

Clean Water – what do we see?

- Fokus35 stormøde 15/6 2021
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Clean water – can we count on that?

Yes – In Denmark all water coming into the farm should be clean!

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How do we treat this clean water coming in?

- Long pipes
- Middle to warm temperatures
- Periods with empty sections
- Dirt on the water-nipples
- Highpressure cleaning
- Watermedication

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Why is clean water important?

- Our pigs should be seen as top-athletes
- Most important feed-ingredient
- Cheapest feed-ingredient
- Best medicine



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How much water do the pigs drink?

- Ca 1 liter/day pr 10 kg growing pigs
- Pregnancy-stable ca 15 l/so
- Farrowing unit ca 30 l/so (average)



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What do we see, when we have dirty water?

- Diarrhea
- Stopped ventils
- Less desire to drink
 - Lower performance
 - Growth
 - Milking
 - Cystitis
 - Prolonged healingtime



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Diarrhea

- We should not feed healthy or sick pigs with bacterias in water!
 - Piglets
 - Die from dehydration or coli-poisoning
 - Clean water and electrolytes are essential
 - Weaning pigs
 - Die from dehydration or coli-poisoning
 - Clean water and electrolytes are essential



7

Diarrhea the first weeks after weaning

- Multifactorial
 - Climate
 - Feed
 - Protein-level
 - Enzym-training
 - Stress at movings/mix
 - Waterquality
- Even more important when ZnO is taken out in a year from now



8

Closed/stopped ventils – fully or partly

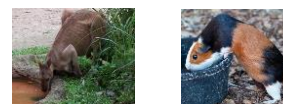
- Consequences
 - To low wateruptake → to low feed intake → lower growth rate
 - lower milkingcapacity
 - cystitis
 - No water intake → no feed intake → Evt. death
- Be carefull when start watering after total stop!!



9

What could cause a lower water intake?

- Illness
- Difficulties in acces – ventill placed wrong
- Dirts
- Bad taste – medicin or dirt



10

Prolonged healingtime - what does that men?

- Water In sickboxes must be checked
- Evt help with the fresh water
- What is the first and most important that happens on hospital?
- Should be a point in the new "SO-VIVOR"©



11

How do we try to keep clean water?

- Nothing.....
- Rinse the hole system with clean water
- Acids
- Desinfectants
- Watercleaningsystem by electrolysis



12

Rinsing the waterpipe system

- Always after a period with no pigs
- Open last ventill – rinses all the horizontal pipes
- Push all ventills - rinses all blind end pipes

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Acids

- Can be a good help at weaning time (diarrhea, FCR)
- Cleaning pipes after water medication

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Desinfectants



Continuously in low dosis
while animals is there

Short time, high dosis without
animals

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15

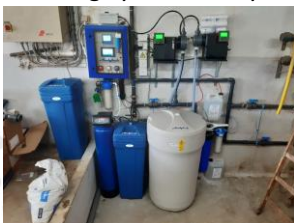
Watercleaningsystem - by electrolysis

- DCW Neuthox (Unitron)
- Anolytech (3S)
- Both systems uses electrolysis to make HOCL (hypochlorous-acid) from salt, water and electricity
 - Anolyt-water (HOCL) – the active part
 - Katolyt-water (NaOH) – not used by DCW

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16

Watercleaning-system, Anolytech (3S)



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Watercleaning-system from DCW (Unitron)



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Watercleaning-system by electrolysis

- Produces continuously HOCl (Anolyt) to buffertank
- HOCl from buffertank are continuously added to the water
- pH is regulated to get the wright composition of CL-products
- Katolyt-waater (NaOH) is either:
 - Send directly in the "gylle" (DCW)
 - or
 - Used as drinking component for weaningpigs 1 dL pr pig 2*dgl (Anolytech)

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Hypochlorous-acid

- Needs pH from 5,5-7,4
- If to low pH we have poissonous gasses
- If to high pH we have more Hypochlorit (less effektiv)
- pH is regulated by the use of the restproduct NaOH ()
- Hypochlorous-acid is a natural product
 - Very gentle to tissues (can be used in eyes)
 - Effectiv against bacterias, virus og fungus
 - Can be used in eco-productions

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Hypochlorous-acid

- Easy to handle – not dangerous
- Can be used to disinfect drinking water systems
- Can be used as desinfectant after wash

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21

Hypochlorous-acid –what do we see?

- Waterpipes are cleaned – without stopping the ventils
- Pigs are drinking more
- Sows are drinking more
- Slaughter pigs have more solid feces

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22