

## See Inside Your Horse

By Luis Lucio

Traditionally heart rate measurement has been used in all kinds of sports to control levels of conditioning fitness, and as an indicator of fatigue levels in sport execution of athletes.

It was in 2007 when I began to use this kind of devices with my horses in training, from young horses level up to Gran Prix.

Originally I was very concern about conditioning them in the right way, but soon I realized how important was the emotional state of my dressage horses and the heart rate reflect during training sessions and competitions.

For the past 15 years I have enjoyed the work of Parelli and learned a lot about reading horses and understanding their mind and emotions, and when I received this insight via the heart rate monitor, my approach and effectiveness as a trainer was forever changed.

### Physical

In equestrian sports, heart rate devices are daily used by endurance riders and quite often by eventers or even jumpers, normally to get idea about the fatigue levels and readjust conditioning training.

In dressage, the right levels of conditioning fitness are also necessary to achieve and normally we reach them by the specific training of the daily work. With this additional concept, I believe riders and trainers can follow a better program allowing them to plan the sessions in a whole new way.

I have implemented this concept as the team coach of the Spanish Olympic Team in all our dressage Talents programs.

### Emotional

The other area that the levels of heart rate give us information is in the area of emotional stress and anxiety. This is an area that we trainers and riders are only starting to realize at a more significant level. We all can feel tension, but we don't necessarily know how critical it is.

In our discipline sometimes routines of repetition and inadequate tactical approach or pressure management can bring our horses to high levels of stress that then affect:

- The physical coordination in technical execution
- The mental understanding about the purpose of work
- Ability to learn
- Behavioral control and management

Knowing the levels of heart rate during training sessions can be real help for riders in order to make decisions about:

- Duration of every work phase
- Duration of every recovering phase (breaks)
- Tactical approach to technical difficulties
- Pressure management adjustments
- Levels of difficulty in work phases
- Length of sessions
- Content of every work phase
- Breaks and rewards

## A quick guide

State	Heart Rate	Comments
At rest	32-35	For example - a normal, healthy horse in the stable.
Walk	40-60	In recovery phase – such as in the middle of the work, better to be under 80.
Trot	90-110	Depends on activity of trot, levels of collection, suspension and difficulty of exercise, repetition, etc. May be higher in certain situations - see notes below.
Canter	100 -140	Canter work has a bigger influence on fatigue levels and conditioning effort because of how much the horse uses its body.
High physical demand	160-180	Threshold area between aerobic and anaerobic work, even as high as 200 in well-conditioned endurance horses. Normally dressage horses don't go there.
Emotional stress	Varies	Anytime the heart rate is higher than the range expected and is difficult to reduce. Especially if the exercise is not physically demanding. Note that heart rates will spike quickly when they are of emotional origin. Introverted horses don't show it! Left Brain horses will come down quickly after a spike.

Here are some examples:

- A normal easy posting trot would be around 90, but a collected Grand Prix trot with suspension, high levels of activity, big steps and covering ground during a competition can rise up to 110, 120 and even more if there is anxiety.
- The more experienced and calm they are, the lower the heart rate will be.
- Some horses can show a relatively high heart rate at the beginning of an exercise, but then repetition can make them more confident and the heart rate goes down. Or, the opposite could happen if the horse becomes increasingly stressed by the repetition, especially if they don't understand the exercise.
- In canter work, emotional stress and fatigue can create a difficult mix to deal with. Here is where we need to know what's happening, what to do and for how long.

Charts are quite easy in the physical conditioning world but as we explore the emotional world there are many factors to check because it depends on who, when, where and what we are working on and the nature and confidence of the individual horse. Monitoring the heart rate will help the trainer and rider know what is going on for the horse both physically and emotionally. It allows us to be more analytical and figure out more accurately what may be the problem. For instance, if it is inordinately high, or spikes quickly, the horse is most likely anxious. In this state it is valuable to know the horse is not in a learning frame of mind, therefore the exercise will be more of a negative experience. It alerts the rider so they can modify their tactical approach.

I have learned to assess a horse's mental and emotional state by reading their heart rates at the

different stages of work.

Every horse has a personal chart and using the numbers as a guide can help us a lot in our training journey.

When you can read the heart rate, it will help you make better decisions for the horse. For example, when the heart rate gets really high in working phases we must evaluate if the work has been going too long and they are getting tired, or if they are feeling emotionally stressed and anxious.

It is time to find the right moment to have a break!

Then check how long it takes for the heart rate to come down again and wait until then before going back to work. If the heart rates stay high, we should think about reduce the asking.

### **The "80" Recovery Rule**

Sometimes in training the heart rate can get quite high, so it is important first to know it, and then to take breaks and allow the horse to recover – mentally, emotionally and physically. During this recovering period should be better not give technical messages to the horse, just walking gently until the heart rate is below 80. If it doesn't come back or takes too long, we have to reflect about the work we have done before: Was it too long, or too hard or too emotional for the horse at the moment.

Creating high positive tension in training is not bad, could even be absolutely necessary to improve exercises and performance. The keys are the recovering times and rate. When the recovery time is fast and the heart rate quickly goes down below 80, it shows that the horse's understanding and emotional fitness is building.

When they truly understand and collaborate with the rider, the heart rate goes down immediately you begin the break.

In my research I have learned that we as riders don't give horses enough breaks during the work, and that the walk is not necessarily relaxing for the horse, sometimes they need to stand still to recover the relaxation mode and even to learn it..!

With the heart rate monitor we can use something other than our perception to take decisions and be more accurate in taking care of the horse's mental, emotional and physical well-being, as well as improve its attitude to training.

My sincere wish is that you will try to use this heart device to enhance your training results and build a better relationship with your horse based on a deeper understanding of his or her experience.

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