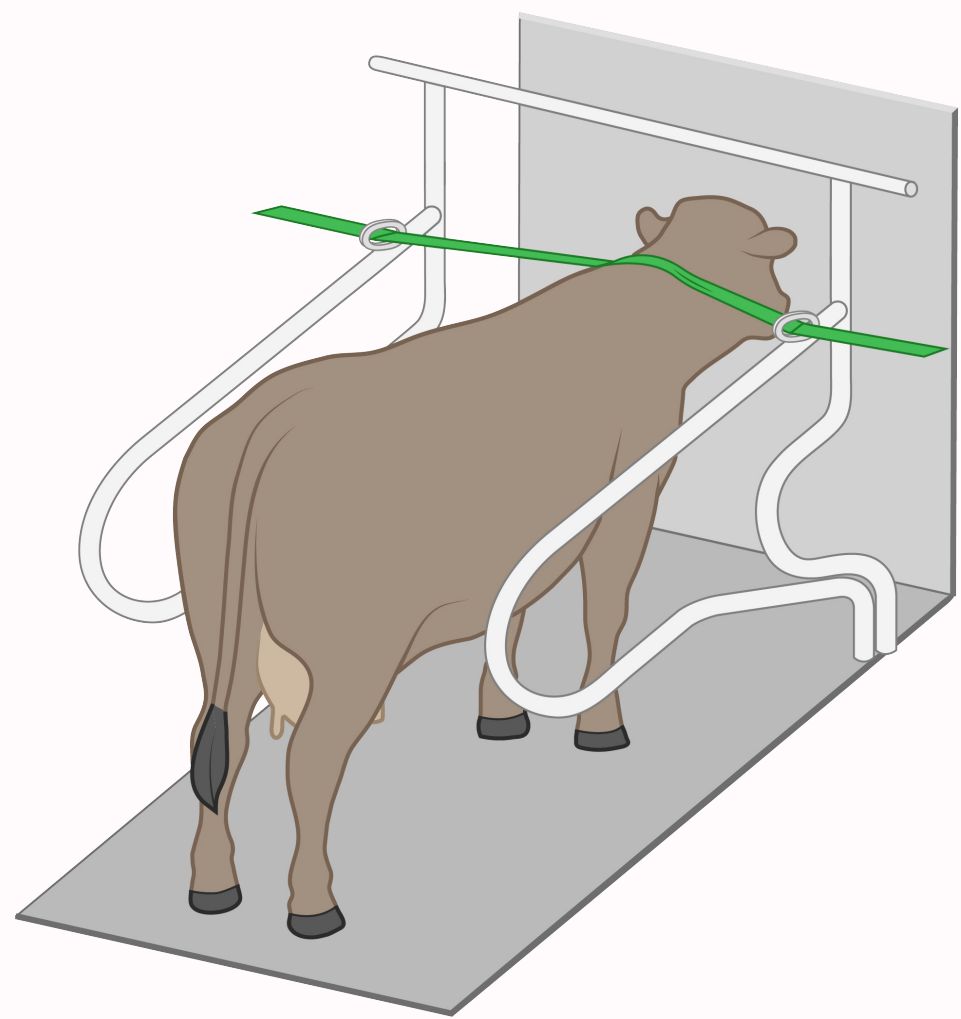


Improving dairy cow welfare with flexible neck straps while maintaining hygiene



Intro



Neck rails/straps/chains are commonly used in cubicle housing systems to position dairy cows within the cubicle in a way that limits bedding soiling by faeces and urine. However, rigid neck rails are associated with animal welfare concerns such as painful collisions, injuries, and atypical behaviours.

Aim

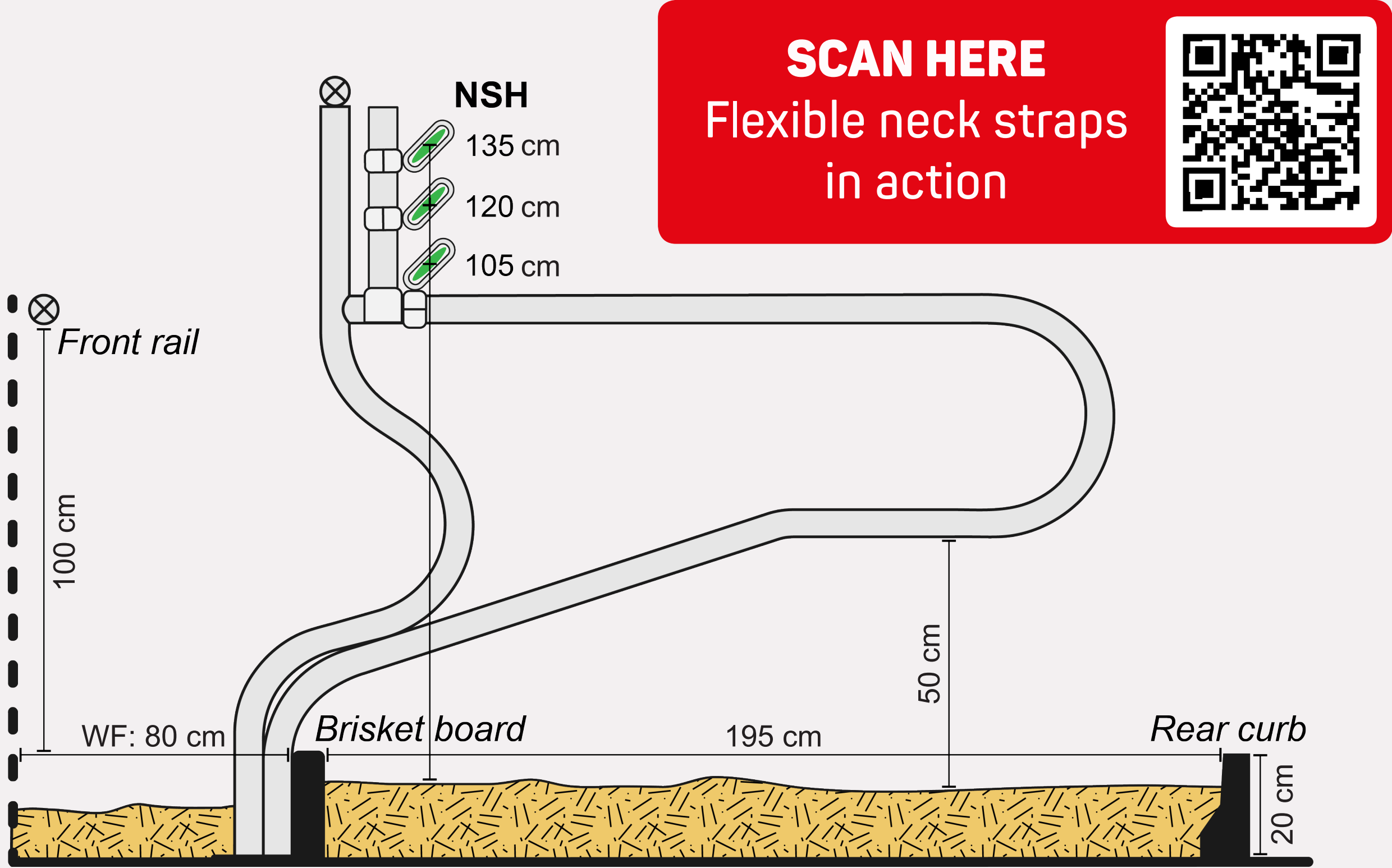
Investigate how the positioning of flexible neck straps affects rising (A), lying down (B), and defecation (C) behaviour in lying cubicles

Methods

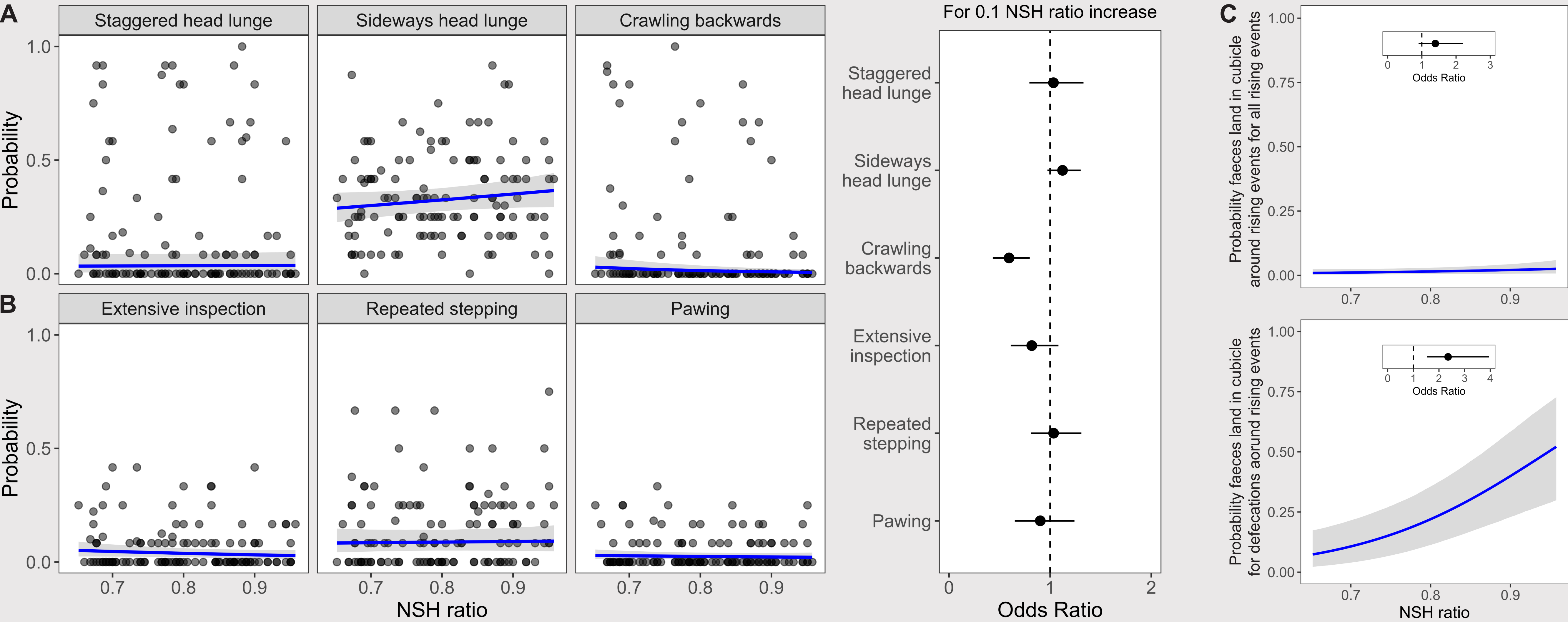
In a Swiss research barn with two pens each housing 20 lactating dairy cows, we tested three different neck strap heights (105, 120, 135 cm) for 1 week each.

To account for the herd's variation in body size (range = 141–161 cm), we calculated the ratio of neck strap height to withers height (NSH ratio), which ranged from 0.65 to 0.96.

Atypical rising and lying down behaviours and defecation behaviour around rising were assessed from video and analysed with respect to NSH ratio.



Results



Take Home



Relative neck strap height did not markedly affect rising and lying down



Cubicle soiling around rising decreased with lower relative neck strap height



Flexible neck straps appear to offer a viable alternative to rigid neck rails

