Fit for EVENTING

by Dual Olympic Gold Medallist

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Eventing, the triathlon of horse-sports, incorporates the three quite different disciplines of dressage, speed and endurance (cross country) and show jumping.

What is fit to compete?

People starting off in “eventing" often ask me, how do I get my horse fit? To answer that you have to know what fitness is and what level of fitness you need for the competitions you we aiming at. My definition of fitness is -the ability to complete the required amount of work in competition without excessive stress or injury. General everyday **dressage** schooling and the occasional jumping school will get your horse to a certain level, but the haphazard approach is not enough to get a horse ready for an EVENT! So below, I have written a generalized program that I use to get my horses -from the youngster off the track to the advanced eventer - fit to compete.

How is Fitness Achieved?

Prior fitness history and the previous level of competition are important in deciding the starting point for all fitness programs, but the basic principles are the same.

1. **Start with a healthy horse:**

Your horse must be well fed. Well shod wormed and most importantly sound. If your how is new or more importantly coming off an unsupervised rest (turned out), It is best to have a veterinary inspection to assess problems and predict possible future problems or restrictions, eg, diet, bad feet, predisposition to various low level soundness problems concussion or arthritis.
I also get a basic blood picture done at this early stage with my top eventers, those headed for a 3 day event. This gives a guide to any low grade infections or deficiencies in diet that need to be worked on and gives us a base level measurement to compare with later on in the program.

2- Establish a base level of fitness:

legging up the muscles. tendons and ligaments and bone density in younger horses in readiness for hard work and establishing a good aerobic platform for both the fitness increments and recovery stages. This involves long walkouts, basic dressage (not too much lateral work too early in the program), long trots and hills If possible.

3 - Specific fitness: Increasing endurance, speed, power and fitness for all three phases of the competition through a balanced Interval program,

* increasing aerobic capacity which is the efficiency of the heart, lungs and circulatory system.

* increasing the anaerobic capacity which is the efficiency of the horse at cellular level to respire (or bum nutrients) anaerobically (without oxygen) to provide energy for work in-conjunction with the aerobic system at faster speeds.

These areas are not mutually exclusive, so as your work schedule increases over time all areas need to be incorporated into your program. Once a base level is established, an interval program that gradually increases the workloads of distance speed and jumping can be undertaken. A usual

program involves a four day cycle of Day I dressage, Day 2 jumping Day 3 Gallop and Day 4 recovery. I tend to work an 8 day cycle with I day off every 8.

When bringing a horse back into work we usually spend a couple of weeks walking out on the road, followed by another couple of weeks doing some long trot work (ie. down the beach or in the forest- not on the hard roads) before starting on the real program. This serves as the “legging up” time and is the beginning of the 2nd Phase where we aim to increase the aerobic capacity. By gradually increasing the workload ie time spent and distance covered we **also** increase the efficiency of the horse’s circulatory system to carry oxygenated blood around the body.

Getting a horse fit to compete at any level of eventing requires a commitment from the rider to coordinate a comprehensive training program that incorporates training sessions to mirror the needs of the horse in competition. He must be supple, obedient and disciplined enough to do a dressage test. Brave, confident and physically capable of galloping fast across country, and then be careful and schooled to show jump clean. Also the horse must complete the event sound and confident with as little physical and mental stress as possible……

How do you work out your horse's stress/gallop program? 1. Facilities: What facilities do you have at your disposal? Your actual gallop program will depend on where you do your stress work. Some people revolve their program around using hills, others use gradual increases in speed and distance on the flat. It really depends where you have to work. Ideally I would like to gallop hills on say Day 8 and gallop on the flat using accelerations on Day 4. Most people do not have both types of terrain at their disposal.

In England in 1992. 1 was lucky enough to be staying near Sweatenham Studs Manton Farm (owned by Robert Sangster) and hired one of their 18 gallop tracks twice a week. (While riding there I was amazed by their specific purpose built tracks which included an 800 mtr indoor track for winter, a horseshoe shaped all weather surface uphill gallop with a 4 min down hill walk an all weather 1,400 mtr gallop as well as many beautifully kept spongy grass gallops which we weren't allowed to use.) I used the 1,400 mtr gallop once a week and worked on speed and intervals, a typical set for Fred was as follows:

* 5 min walk
*15 min trot
- 2 min canter; I min @ 4-500m/min. I min @ 6-700 m/min
- 3 min walk
- 2 min canter, I min @ 5-600 m/min l min @ 6-700 m/min
- 20 min trott

• 6 min canter @ 5-600 m/min accelenitlons,

• 6 min canter @ 500 m/min

• 6 min canter @ 5-600 m/min accelerations

• 5 min trot.

• 10 min walk

2. Heart rates: Careful monitoring of heart rates will help you to assess the horses fitness by giving you an indication of just how hard he is working and how quickly he is recovering from that work Every horse is slightly different in its training needs and therefore requires an individual program However, the rule of thumb for heart rate is:

- Working at less than 150 beats per min "" keeps the respiratory system in the aerobic range. This means blood is able to supply the cells (especially muscle cells) with "oxygen to bum food for energy.

- Greater than 150 bpm represents the Start of the anaerobic threshold. The anaerobic system will "kick in" when the aerobic system can no longer provide enough oxygen when both system work together.

Unfortunately the anaerobic system cannot provide this energy for an unlimited length of time as toxic lactates are a by-product of this energy system and limit the amount of time work at anaerobic speeds can be done before fatigue sets in.

- Therefore training in the aerobic range to increase the efficiency of the cardiovascular system delays the anaerobic onset. The aerobic system also assists recovery by breaking down the lactates produced by anaerobic activity, which is why the cool down process after galloping is so important as is a trot followed by a long walk after the cross-country in competition.

3. **Measuring heart rates:**

In the old days we had to develop an eye for fitness. Not very scientific and not easy for an "ex-showie" like me. When I took up eventing at 21 years of age on a horse I'd bought for a couple of hundred dollars, I was lucky enough to do a clinic with Montreal Olympics individual Gold Medalist "Tad" Coffin. Tad was a real thinker and a great inspiration. At the clinic he said to me. "you have a great horse there, all you have to learn is how to ride it and get it fit"

They were, of course, fighting words, So, at Tads instigation, I started reading all I could on interval training and enlisting the help of Brian Schrapel who was also working with Tad at time, and experimenting with interval training. Being a physical education student teacher helped as I was able to relate general phys ed training principles to what I was doing with the horses.

I started using a stethoscope to take heart rates. This worked as long as I kept the time between pulling up and taking the heart rate constant. As the heart slows down dramatically when work ceases (unless the horse is very stressed due to too hard a work out), the heart rate would be relatively low by the time I was able to take it, but at least there was a comparison to be made and something tangible to record.

Every horse is different but some average heart rates using a stethoscope are as follows:

	HR with a stethoscope	HR with HR monitor
Normal at rest approx	36 bpm……..	36 bpm
Saddled up …….	60 bpm……..	60 bpm
Walk……	60 bpm……	60 bpm
Trott……	70 bpm ……	85 bpm
Trott uphill……..	90 – 120 ……..	95 – 140
Canter @ 500 m/min….	120 –130 ……	130

Gallop @ 600 m/min….. 140 ……. 150

H Rates with a stethoscope are lower than with a heart rate monitor, as the HR decreases so quickly while you slow down to stop to take the HR.

When doing Intervals, the horse should recover to 80bpm before setting off again. This recovery should take around 3mins. If the heart rate does not go below 100bpm after 3mins your program is too hard or the horse Is not recovering. You should not set off again until it is around 80 bpm. If the heart rate is very low and is down to 60bpm after 3mins walk your program is not tough enough.

The Polar Horse Heart Rate monitor is just a sophisticated way of quantifying your program. With the monitor you can read the heart rate at any time during your workout and can see just how high the heart rate really goes in your fast work. You can slow down gradually but still know the heart rate at the finish and can monitor recovery much exactly. The really top monitors can store the whole workout of a number of horses and record, graph, interpret and play back the workout from the computer.