 - Is it going better?



- Interaction and cooperation between pig farmer, veterinarian and feed adviser
 - All on the same line to achieve goal
- Important create support of veterinarian en advisers



- Repeatability
 - questions as concrete as possible
 - scientific
- User manual
- Comply with EU requirements
- Additional information digitally available
 - each question
 - why it is important?
 - in the farmers language
 - recommendations









Eating speed dry feed

- Depends on age
- Eating frequency
 - Rearing pigs 10-12 time a day
- Eating speed (gram per minute)
 - Rearing pigs)
 - 8 kg: 3-4 gram
 - 23 kg: 6-7 gram
 - 0,9 kg feedintake → 2 hours



Number of eating-places and drink places

- First 2 days after weaning
 - 1 eating place for 2 pigs
 - 1 drink place for 5 pigs

- Afterwards (till 25 kg)
 - 1 eating place for 5 pigs



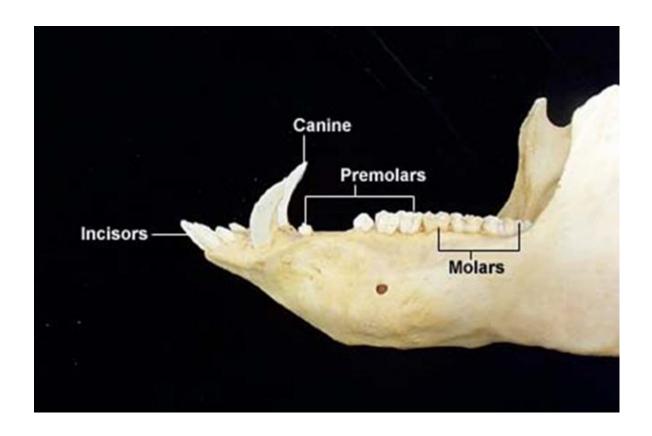


Efficiency eating places





Teeth





Tandformule

Melkgebit
$$\frac{3 \cdot 1 \cdot 3}{3 \cdot 1 \cdot 3} = 14$$
 Permanent gebit $\frac{3 \cdot 1 \cdot 4 \cdot 3}{3 \cdot 1 \cdot 4 \cdot 3} = 22$

Tanden ontwikkeling

	Melkgebit	Permanent gebit
Snijtanden	geboorte - 2 weken	8 - 18 maanden
Hoektanden	geboorte	8 - 12 maanden
Valse kiezen	2 weken - 8 maanden	12 - 16 maanden
Echte kiezen		4 - 22 maanden

Starting point:

- The pig farmers meet the requirements of the Dutch regulations
- Therefore, no questions about risk factors that are already anchored in the regulations



- Per animal category
 - suckling piglets
 - weaned piglets
 - fatteners-gilts



- About 60 questions per animal category
 - kitchen table
 - compartment 1
 - compartment 2
- Time needed 1-2 hours per animal category



- Question
 - Answer can be yes, no, or a number
 - Traffic light system
 - If the answer is a risk factor on tail biting in a limited way then the color is orange
 - Is the answer a big risk factor on tail biting then the color is red
 - Is the answer neutral or positive to reduce tail biting behavior then the color is green
 - There is no weighting factor between the sectionsquestions



- Questionnaire
 - Animal based indicators
 - observations on the pigs
 - Start with these questions``
 - Non-animal based indicators



- Animal based indicators
 - Skin and tail lesions
 - Lying behaviour
 - Cornea colour and tear staining
 - Body soiling with manure and urine
 - Too skinny
 - Respiratory frequency





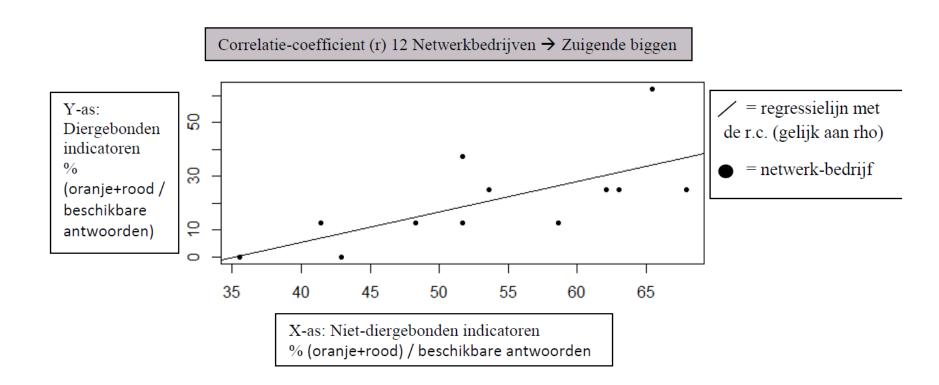




- Not animal bound indicators
 - Enrichment
 - Feeding supply and feed competition
 - food and water
 - Living space and competition
 - Thermal comfort and air quality
 - Hygiene
 - Animal health
 - Animal care taker
- Genetics is not included
 - At this moment no scientific basis



12 farms: suckling piglets





Risk assessment

12 farms

- Significant positive correlation between percentage of non-animal based indicators and animal based indicators in suckling piglets weaned piglets
- No significant positive correlation between percentage of non-animal based indicators and animal based indicators in suckling piglets weaned piglets



Results pilot 15 farms: process

- Farmers network:
 - Good assessment list
 - Added value
 - Fill out together (farmer, veterinarian, feed adviser)
 - Looking at only one subject, you start thinking
 - 1 line
 - You should take the time
 - Dare to be critical: influence on results
 - Added value must turn out later in process
 - Score over certain period of time



Measuring the effect of chances

Needs a lot more attention





