**Conditionning – adapted from Claire Harmon 2009**

**What is Condtioning?**

Conditioning is a systematic process in which your horse strengthens their cardio-vascular, respiratory and muscular systems thru periods of work and recovery.

When a good conditioning plan is in place it will help your horse by allowing them to perform more efficiently with less chance of injury.

**Conditioning and Pace**

Did you know ½ mile is 800 meters? 1 mile is 1600 meters.

240 meters per minute (mpm) is a trot

350 mpm is a working canter

400 strong canter working toward gallop

**After work, a fit horse should recover normal breathing in about 5 minutes. Make sure to walk your horse until he is completely cooled out.**

Your stirrups should be at cross country length.

Warm up your horse for 15-20 minutes before your begin galloping.

Most injuries occur from your horse’s:

* Fatigue
* Improper conditioning
* Lack of knowledge about pace

**Factors to consider before you begin**

Rider fitness

Age of your horse

What is the current level of activity-look at their weight, fitness and attitude?

Is “legging up” required?

Body score

Breed-the recovery rate will vary

Final goal (date of competition)

The terrain needed to condition

Adjust the feed schedule as program progresses:

* Increase energy source as they need more energy
* Mindful of protein levels
* Adding fat or carbs as they progress
* Will they need electrolytes?

Base line TPR (temperature, pulse, respiration)

* Temperature is usually between 99-100.5
* Pulse rate at rest is normally between 36-44
* Respiration at rest is normally between 8-16
* Mucous Membrane is pink
* Capillary refill usually in 2 seconds

Good grooming-aids in circulation, healthy skin and also tones muscles.

**Definitions you should know**

Long, Slow, Distance:

* It can take 4-6 months to strengthen the density of the bone
* Usually shorter work outs to strengthen the tendons and ligaments
* Improves cardio
* Helps to regulate the body temperature

Interval Training:

* The progression of work and rest, speed and duration
* Several short periods of work are alternated with brief recovery periods

Progressive Loading:

* You will add to the workload and then give time for the body to repair and adapt to that specific workload before adding more
* You will add Strength Training

Peaking

* Your horse is at his/her peak at the specific time of the event

**Conditioning Example:**

**Long, Slow Distance**

* Start with a one to three months of LSD.
* You should work up to 45-60 minutes of easy exercise. This work includes walk, trot, and canter.
* Work up to, for example, 2 twenty minute trot sets. Then begin 2-3 minutes of cantering at 350 mpm followed by the same amount of rest time.
* Be mindful not to over load the horse, it takes time to build muscle. Overloading will only delay the process because they don’t have enough time to recover.

**Interval Training**

* Then move on to the interval training.
* Cardiovascular conditioning comes into play here.
* There are two kinds of cardio:
* **Aerobic** (requires O2 in their system)
* **Anaerobic** (less efficient and produces lactic acid).
* We want to increase the aerobic exercise early in our training.
* This is monitored by their heart rate and speed.
* Anaerobic training comes later, and works on short fast work, turns and sprints, needed for cross country and stadium.
* Keep increasing the cantering times slowly, and match the work with equal rest times.
* As your horse gets in shape increase speed, again slowly, from 350 to 375 then 400, etc, until you reach gallop.
* You are ready to move on when the horse can canter three 4 minute canters at 400 with a heart rate of around 150 per minute
* The heart rate should drop during the rest set.
* As you continue start adding 2 minute gallops, 4 minute trots, 2 minute gallop, rest.
* Work up to 2 sets 3 times per week

**Progressive Loading**

* You then begin progressive loading adding more time to the gallops.
* You also add time to the rest so your horse is able to recover.
* In time you can add some strength training, up hills to build muscle.
* Pulse rate is normally 36-44 at rest, and should stay between 100-150 per minute.
* Respiration is normally 10-16 at rest, at work it should not go over 100 per minute.

**Peaking**

* About 2-3 weeks before the event you would increase the intensity of the sets (sprints) while decreasing the galloping.
* This will max the aerobic capacity of your horse.
* Real strenuous workouts end by 5-10 days out.
* During the last days before competition make sure your horse is hydrated.
* This time will also allow for muscle repair and any lactic acid to be flushed from the body.
* Electrolytes in the morning will be helpful in replenishing sodium water retention.
* They should be ready for your event.

**Additional Considerations**

* Conditioning schedules vary for every horse and this is giving a broad basic example, obviously you would be flexible to adhere to your specific mount.
* Blood work and lameness exams should be a part of the program to evaluate the horse’s overall condition.
* Time in the saddle is not the same as a conscientious conditioning plan.
* Be flexible with your schedule.
* “False” readings in TPR may occur. That is why it is important to establish a consistent plan.

**After Cross Country in Hot Weather**

* As you come off cross country, remember to slow down in a balanced manner because your horse will be tired and more likely to injure themselves in transitions
* Dismount as soon as you can, remove the saddle if it’s possible to do so quickly, loosen the noseband, and walk your horse until they stop blowing (breathing hard). If it’s not possible to remove the saddle quickly, loosen the girth.
* Sponge/hose them off as soon as possible. At most events, there is ice water available for this at the finish. If not, you will need to bring some before your ride. Repeatedly remove the water with a sweat scraper until the water you remove is no longer hot.
* Concentrate the water on areas where the veins are close to the surface (inside of hind legs, between hind legs, jugular vein, etc)
* Keep the horse walking until he is completely cooled out. Offer him water every few minutes as he walks.

**Care of a Horse After Strenuous Work**

* Cooling out: Walk for 15 minutes to cool him out. His breathing should return to normal in 5 minutes of walking.
* Legs: Right after work, pick out his feet and check his shoes. Run your hands down each leg, feeling for swelling, cuts (particularly on the heel), or tenderness. After he is cooled out and relaxed, check the way he moves for lameness or soreness. You need to know your horse’s legs well enough to notice any small changes. After hard work, you can take care of your horse’s legs by hosing them with cold water, drying them, and using rubbing alcohol on the tendons and ligaments. Stable bandages and/or poultice on the legs may be recommended. Check him at night or in the morning for lameness and inflation.
* Water: Your horse can be given water as he cools down. Remember that after strenuous work he may drink much more than usual, so he may need more water in his stall overnight.
* Feeding: Your horse can eat hay when he is cool. However, he should not eat grain for several hours after very heavy work.

**How to Tell if Your Horse is Fit Enough for the Work Asked:**

* An unfit horse will tire more quickly; he will be sluggish or clumsy or start to stumble and jump carelessly. In this case, he is seriously tired and needs to stop.
* An unfit horse is also more likely to injure himself. If you feel him moving unevenly, stop and check him. He may have twisted a shoe or gone lame.
* An unfit horse will breath very heavily. A fit horse’s breathing should return to normal in 5 minutes of walking after strenuous work.
* A very unfit horse will invert, meaning that his breathing is faster than his pulse. This is dangerous.
* An unfit horse may not be willing to do the work asked of him. For example, he may refuse fences. If your horse is being difficult, it’s important to consider if he is too tired to continue.

**What is a cooler / anti-sweat sheet?**

* When your horse gets sweaty or wet in cold weather, a cooler can be placed on him as he dries. A cooler is a loose wool blanket that is breathable. The horse should not be turned out or left overnight in a cooler. It is only until they dry off. Your horse’s coat cannot keep him warm until he dries. It is important not to let him overheat in a cooler so check him regularly.