

## Experiment 5

Moore-Colyer, M.J.S. and Payne, V. (2012) Palatability and ingestion behaviour of 6 polo ponies offered a choice of dry, soaked and steamed hay for 1 hour on three separate occasions. *Advances in Animal Biosciences. Healthy Food from Healthy Animals*. Vol 3 part 1. 127

**Introduction:** Steaming has been shown to be an effective alternative to soaking for reducing respirable particles in fodder (Stockdale and Moore-Colyer, 2010). However, to date no information is available on the palatability of steamed vs soaked vs dry hay. The current trial sought to determine the palatability of dry, steamed and soaked hay when offered to 6 Polo ponies for 1 hour, previously fed haylage in a repeated measures design experiment.

**Methodology** Replicate bales of hay were taken from first cut Timothy and Meadow Fescue hay which had been barn-stored for 6 months. Bales were divided into 2. One half was steamed in the HG 600 while 2 x 1 kg hay nets were taken from the other half for the dry and soaked treatments. Six Polo ponies were offered 1 kg each of the dry, soaked and steamed hay simultaneously. The hay was placed on the floor in 3 different corners of a rubber-matted stable, where water was available *ad libitum*. In order to eliminate positional preferences, the experiment was repeated 3 times for each horse with the position of each of the hays being rotated between the 3 corners of the stable. Data was subjected to a repeated measures analysis of variance (Genstat 12). Observations were recorded on the first choice of forage eaten for a consecutive 5 minutes.

### Results:

*Table 1. Average amount of forage consumed in kg (on 95% DM basis) when offered to 6 polo ponies on 3 separate occasions.*

	Steamed	Soaked	Dry	Sed	Sig
Kg of Hay consumed	0.867c	0.050a	0.183b	0.0246	***

abc Values in the same row not sharing common superscripts differ significantly (P<0.001)

**Conclusions:** The results from this experiment clearly demonstrate that horses preferred to consume steamed hay to dry or soaked hay when offered free-choice in a stable environment. Observations of choice of feed revealed that steamed hay once tasted was always the first consumed. Some horses did nibble some dry hay, but quickly returned to the steamed hay until it was all consumed whereupon they then chose to eat the dry hay.