

# How to make survival rate better

Fokus 35 Vital, March 24, 2021

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STØTTET AF

**Svine**afgiftsfonden

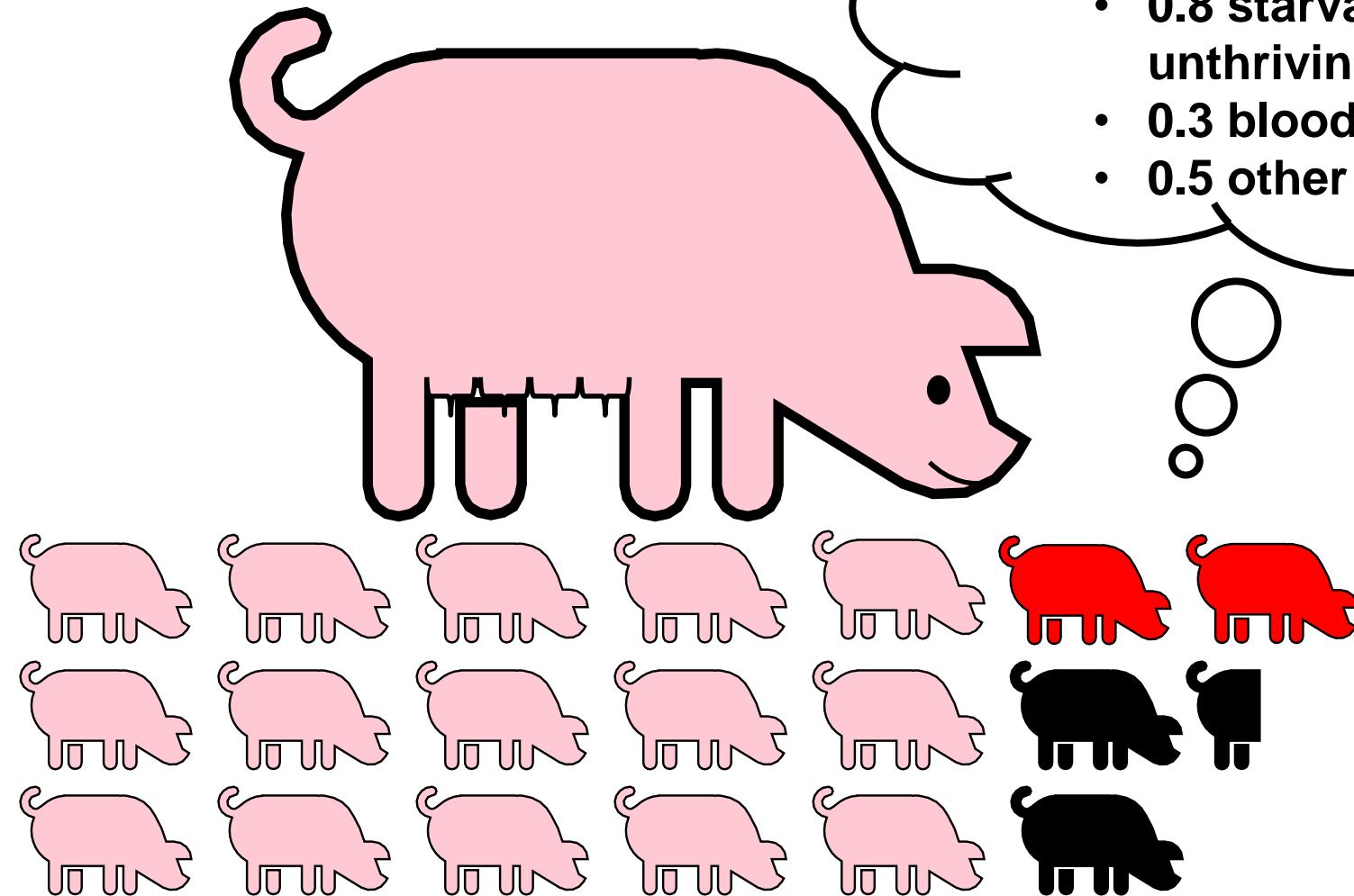


# Agenda

- A sow fit for farrowing
- Farrowing surveillance
- Heat around farrowing
- Ensure sufficient colostrum uptake



## A sow with 19.4 piglets



Brief no. 2014; Report no. 1703

# Before parturition

# A sow fit for farrowing

- 5-7 days before expected farrowing
- 16-19 mm backfat
- 3.4-4.1 FE/day
  - At least three meals a day (equally distributed around the clock)
  - 500-600 grams fibre/day





## Nest building

Reduces farrowing length  
and stillborn piglets

Improves nursing  
performance



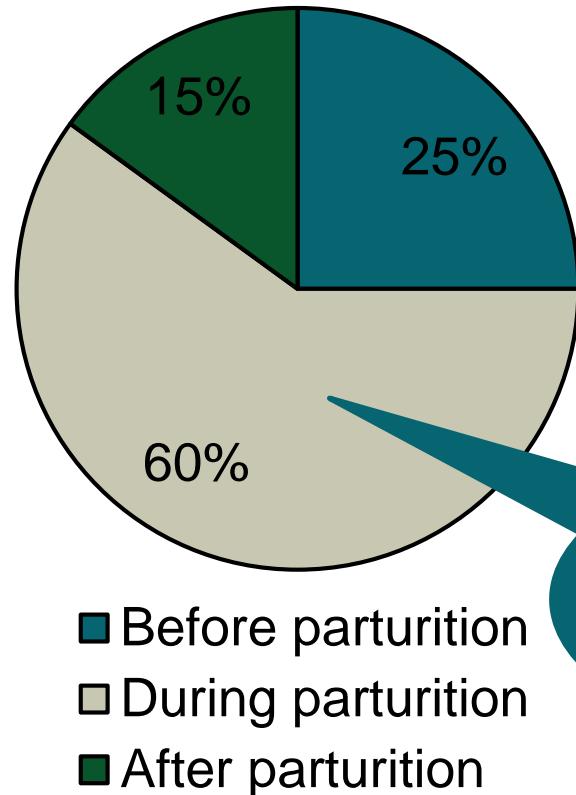
# Farrowing

# Good to know about the farrowing



- The sow wants to farrow in peace
  - most sows start to farrow after working hours
- On avg. the farrowing takes 6 h (1.5 - 14.5 h)
  - Risk of stillbirth increases with increasing farrowing duration
  - Risk of stillbirth increases with increasing birth order
- For every parity, the number of stillborn increases by  $\frac{1}{2}$  piglet

# 60% of stillborn piglets die in the process of farrowing



Great potential  
for increasing  
survival rates

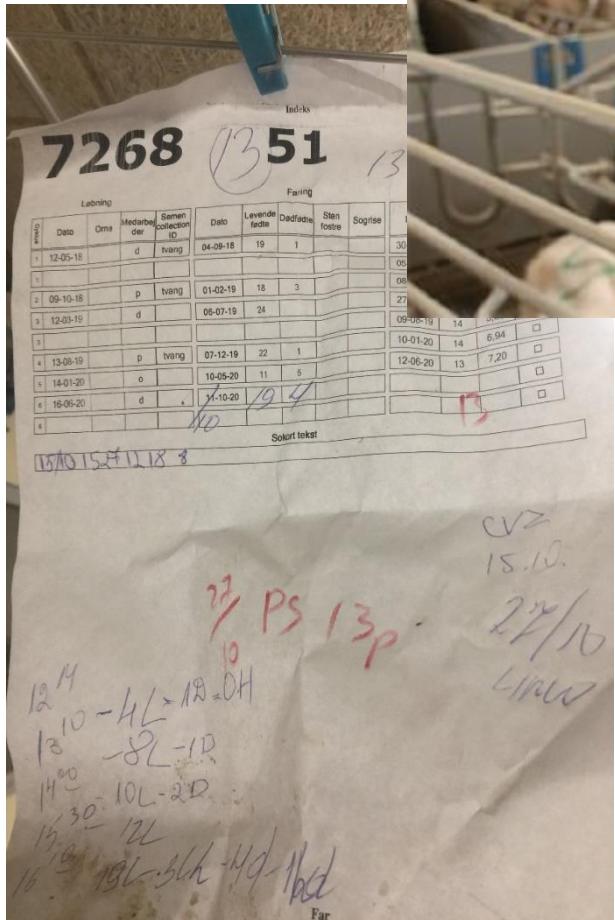
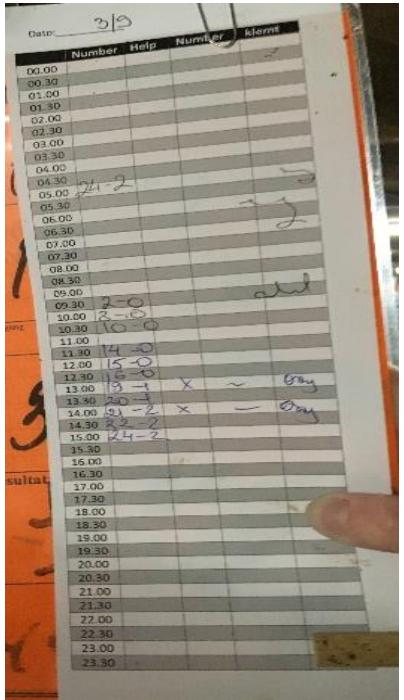


# Organize farrowing surveillance and assistance

- When farrowing is in progress → Farrowing surveillance
- Put one person in charge
- Set an alarm for every 30 min
- Supervise all farrowing sows
- Count piglets and note the number
- No new piglets since last check = assistance
  - Piglet 1-3: 1 h between piglets
  - Piglet >3: 30 min between piglets



# Tools for managing farrowing surveillance



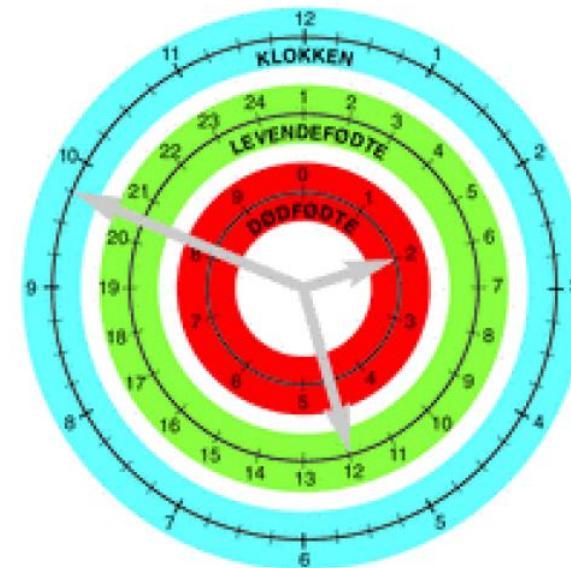
Search bar: f-skiven Annuler

**F-Skiven**  
Produktivitet ÅBN

Opret faring i Stald 1  
Dato: 25-06-2015 Tidspunkt: 11:04  
146 23365  
Levende føde Døde føde  
16 05  
17 03  
18 04  
19 05  
20 06  
Foddelshjælp  
Måske født  
Færdig  
Gem & ny  
Gem & Luk  
Afslyd

Stald 1  
Sl Nr. 142 - Sl 10562  
Sl Nr. 146 - Sl 23365  
Tilføj Alarm til Stald 1  
Alarm om 30 minutter  
Alarm om 45 minutter  
Antal aktuelle faringer med foddelshjælp i Stald 1  
2

## F~Skiven

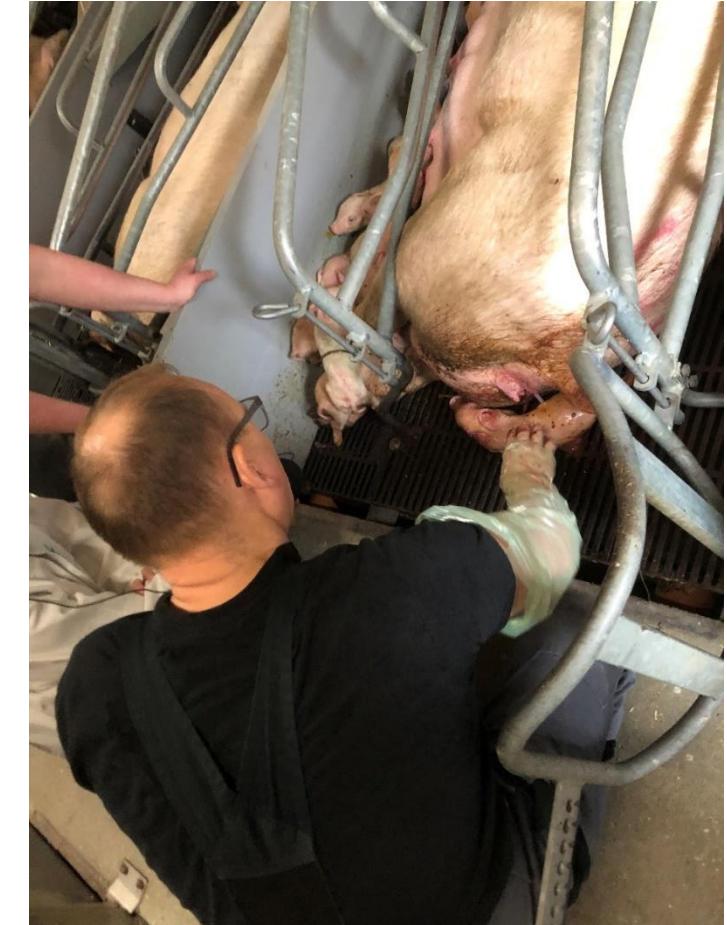


# FarrowTech



# Where to save time on farrowing surveillance

- When no or only a few sows are farrowing
- The first two hours after sows starts farrowing
- When only gilts are farrowing



## Extra benefits from surveillance

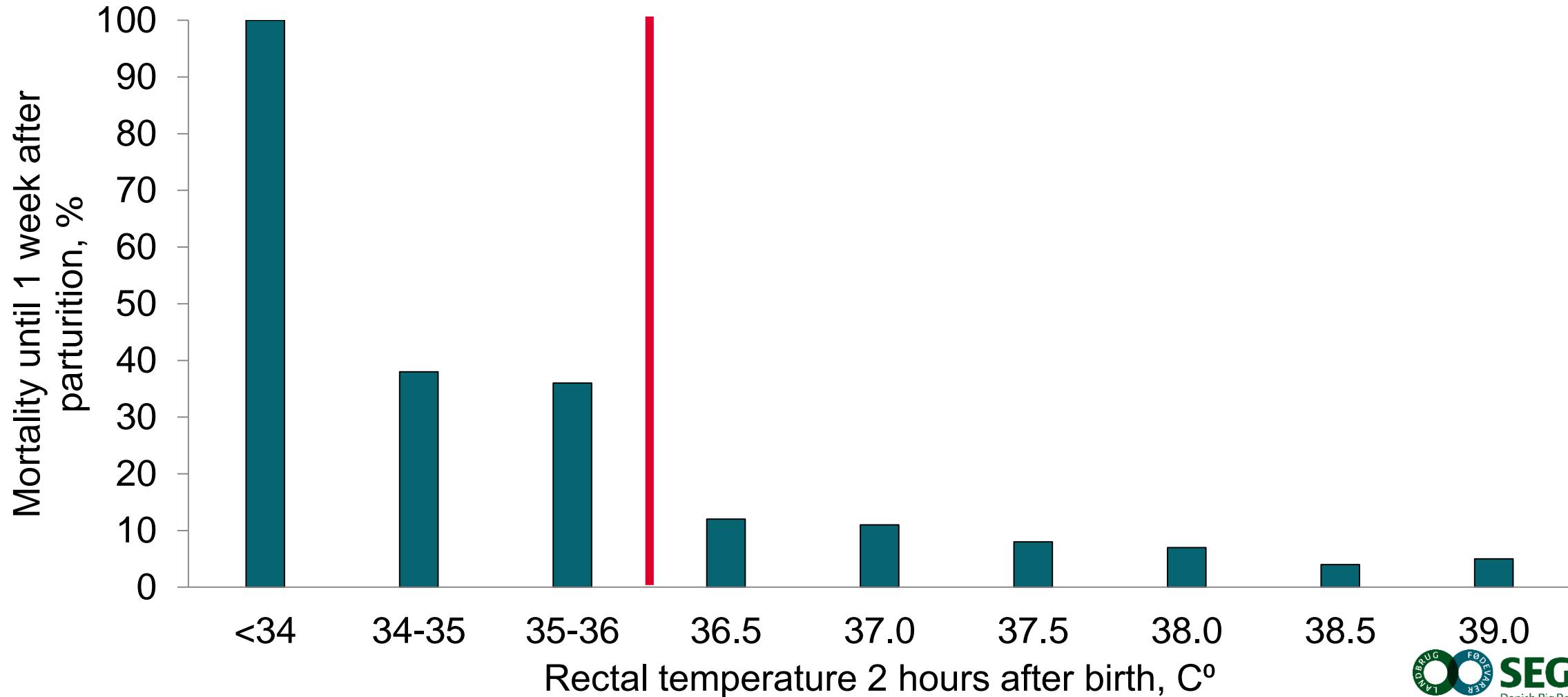
- Help piglets to the udder or into the heat/creep
  - Mark the first-born piglets
  - Ready to be moved early
- Help newborn piglets out of the amniotic sac



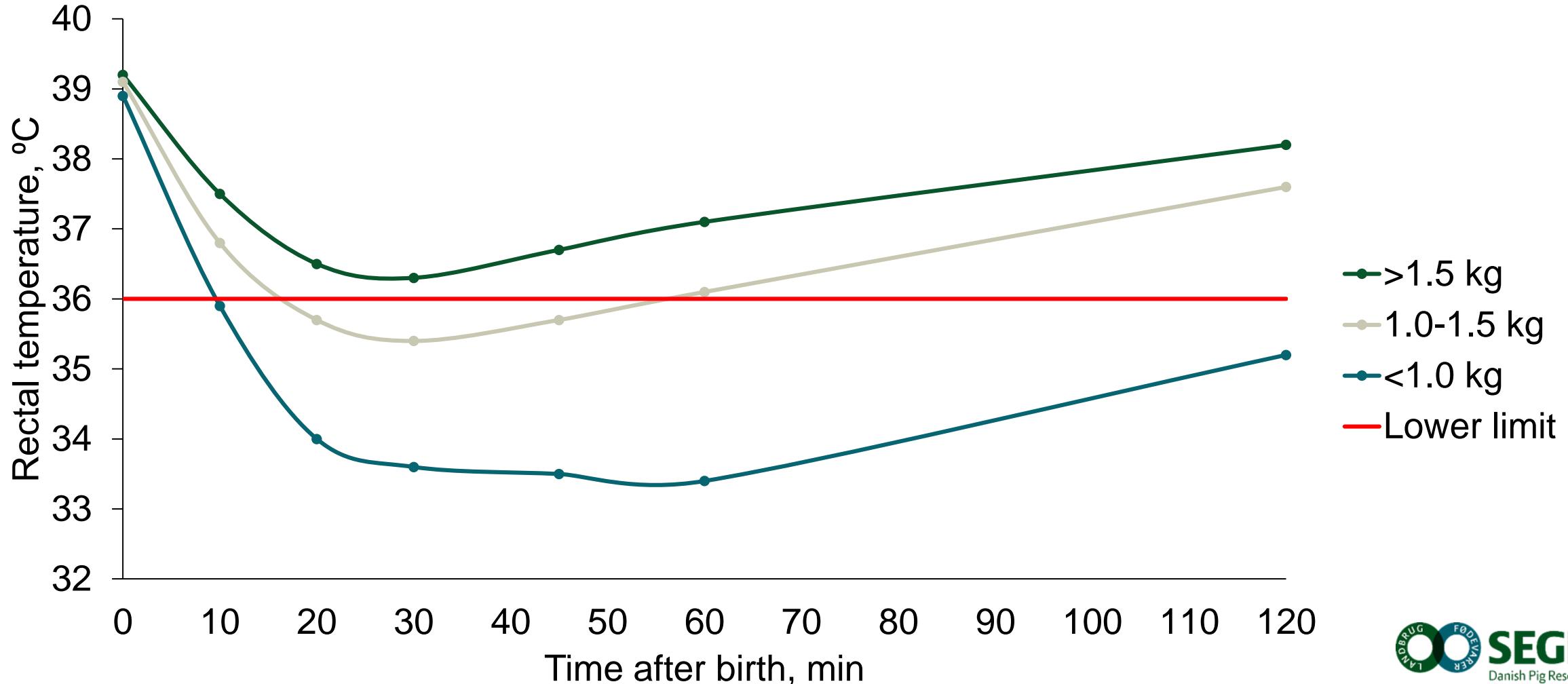
# After parturition

Heat

# A temperature above 36 °C increases the survival rates

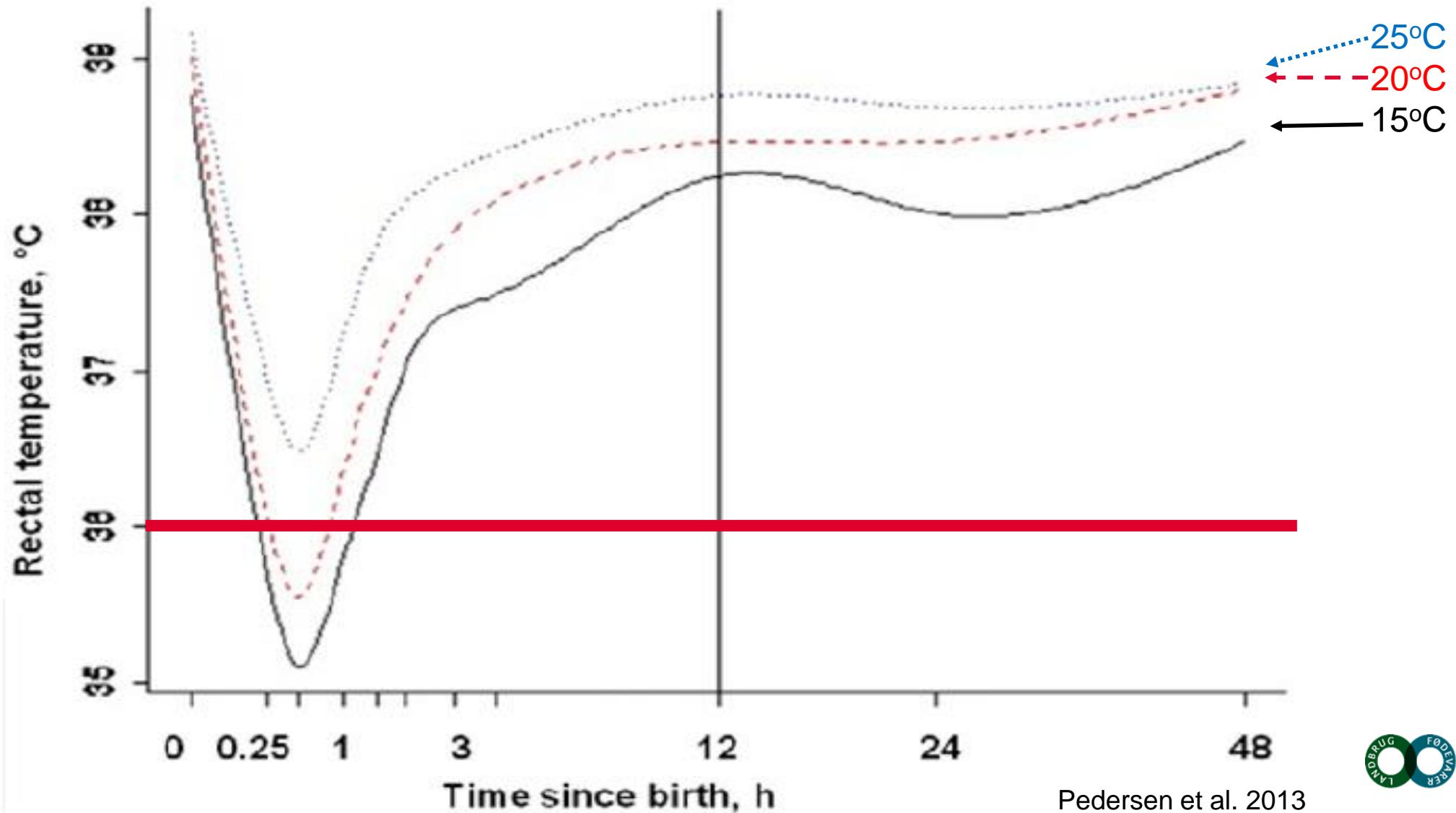


# Rectal temperature after birth at different birth weight



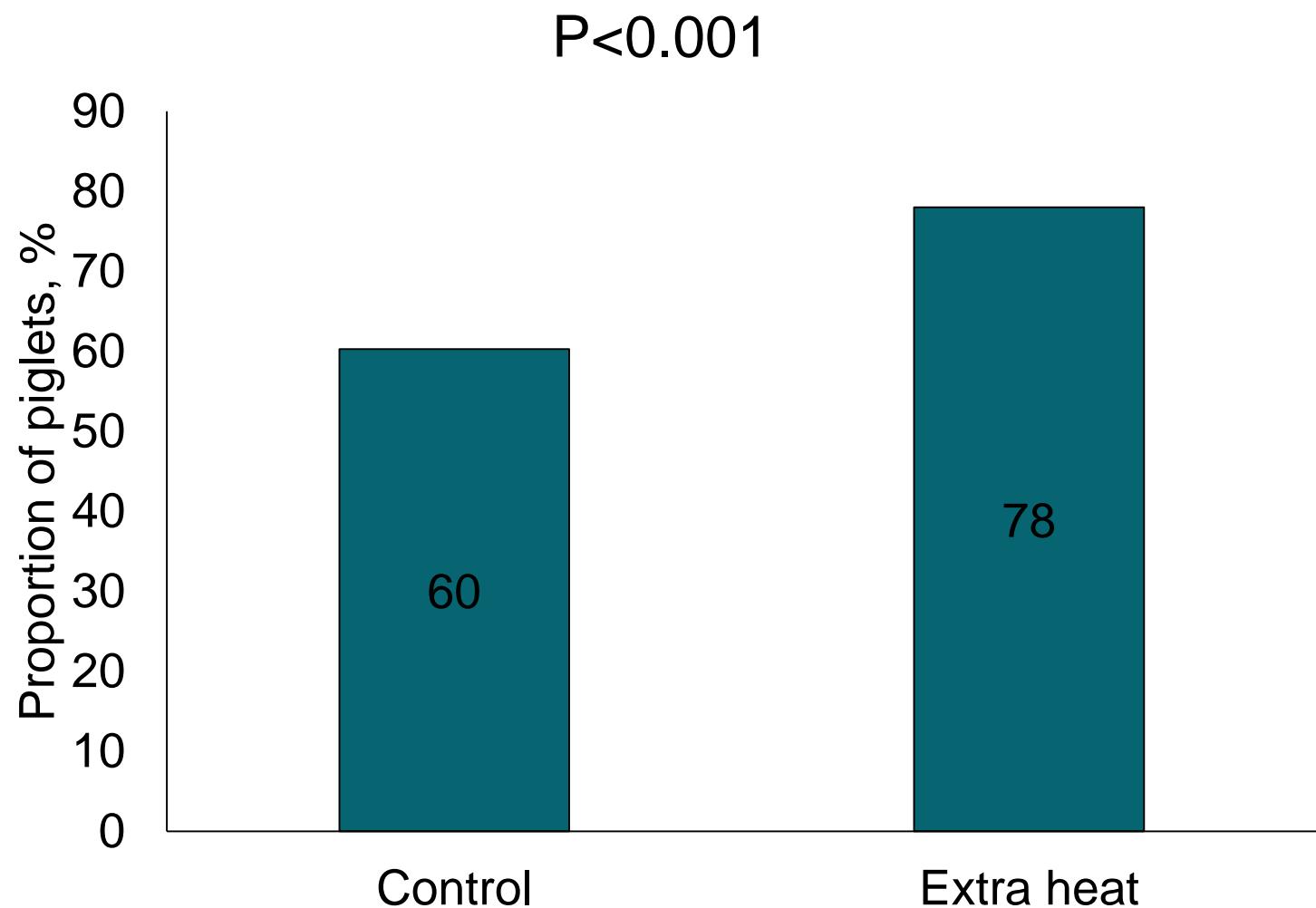
Pol et al. 2020

# Piglet temperature after birth



Pedersen et al. 2013

# Extra heat around the sow during farrowing

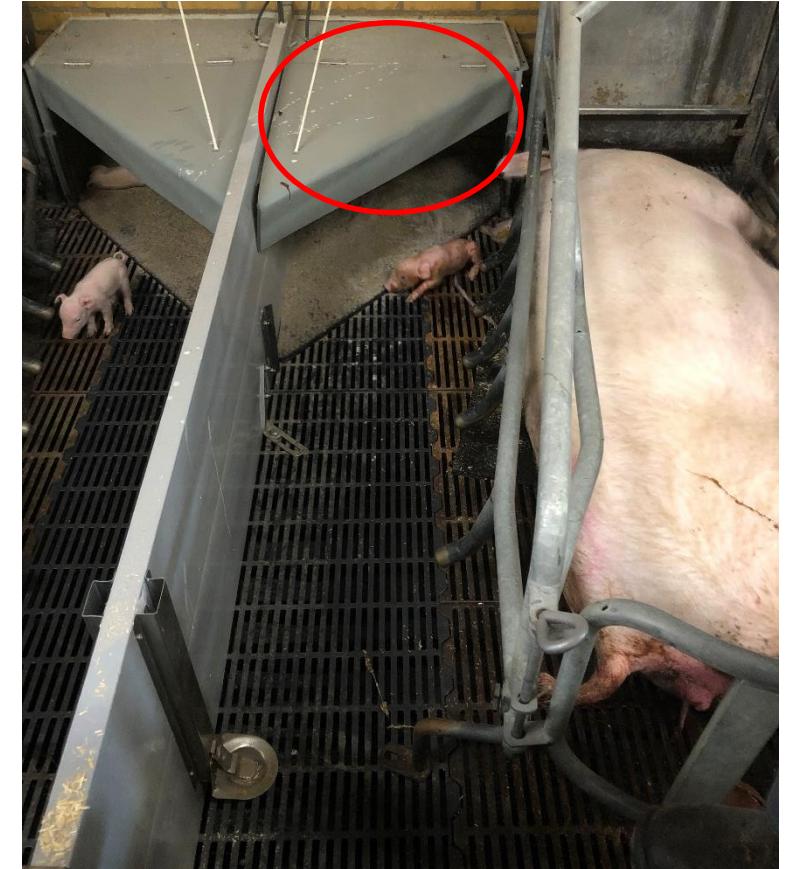
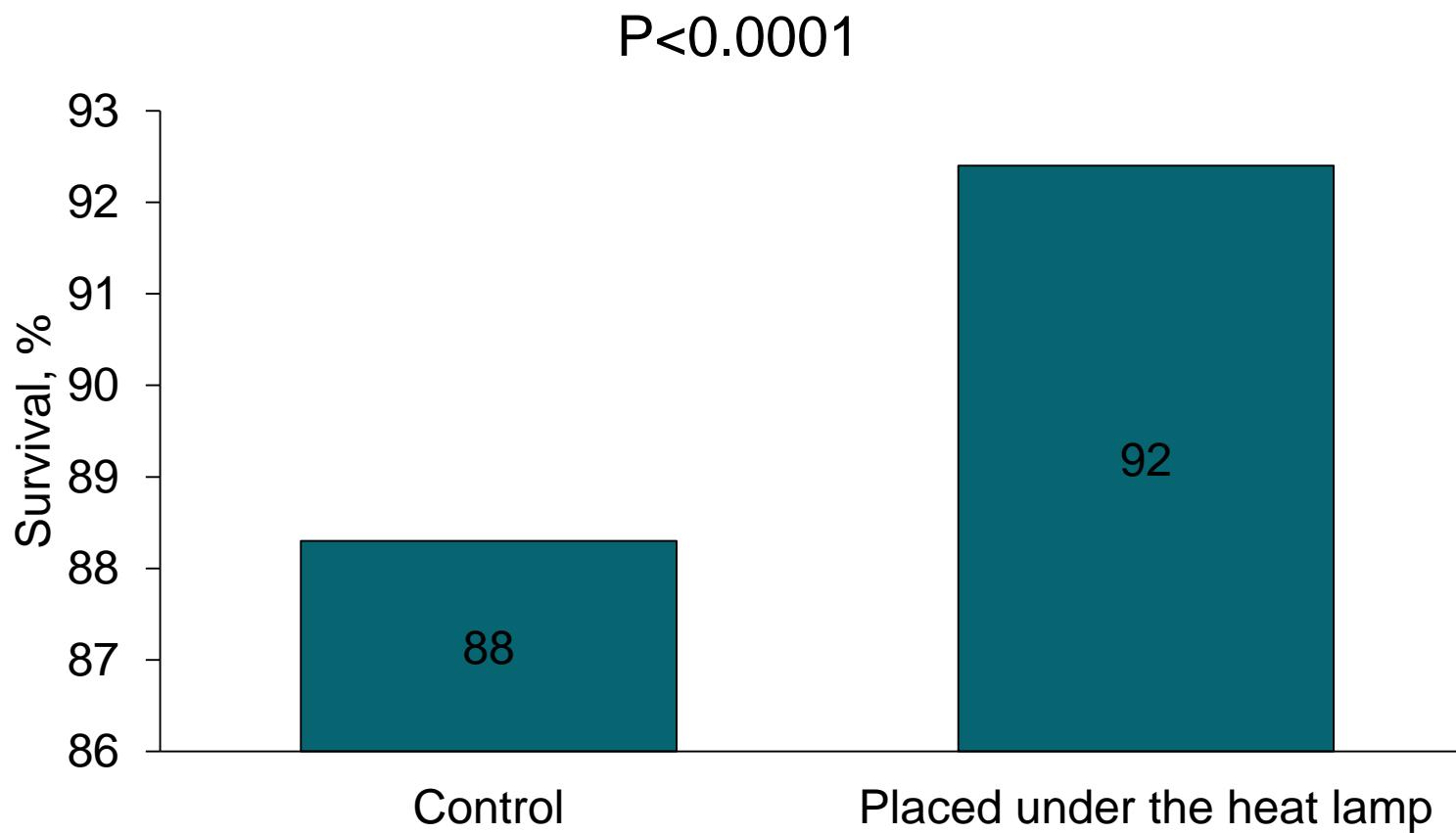


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Trial report no. 1176



# Drying and warming after birth



Modified from Andersen et al. 2009

# **How much time do you spend on creep training? And how much time is taken away from the sow and piglet?**

A photograph showing several piglets huddled together under a red heat lamp in a wooden creep area. They are lying on straw bedding.

My guess		
Day 1	At	Time in the creep area
Morning feeding (8 o'clock)	7.00-10.00	3 hours
Afternoon feeding (13 o'clock)	12.00-14.00	2 hours
Evening feeding (19 o'clock)		
		5 hours

# Piglets can be lured in the creep area

## CONTROL – Creep training

- 1 h around feeding (day 1 and 2)



## TRIAL – Lure piglets to use the creep area

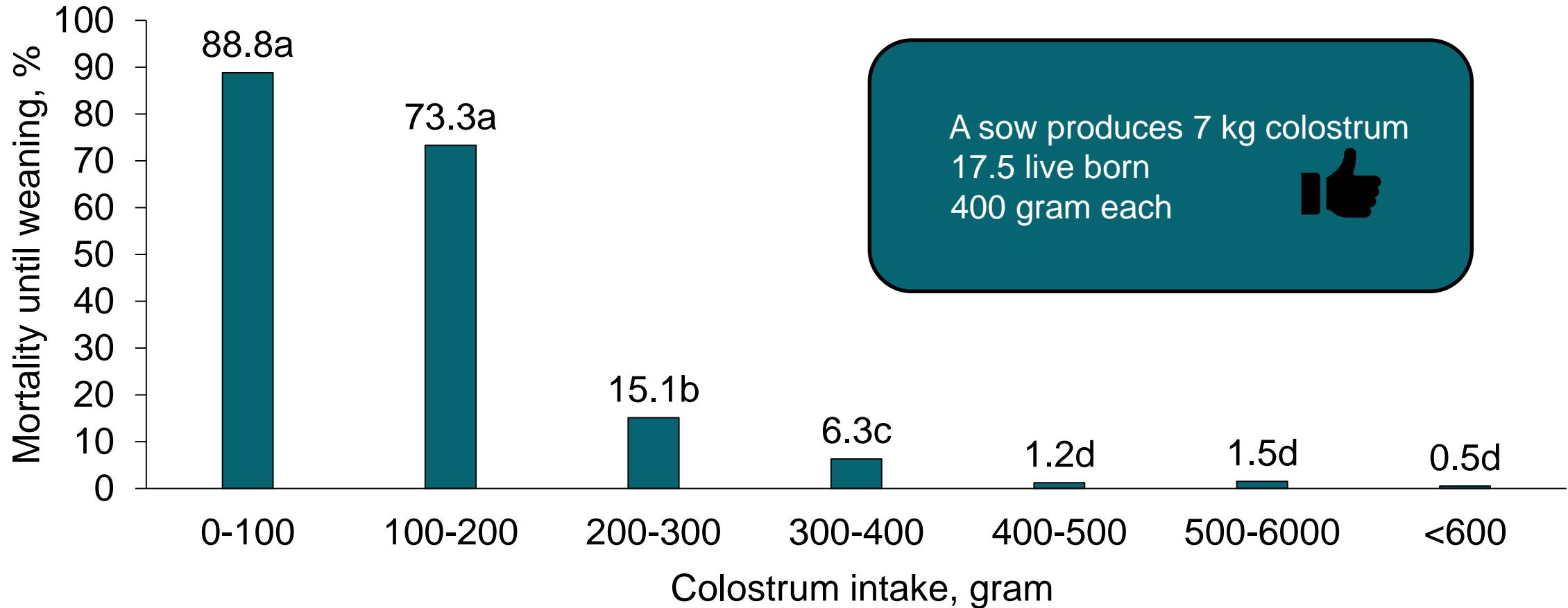
- Straw, sock with grains, jute sack



# After parturition

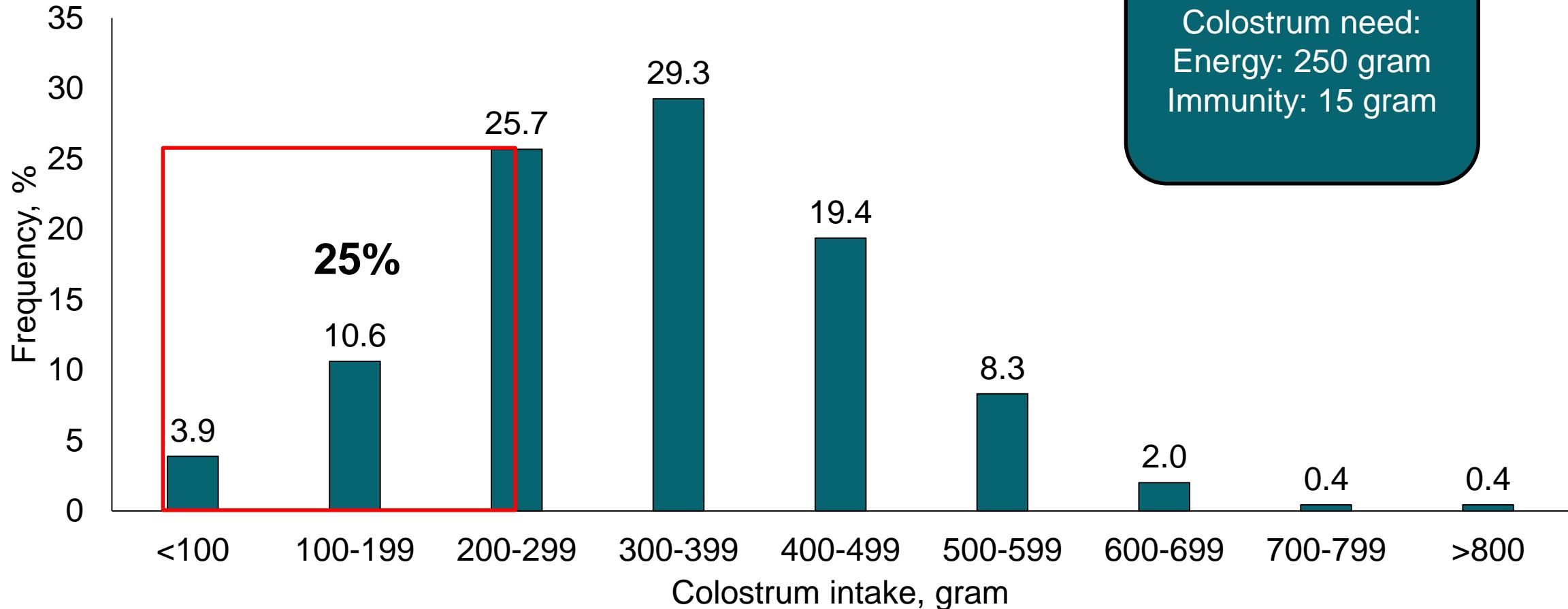
Colostrum

# Piglet colostrum intake is positively correlated with survival



Nuntapaitoon et al. 2019

# Colostrum: A need for energy and a need for immunity



Pedersen et al. 2020

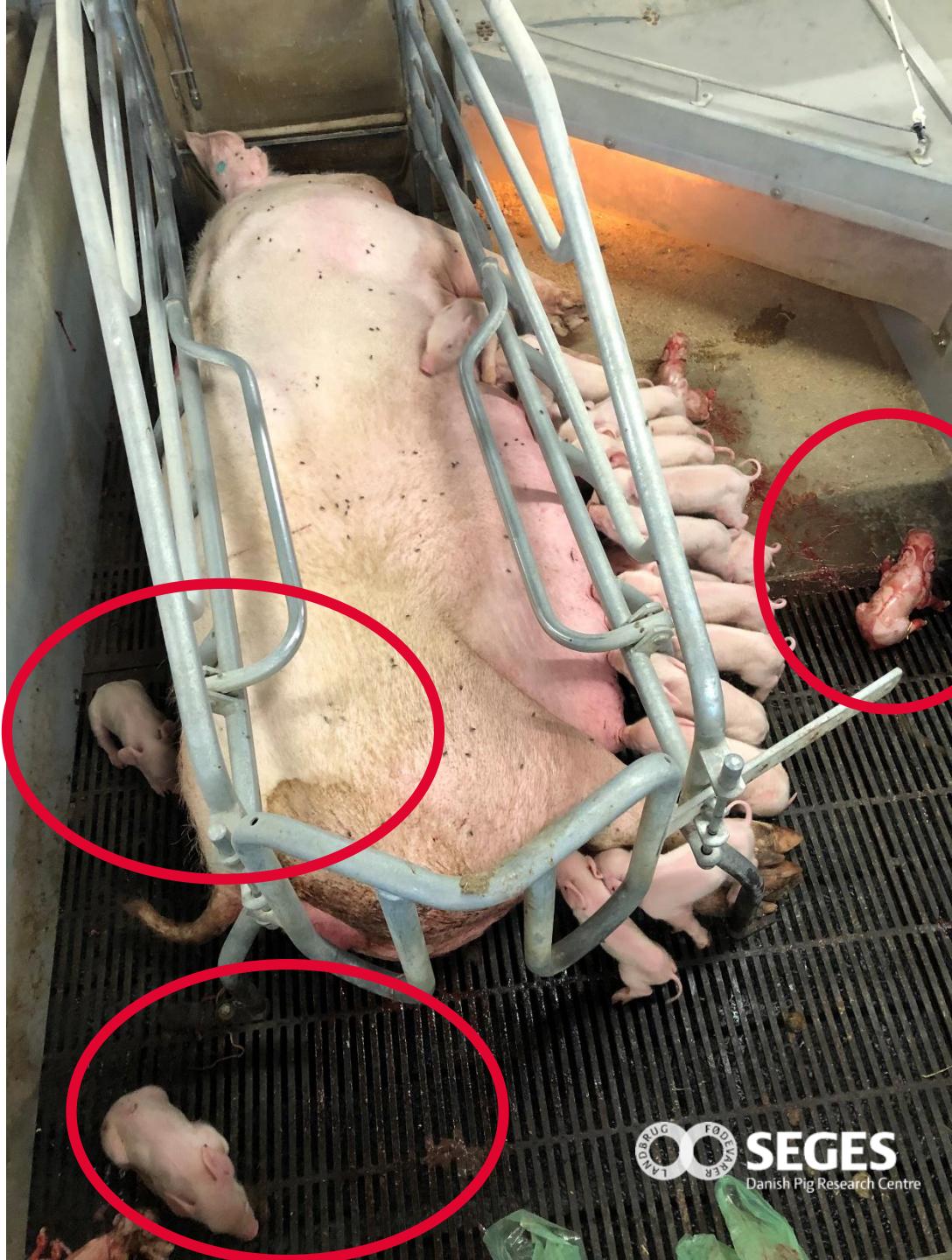
# Ensuring antibodies

- RISK FACTORS
  - Litter size
  - Birth weight
  - Birth interval
  - Birth order
- All sows have enough IgG
- Most piglets have ingested enough colostrum after 8 hours
- Colostrum from another sow is equally good
- After colostrum, sow milk is a good energy substitute



# How to secure colostrum for all piglets

- Help small and weak piglets to the udder
- Adjust litter size (continuously)
  - Mark first-born piglets
  - Move first-born large piglets
  - Move small piglets to a small nurse (with colostrum)
  - The remaining piglets stay with own mother
- Alternatively: Split suckling



# Energy supplements and glycose at litter equalization = no go

- No documented effect ~ Only negative
- Expensive
- Instead spend your time wisely



# Take home messages



A sow fit for fight

Farrowing surveillance

Heat around parturition

Colostrum



# Time for questions