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Preference for heights of feeding troughs in mares: a pilot study

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Abstract

Preferences for the height of feeding troughs of seven mares were evaluated and, as awareness of surroundings when feeding is adaptive for horses, the relationship between preference responses and attention behaviours was also assessed. First, feeding troughs at four heights (0, 25, 50, and 75 cm) were provided for 16 days, and the amount of time animals ate from each height option was measured daily. These data were used to determine the preferred/non-preferred options for each individual. An overall preference for heights of 50 and 75 cm was detected, but responses showed significant individual variation. The same animals were subsequently observed, when feeding from preferred (four days) or non-preferred (four days) trough heights, while their behaviours were recorded. Moving ears/head (attention behaviours) occurred more frequently when feeding from preferred heights of feeding troughs. We concluded that to ensure better welfare conditions for the mares in this study, it was important to consider the individual variation of such preferences if possible, however, by using troughs positioned at 50 or 75 cm, the general preference could be assured. Moreover, when feeding from their preferred heights, the study mares paid more attention to their surroundings than when feeding from their non-preferred height and thus it is likely that they defended their preferred options more. However, further studies are needed to evaluate the generalisability of these findings. We have demonstrated a methodology to assess mares' preferences and provided some preliminary data on the relationship between preferences/non-preferences and the possible emotional states of mares.

Keywords: animal welfare, attention, feeding, mare, Preference Index, trough