

## The art equipment for measuring the horse's heart rate

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#### ABSTRACT

**Purpose:** of this paper: Heart rate is a reliable indicator of the stress. Non-invasive methods have advantage over the methods that have a negative influence on the condition of an animal. When breeding sport horses, which undergo stressful training every day, it is required, from an ethical aspect, to monitor their capabilities by using most advanced electronic devices Polar Sport Tester and Polar Equine RS800cx G3.

**Design/methodology/approach:** The original Polar ProTrainer 5 Equine edition software facilitates the analysis of individual training phases and gives the number of heart beats, average heart rate, average speed and distance covered in individual training phases.

**Findings:** Heart rate increased, in warming up phase, from the value associated with a resting horse (30 to 40 bpm) approximately in one minute, while, during the slow cooling down phase, ten minutes were required for the heart rate to reach the afore-mentioned value. During quick trotting heart rate are 112 heart beats per minute, while during steeplechase phase, it increased to the value of 160 to 170 heart beats per minute.

**Research limitations/implications:** To receive heart rate without disturbances already we moisten the skin on the contact spots, using a mixture of water and electrolytes (Salvana Nutrilyt). Placing receiver on the saddle close by the T56H transmitter was the optimal choice.

**Practical implications:** Modern equipment makes monitoring the horse's heart rate accurately and to perform, safely and without disturbances, exercises required during training. It also checks the heart rate, which indicates the horse's health.

**Originality/value:** Polar Sport Tester and Polar Equine RS800cx G3 are state of the art products that facilitate the receipt of the horse's heart rate signals. The accuracy of the acquired results can be compared with those obtained with ECG measurements.

**Keywords:** Technological devices and equipment; Polar monitors; Heart rate; Horse stress

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