Lying behaviour of group-housed horses

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Sleep and Recumbency

Sleep is a basic need!

Recumbency time of horses

- Natural conditions: 96 min (Duncan 1980)
- Single-housed: 118-154 min (Ruckebusch 1972, Oechhsle 2001)
REM sleep deficiency vs. narcolepsy

- **REM sleep deficiency**
  - Recumbency periods which are regularly too short

- **Narcolepsy** = Sleeping disease
  - Falling asleep while being active

_Fuchs et al. 2015_
Materials & Methods

- Two groups of six mares
- 72 h per treatment
- Treatments: Control (unstructured) With Structure
Duration of sternal and lateral recumbency

- 24 min longer with structure
- No influence of the structure
Recumbency time and hierarchical level

![Box plot showing time spent recumbent for different hierarchical levels and treatments.](image)

- **Position in hierarchy/Treatment**: High/Control, High/Structure, Middle/Control, Middle/Structure, Low/Control, Low/Structure
- **Time (h:mm)**: 00:00, 01:00, 02:00, 03:00

*n=12*
Conclusions

- Positive tendency for high & middle-ranked horses
- No effect on low-ranked horses
- Strong influence of the hierarchical level

- Structural elements may improve the lying area
- Group-housing systems require know-how