

# Variation in meat quality depending on process time during slaughter and chilling

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## AIM

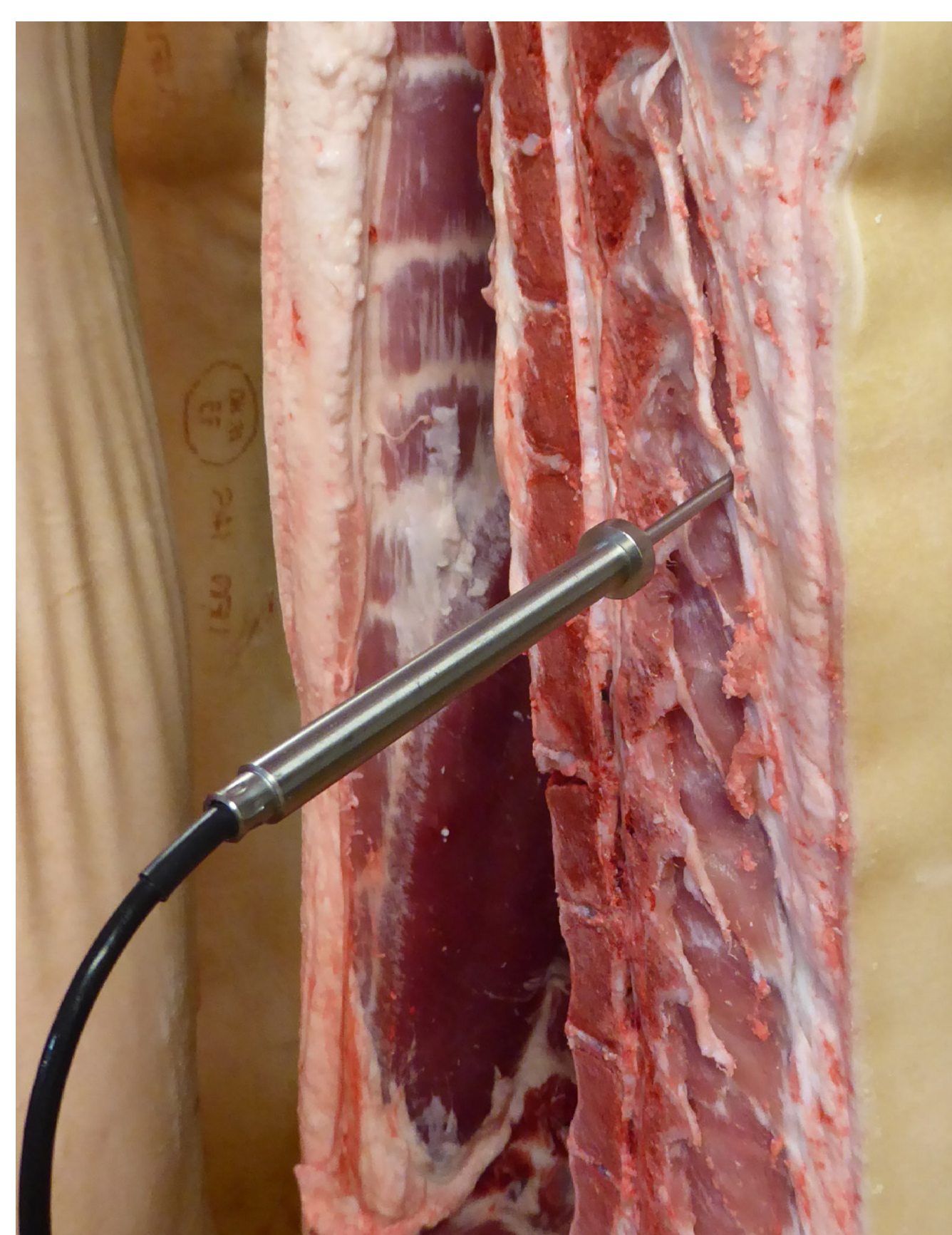
To investigate the variation in meat quality and process time at different European abattoirs.

## METHODS

Six different European abattoirs were investigated, and the process time from sticking to chilling was recorded for 8 carcasses during the day in each abattoir. The carcass temperature was measured in 4 carcasses with a Testo175T2 logger placed in the core of the loin. 22 hours from sticking, samples from 20-24 right loins for meat quality (EZ-DripLoss and Warner Bratzler shear-force) were collected. The samples came from carcasses randomly selected at the slaughter line.

## CONCLUSION

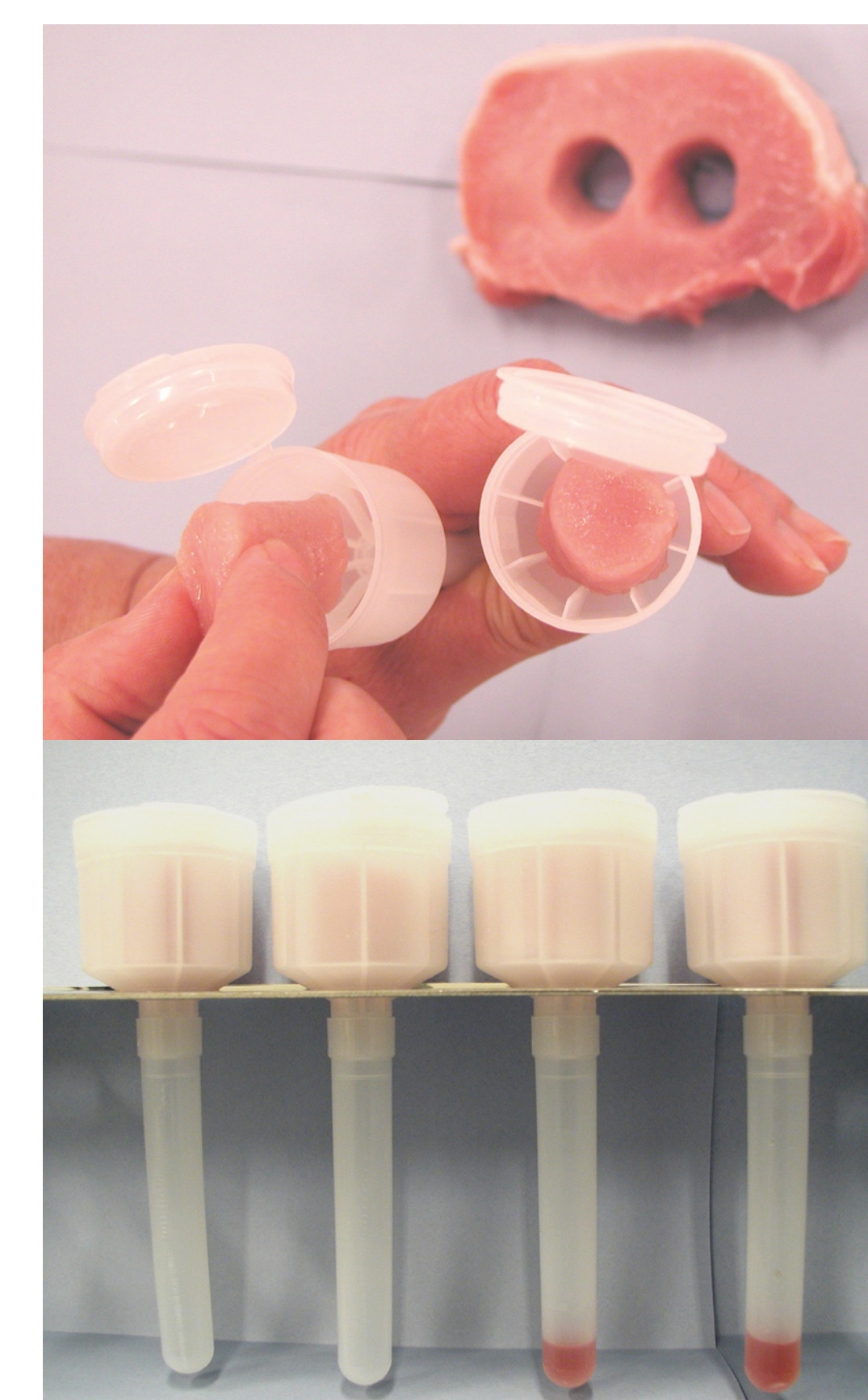
A very fast slaughter process influences the WBSF in the loin, without changing the level of drip-loss. Time to onset of the chilling can be an important parameter in the future work with meat quality and processes.



Temperature logging



Warner Bratzler shear-force



EZ-DripLoss

## RESULTS

Abattoir	Sticking to chilling (min.)	Min. to 7°C in the core in the loin
1	47	279
2	36	207
3	35	233
4	33	252
5	38	207
6	26	421

Table 1. Process time (minutes) in 6 European abattoirs.

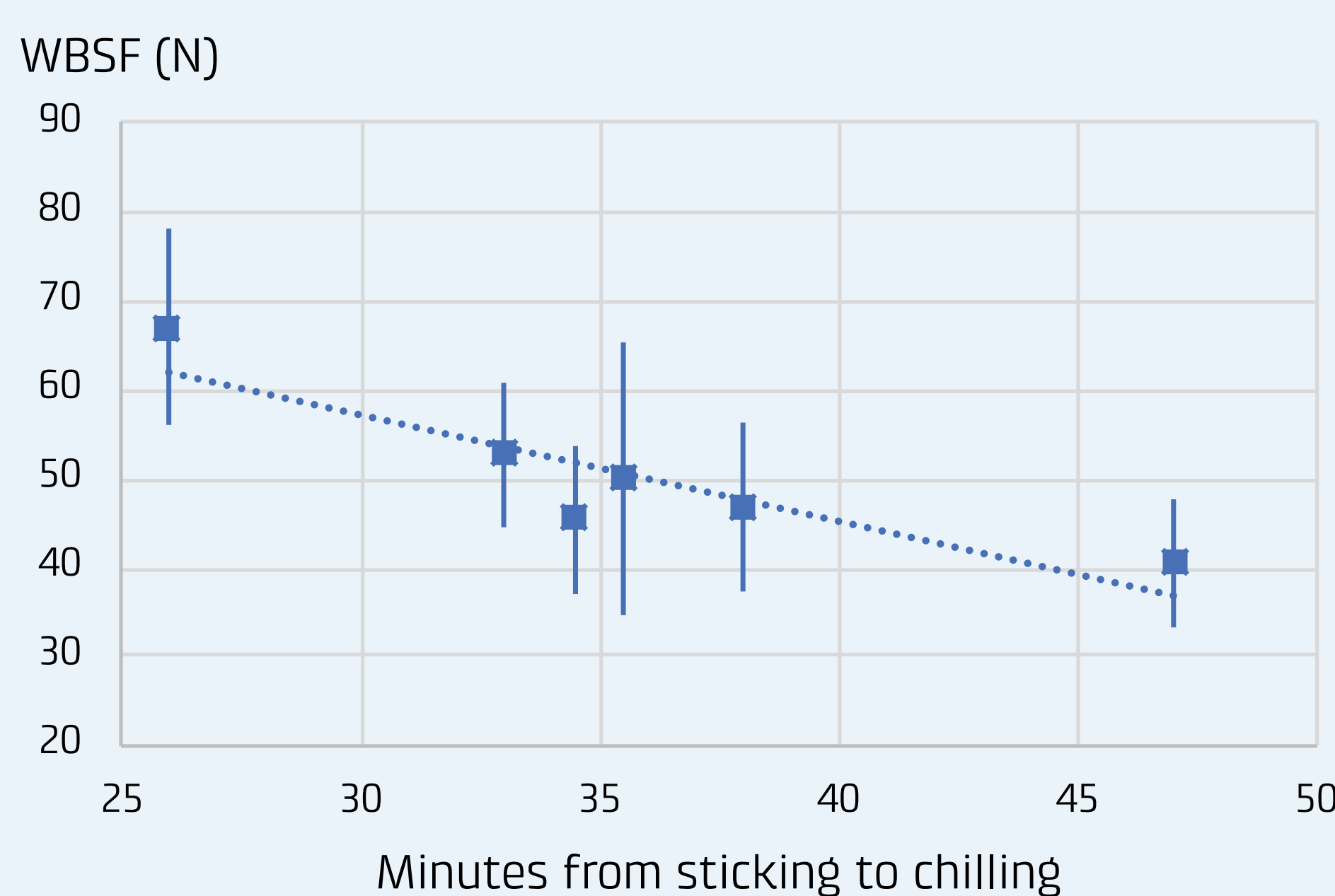


Figure 1. Minutes from sticking to chilling and WBSF. LS Means with confidence interval for the 6 different times/abattoirs.

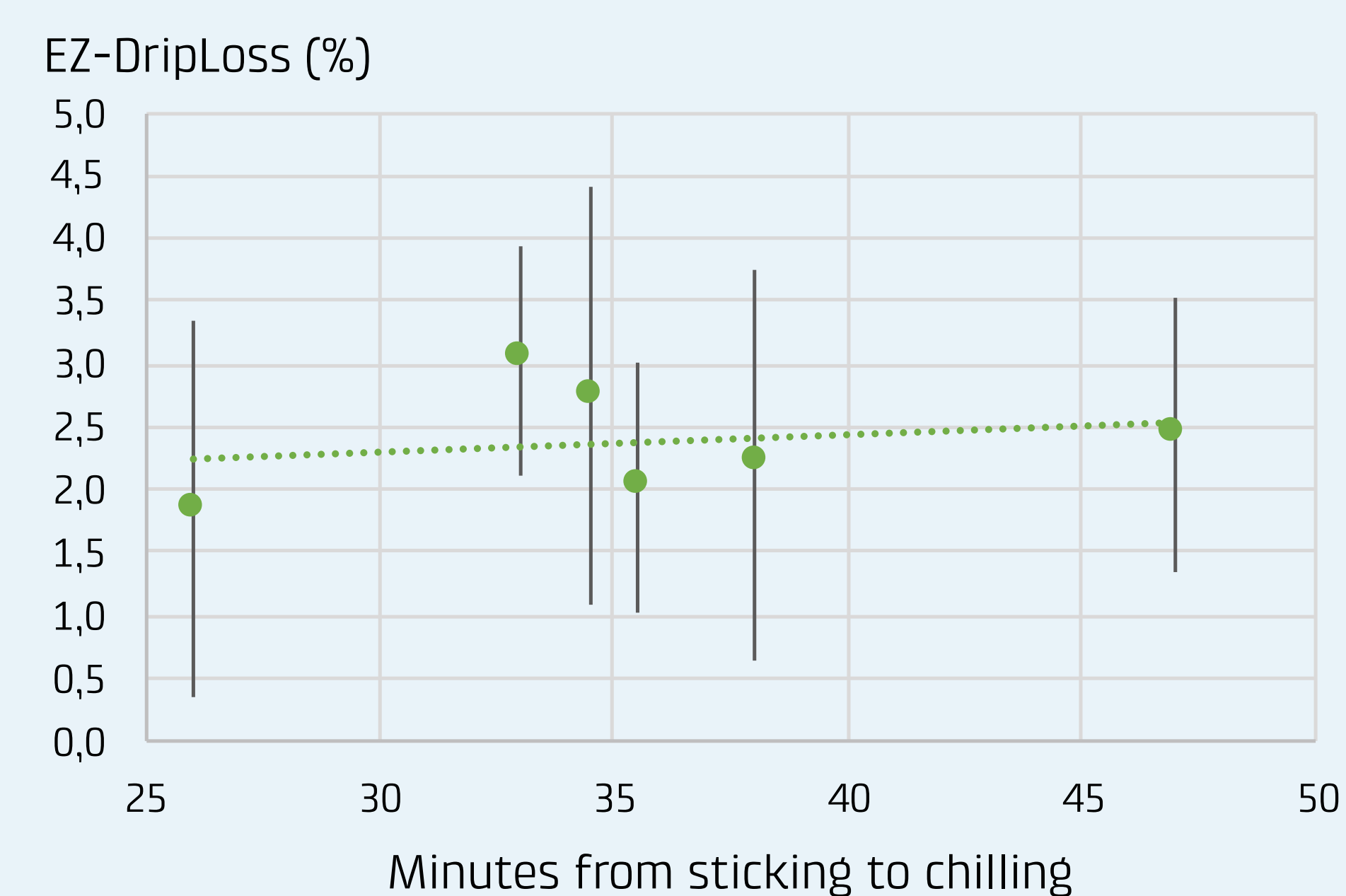
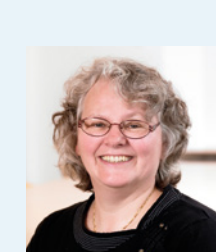


Figure 2. Minutes from sticking to chilling and EZ-DripLoss. LS Means with confidence interval for the 6 different times/abattoirs.

The time from sticking to start of chilling varies between the abattoirs due to different line speeds. Time to equalization (7°C in core) depends on both time and temperature in the tunnel. Abattoir 6 has a mild chilling process compared to the other abattoirs with a medium-hard process.

## CONTACT INFORMATION



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