



# Elevated floor did not reduce the overall piglet mortality

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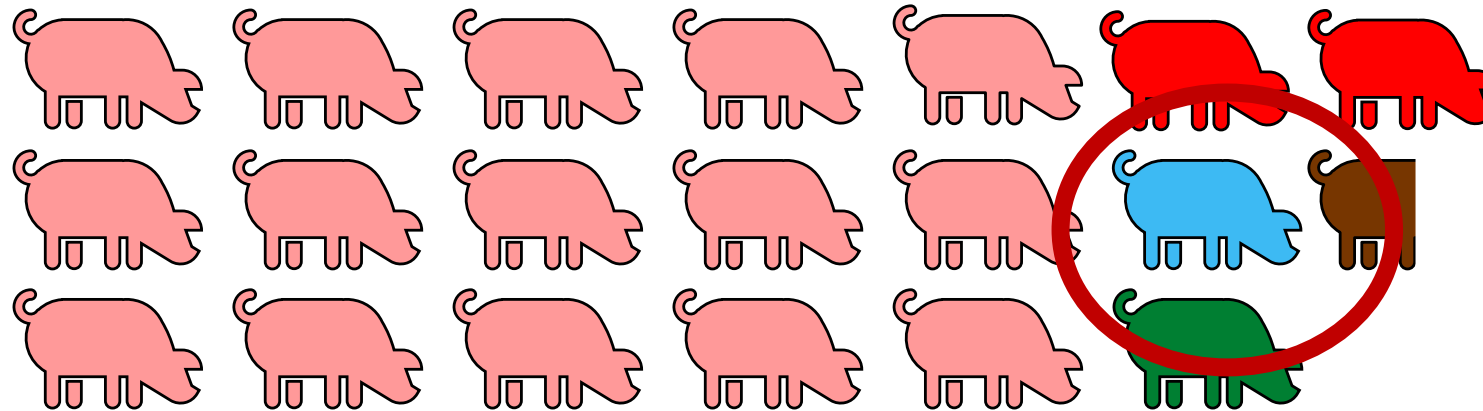
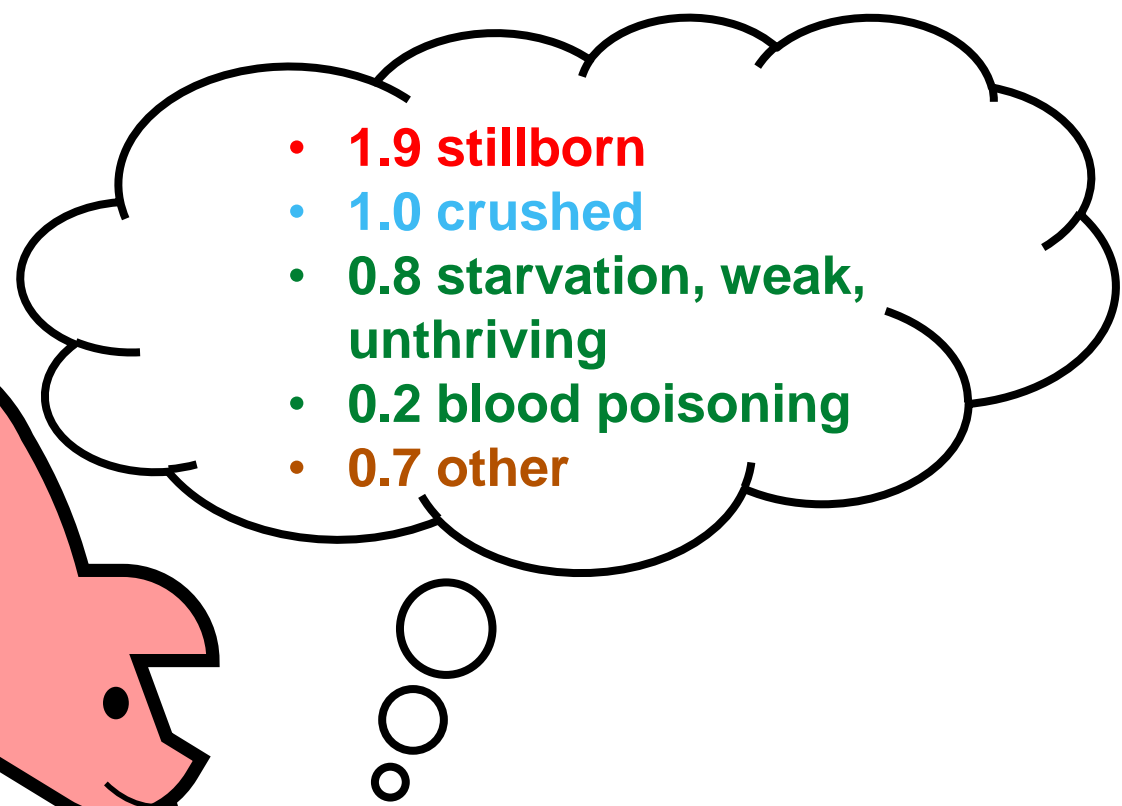
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SUPPORTED BY

Danish Pig Levy Fund

**SEGES**  
INNOVATION

**Background:**  
**Average in DK: 19.9 piglets per litter**



# How to prevent crushing



# Objective

This study investigated if an elevated floor had any effect on piglet mortality from farrowing until day 4 after litter equalization



# Materials and Methods

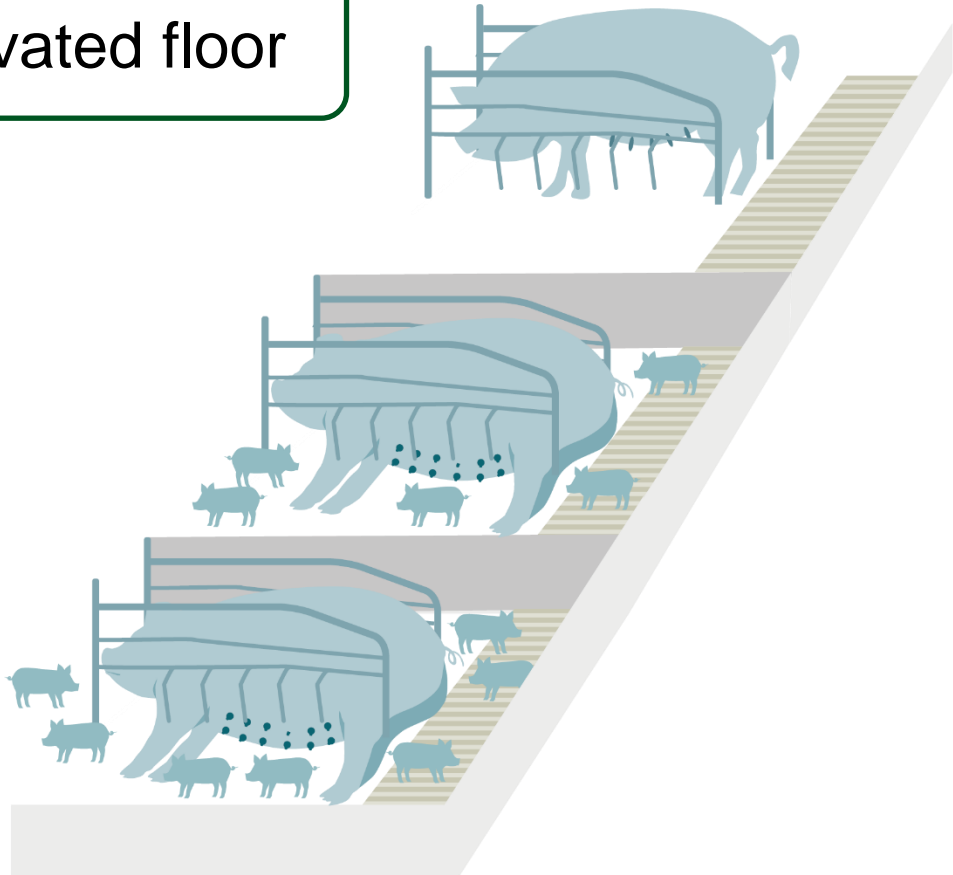
The trial was performed in a Danish sow herd with:

- 2,000 DanBred LY-sows
- 176 farrowing pens
- 18.8 liveborn piglets per litter
- 0.8 stillborn piglet per litter

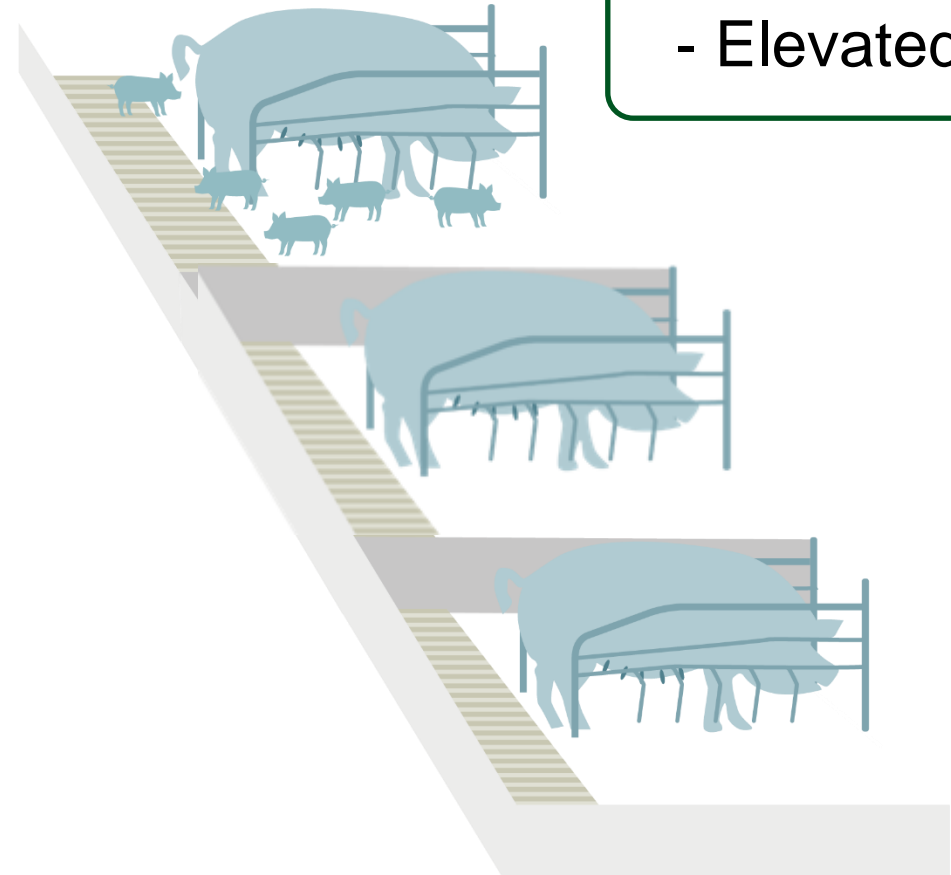


# Materials and Methods – Entry in the farrowing pen

+ Elevated floor

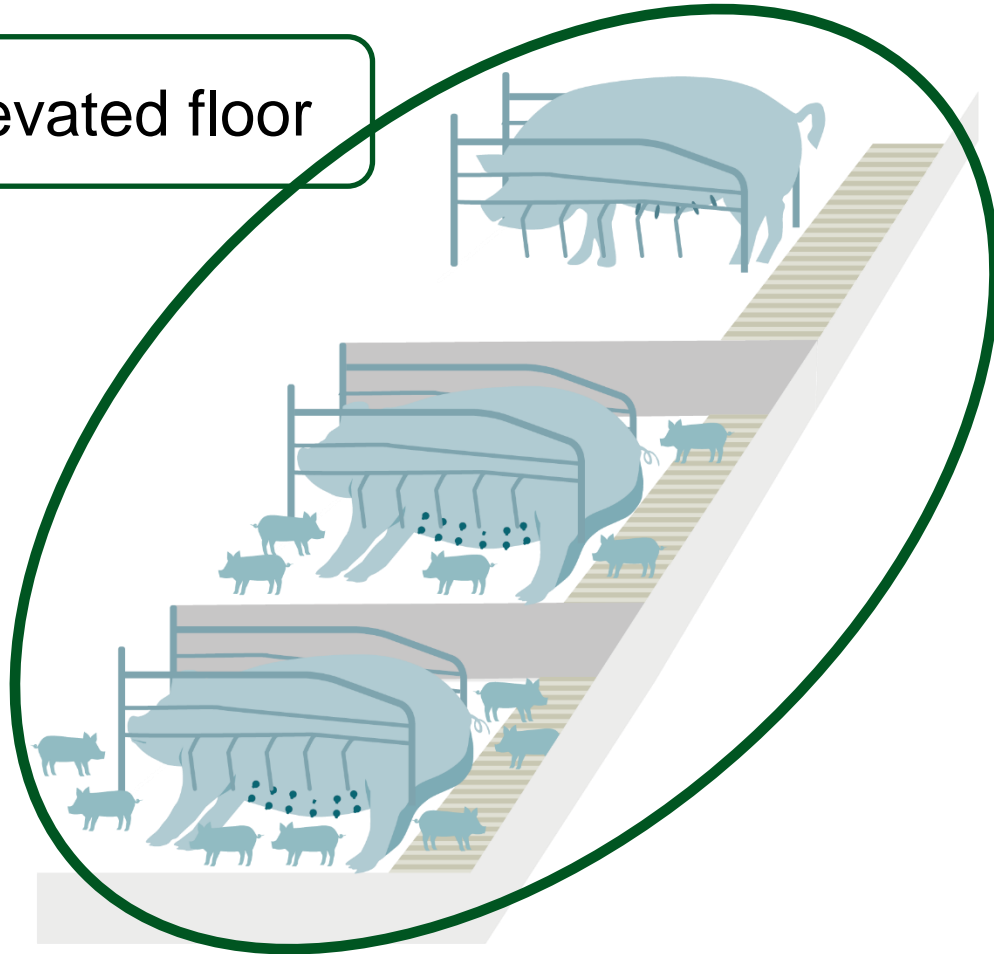


- Elevated floor

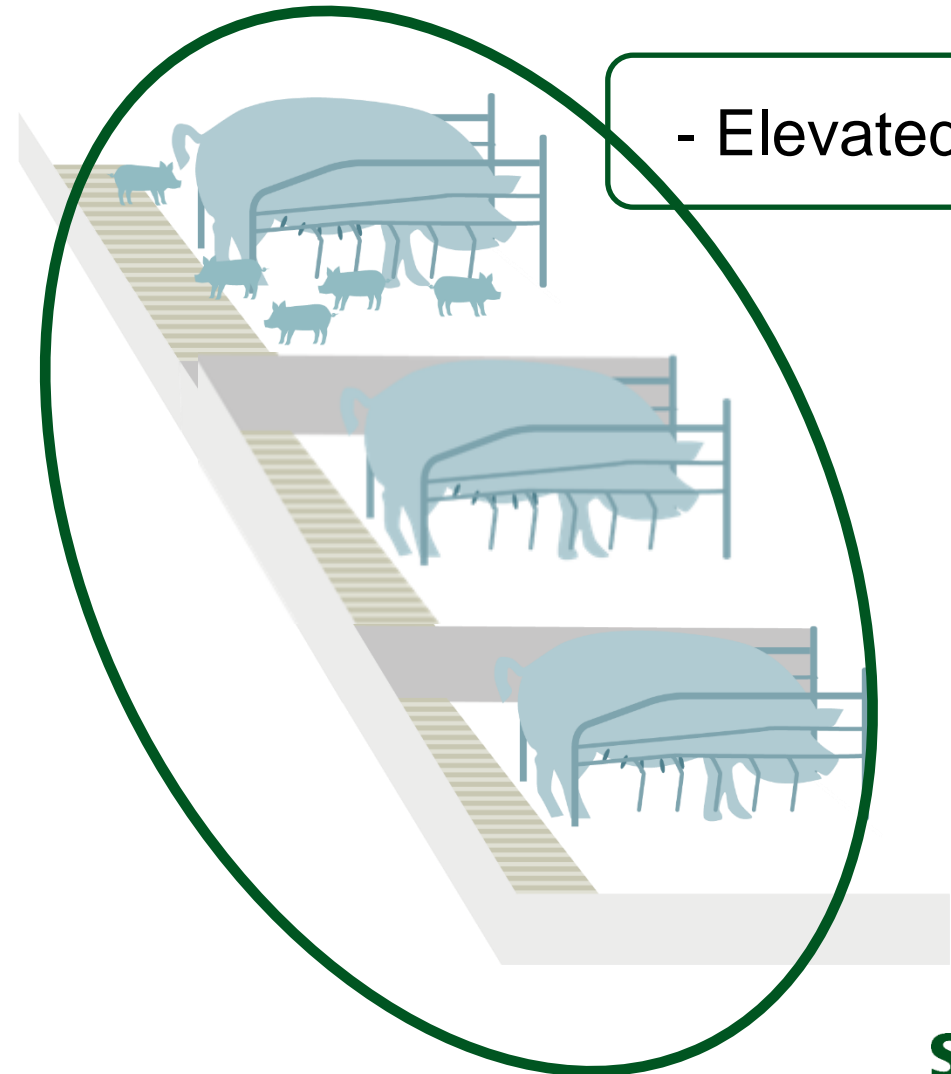


# Materials and Methods - Farrowing until litter equalization

+ Elevated floor

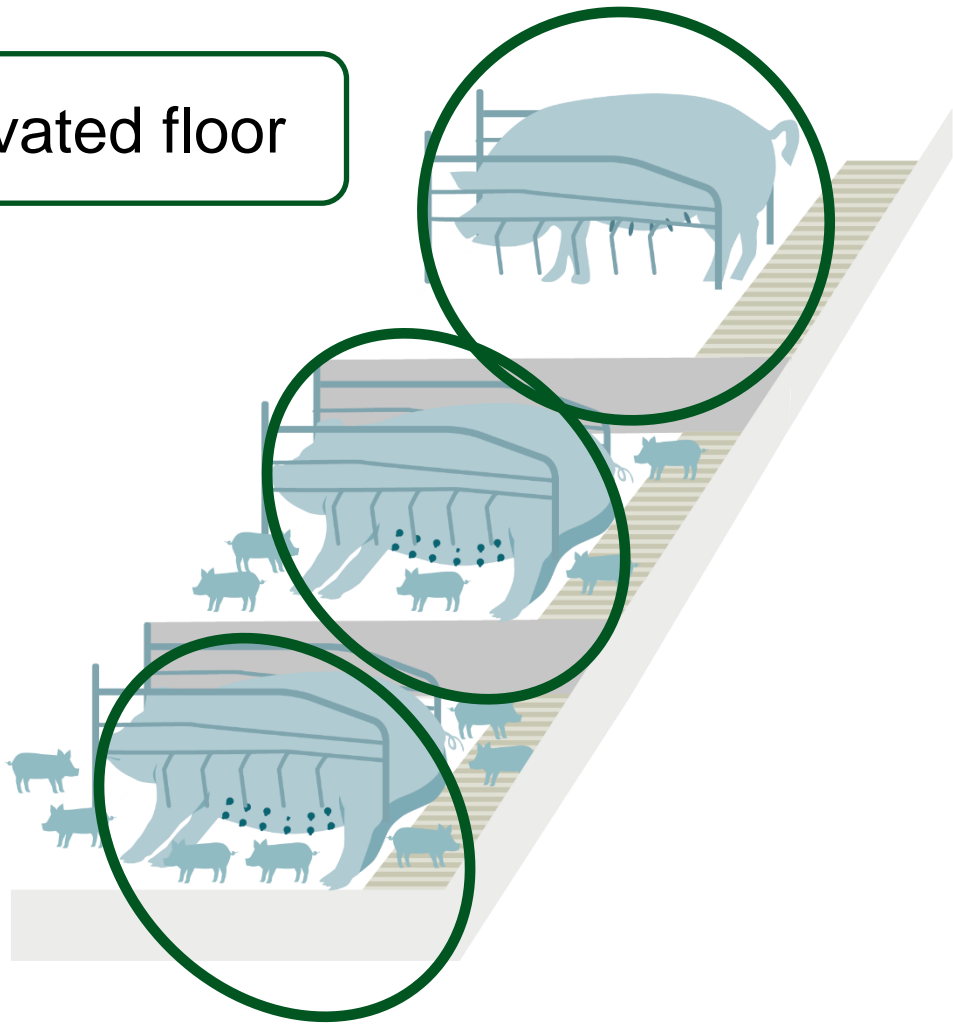


- Elevated floor

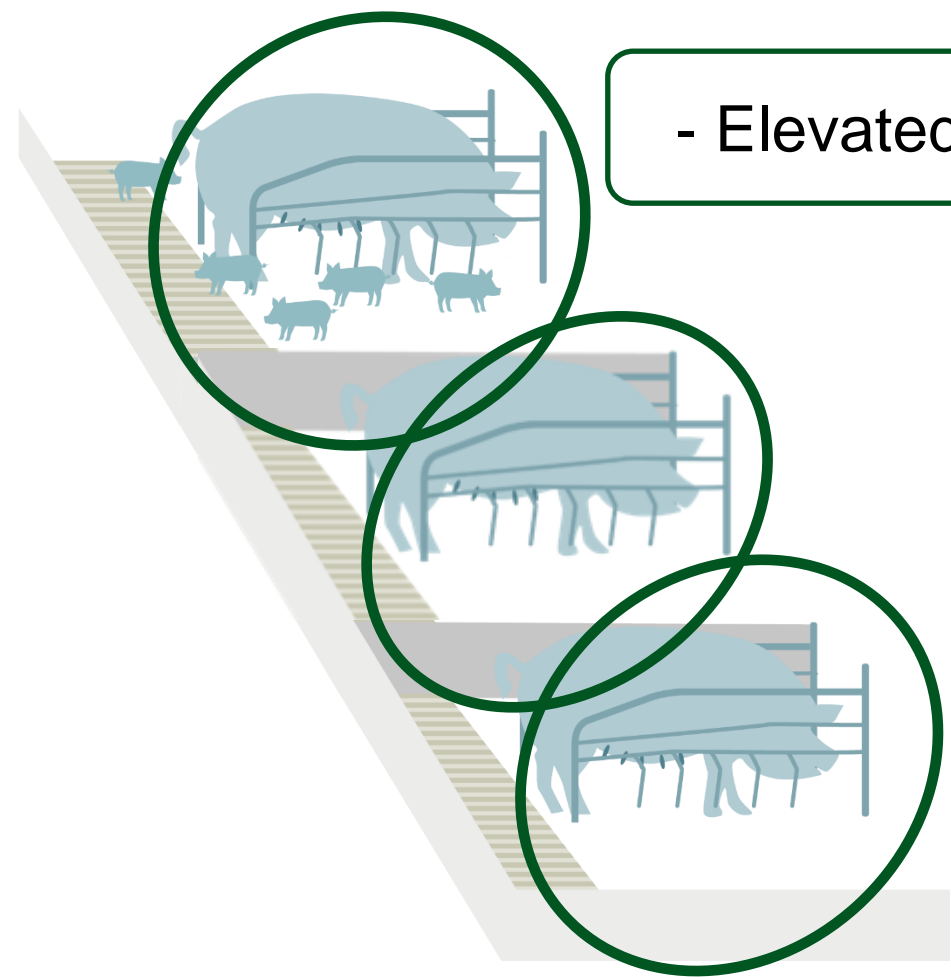


# Materials and Methods – Litter equalization until day 4, fixed litters

+ Elevated floor



- Elevated floor





# Results before litter equalization

	+ Elevated floor	- Elevated floor	<i>P-value</i>
<b>Number of sows</b>	<b>491</b>	<b>508</b>	
Liveborn piglets per litter	18.5	18.7	
Mortality until litter equalization, no./litter	0.3	0.3	
<b>Mortality, %</b>	<b>1.8</b>	<b>1.7</b>	<b>0.555</b>
<b>- Crushed piglets, %</b>	<b>62.2</b>	<b>66.3</b>	<b>0.677</b>



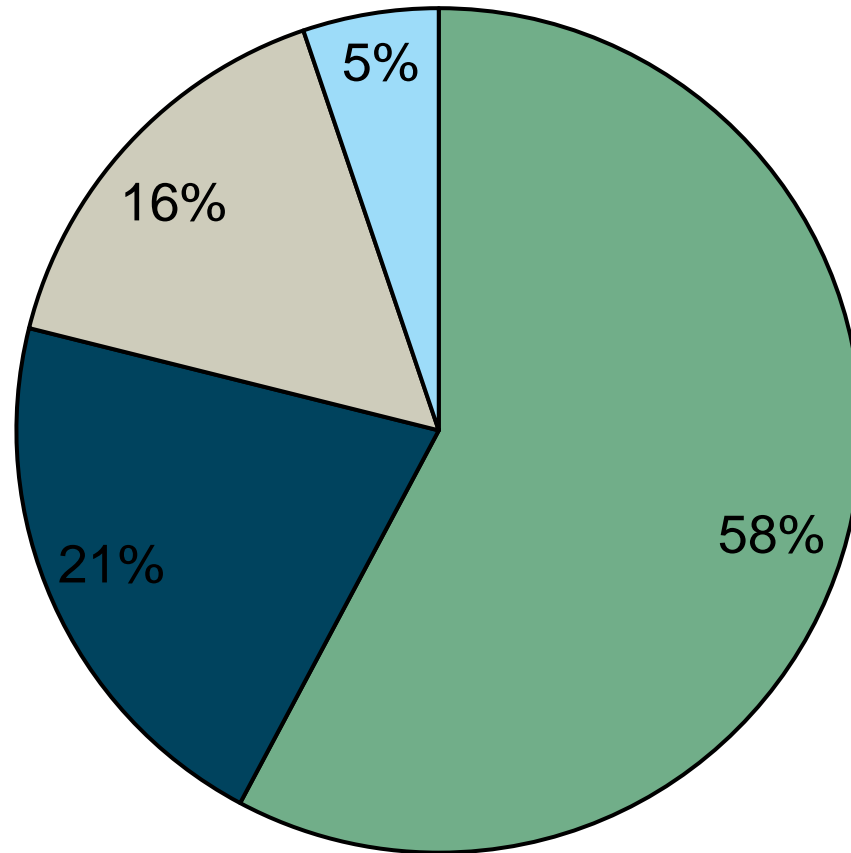
# Results from litter equalization until day 4

	+ Elevated floor	- Elevated floor	<i>P-value</i>
<b>Number of litters</b>	<b>625</b>	<b>646</b>	
Parity	3.4	3.2	
Number of piglets at litter equalization	14.4	14.3	
Number of dead piglets per litter	0.7	0.7	
<b>Mortality after litter equalization, %</b>	<b>4.2</b>	<b>4.6</b>	<b>0.351</b>
<b>- Crushed piglets after litter equalization, %</b>	<b>68.7</b>	<b>80.0</b>	<b>0.091</b>
Age of dead piglets, days	2.2	2.4	

No effect of sow parity or floor on mortality rates

# 79% of dead piglets have an empty stomach – mainly crushed piglets

Autopsy  
Approx. 25% of the dead piglets



- Empty, have not consumed milk
- Empty, have consumed milk
- Partly filled
- Filled

## Conclusion and Perspectives

- Elevated floor did not reduce the overall piglet mortality until day 4
- Elevated floor did eliminate time spent "putting piglets into the creep" while sows eat – however, this does not outweigh the extra floor costs.....
- Piglets getting crushed because of hunger
  - Elevated floor did not prevent hunger and hypothermia
- Qualified staff is needed to prevent both hunger and hypothermia



Thank you 😊

## The sow effect on mortality – all sows

	Normal sows	Nurse sows	Nurse sows smallest piglets
Number of sows	823	266	182
Parity	3.9	2.5	2.0
Number of piglets at litter equalization	14.1	14.0	16.0
Number of dead piglets from litter equalization until day 4, no. per litter	0.3	0.4	2.7
Mortality after litter equalization until day 4, %	2.3 <sup>c</sup>	3.4 <sup>b</sup>	11.1 <sup>a</sup>