

# Is the use of haynets for horses associated with increased health risks?

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- Horses have evolved to graze up to 16 hours/day (van Dierendonck *et al.*, 1996)
- Their diet should be high in fibre and fasting periods should not exceed 4 hours to prevent physiological (gastric ulceration (Destrez *et al.*, 2015)) and psychological (boredom and aggressiveness (Thorne *et al.*, 2005)) issues
- But ad libitum hay: rarely possible without risking obesity or metabolic diseases (especially for easy-keeping horses)

## «Slowfeeders» (SF)

- Mechanically slow down hay intake
- Different materials and various shapes (nets, metal grid ...)
- Positive effect on horses' stress and friendliness towards humans (Zeitler-Feicht *et al.*, 2005, Rochais *et al.*, 2018))
- Potential long-term effects on health haven't been studied yet

➔ **How to fulfill the horses' physiological and behavioural needs without risking excess weight?**

1) **Online questionnaire:** 1'480 answers → 80% of SF = haynets & horses with SF = particular profile (stratas)

2) **Pilot-study** (42 horses) → power analysis:  $N_{needed} = 670$

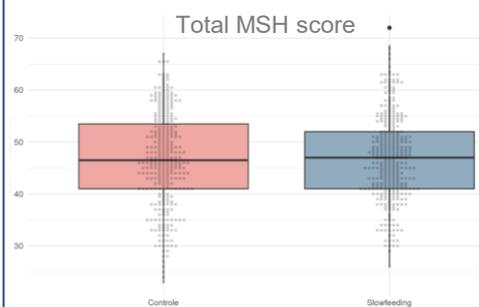


**Retrospective cohort study: 702 horses (350 with haynets / 352 control)**

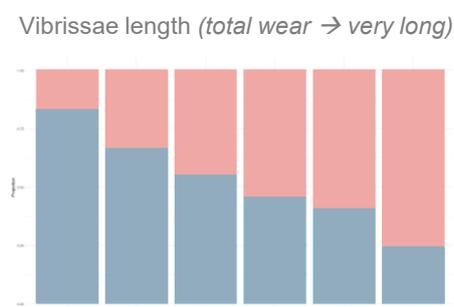
- Musculoskeletal health (MSH) assessment and control of gums, teeth and vibrissae
- Human Reactivity Test



- No association **use of haynet / total musculoskeletal health** (Student test,  $p > 0.05$ )
- No association **use of haynet / specific musculoskeletal health (MSH)**



- **Wear of vibrissae** associated with use of haynet: RR = 2.26
- **Alteration of gums** associated with use of haynet
- No association use of haynet / noticeable wear of incisors



- No association use of haynet / **human reactivity (free-test)**
- No association use of haynet / **human reactivity (tied-test)**
- **Human reactivity (tied) associated with musculoskeletal health**

*With or without haynet, that is the question...*

**Haynets are not associated with major health issues** (horses with daily social interactions and daily turn out). However, horse caretakers should be **attentive to their horses' gums and vibrissae**. Haynets could be considered for **horses whose physiological and behavioural needs cannot be met without risking obesity**. Finally, **more experimental studies are needed** to evaluate the effects of the dispensers' characteristics (height, mobility, inclination) on horses' MSH.

