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Liegeverhalten von Milchkühen in Abhängigkeit ihrer Körpergröße
und den Abmessungen ihrer Liegeboxen

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Summary

Adequately dimensioned cubicles are of great importance for species-specific behaviour, high animal welfare, and the exploitation of the performance potential. However, the body size of dairy cows increases steadily due to breeding. The aim of this study was to investigate lying behaviour in relation to cow body size and cubicle dimensions. In total, 144 cows were observed on 8 farms, half of which with a height at the withers between 140 and 150 cm and above 150 cm, respectively. On 3 days, the lying down and standing up behaviour as well as lying positions were recorded in order to analyse the effects of the bed length ratio (bed length : withers height) and the lunge space ratio (lunge space : withers height). When bed length ratio increased from 1.2 to 1.4, cows were more often lying without physical contact to cubicle elements, have less often tarsal joint lesions, trampled less and showed less head pendulum movements before lying down, hit less often against cubicle elements during lying down and standing up, and performed more often smooth head lunge movements. In addition, straight forward head lunge movements were performed more often when lunge space ratio increased from 0.3 to 1.4. The results clarify that cubicles dimensions should be adapted to the size of large cows.