**Validation of triaxial accelerometers to measure the lying behaviour of adult domestic horses**

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Triaxial accelerometers have the advantage of being able to continuously monitor an animal’s standing and lying behaviour without requiring live observations or video recordings. To date, no units have been validated for use in equines. Onset Pendant G data loggers were tested on two mature Standardbred horses for a period of five days. Data loggers were attached vertically to a single hind limb of each of horse and set to record position every twenty seconds. Horses were monitored by two independent observers via live observations (daytime) and video recordings (night-time). Data collected from the loggers was converted and edited using a macro program to calculate the time the animal spent lying down and the number of lying bouts. A paired t-test compared lying bout duration calculated from video observations and data loggers. There was no significant difference between the video observation recordings and the output from the data loggers (t14 = -1.0732, p = 0.301) and the macro was able to tabulate the correct number of lying bouts with predictability, sensitivity, and specificity all greater than 99%. This study validates Onset Pendant G data loggers in adult horses to determine the frequency and duration of standing and lying bouts when set to sample and register readings at twenty second intervals. The validation of automated data recording devices such as the Onset Pendant G data logger will assist in reducing the time expenditure of live observation and improve our understanding of equine time budgets with respect to standing and lying behaviours.