

The Benefit of Heart Rate Training for Horses

Whatever your interest in equine activities, there is no more reliable measure of a horse's biological condition than heart rate. Continuously measuring the horse's heart rate can help you:

- Design an exercise program that is safe, reliable and appropriate for your discipline.
- Measure how your horse is responding to exercise or training.
- Monitor your horse's recovery from exercise or injury.
- Provide a vital indicator of your horse's general health.

Heart rate monitors continuously measure a horse's heart rate, via an electrical impulse transmitted from an electrode secured to the horse's body. The impulse is received on a transmitter worn by the rider/driver/trainer. The receiver looks like a wristwatch and the heart rate is displayed on a screen for the rider or driver to view. Some advanced monitors are even equipped with additional speed sensors and have the capability to download the information into a computerized program for comparative study and training.

Like an engine, your horse uses oxygen and fuel to generate energy, enabling it to run fast. The heart and lungs provide a delivery service taking the oxygen to the working muscles, which in turn use the oxygen to "burn" the fuel of carbohydrates and fat. If the heart is working ineffectively or too hard, glitches happen in the systems of the horse's body, because sufficient fuel did not get transported or did not get transported in time. Or, waste products did not get carried away effectively from the systems that used the fuel. Horses are capable of physiologically adapting to stresses and demands placed upon them. By exposing the horse to a well-designed training program, the horse's energy systems can start to be stressed or overloaded with less fear of causing harm. With good recovery bouts between training sessions, the horse's body can adapt to the overload process, becoming stronger and fitter in a safe manner.

Aerobic training seeks to improve the function of the heart, lungs and muscles. A safe program gradually increases the frequency or intensity of overload of these systems. It's a VERY difficult process to do safely without basic tools. how can a person KNOW the right level of stress, how can a person KNOW how hard to physically work a horse without causing harm? Here is how a heart rate monitor can help.

A horse's RESTING heart rate can be determined by making a reference level over five consecutive days, and taking the average of the five measurements. When doing this, it is important the horse is in a healthy state, free of injury and has had complete rest or very light work for two days prior to the first reading. A horse's MAXIMUM heart rate can be determined by measuring it during a strenuous exercise session. Three examples are: An all-out test over 1000-1600 meters, a continuous progressive galloping test and a hill test.

These two ends of the spectrum show us the end guidelines for an aerobic training program. We now have numeric measurements that can tell us a horse is doing NO work and a horse is doing ALOT of work. Knowing those two numbers, a graduated training intensity scale can be developed for the individual horse, that allows us to watch the heart rate and let us know if the horse is working anywhere from VERY EASY to VERY HARD and for how long during a training session.