

Using Equine Breathing to improve competition performance

When you go to shows does your horse suffer from

- Nervous stress in various forms
- Poor performance (compared to work at home)
- Loss of fluidity in movement or stiffness
- Reduced impulsion
- Lack of attention to the rider
- Separation anxiety
- Loading or travelling difficulties
- Increased snorting, neighing, pawing the ground, headshaking etc
- Lack of speed, endurance or stamina
- Tying up
- Exercise induced pulmonary haemorrhage



If so then Equine Breathing may be able to help improve your performance. Even if you don't have any of these problems, Equine Breathing may still improve performance.

Regain good health

First, do an Equine Breathing program¹ to help recover chronic conditions such as head shaking and anxiety and to improve the breathing pattern and thus overall health, generally.

Horses that over breathe tend to get stuck in the adrenalised 'catabolic' state of flight or fight. Adrenaline produces feelings of anxiety and restlessness (nervous stress). This is fine and essential if you are about to flee for your life or go round a XC course, but the over breathing horse is unable to shut off the adrenaline. It's likely s/he feels wound up all the time – especially in new circumstances. Regular Equine Breathing on the Equine Breathing program, helps the horse into the opposite 'anabolic' state of relaxation, where resources are put into organs, immune response (defence against disease), healing and cell maintenance rather than muscle groups. The idea is that the horse heals, but can respond more appropriately, remaining calm and increasing adrenaline only when needed.

Another reason that Equine Breathing is calming is that the low carbon dioxide (CO₂) resulting from over breathing affects nerve cells which makes the horse hypersensitive to stimuli (spooky) and makes concentrating difficult. Equine Breathing helps bring CO₂ levels up towards normal, reversing this excitable state.

Increasing the body's carbon dioxide levels through Equine Breathing increases the amount of oxygen that can be taken up in the lungs. This is because oxygen is exchanged for carbon dioxide on the haemoglobin in the red blood cells, so the more CO₂ there is leaving the haemoglobin the more oxygen can be taken up by the haemoglobin. At the cells, the higher the CO₂ levels, the more oxygen is released from the haemoglobin and is therefore available to the cells for aerobic respiration. As the horse exercises more intensively the oxygen demand grows and if it cannot be met the cells have to go into anaerobic respiration. So increasing the oxygen availability through Equine Breathing is likely to increase fitness.

Specific benefits of Equine Breathing on a show day

Loading and travelling

Equine Breathing your horse while you are preparing to travel calms and relaxes horses. If the horse is a poor traveller an Equine or Grazing Breather can be used up to and including loading, and during travelling if they are accustomed to it, and can be supervised.

Following unloading, if the horse is excitable in new surroundings, Equine Breathing can be used to regain composure (for both of you!).

Warming up

Reducing the breathing makes more oxygen available to the cells. If you Equine Breathe your horse before starting work, the increased oxygen in the muscles will result in increased cellular respiration, which produces heat. So you literally warm up the muscles. It also produces CO₂ which releases oxygen from the blood to the cells (due to the Bohr effect) so the muscles will be able to continue to respire aerobically (using oxygen) upon exertion, for longer. This is good because once muscles are forced into anaerobic respiration they produce lactic acid which builds up and reduces muscle functioning and can result in stiffness and tying up.

The more CO₂ is available in the muscles, the less prone they are to injury and the more fluidity, suppleness and ability is in the movement.



In addition to better physical functioning, Equine Breathing before your event improves brain function. The increased carbon dioxide results in more oxygen reaching the brain due to

1. relaxation of smooth muscle of blood vessels enabling better circulation, and
2. better oxygen take up in the brain due to the Bohr effect.

The horse is likely to have better concentration, problem solving ability and focus on the rider - important safety considerations for some disciplines.

Lethargic horses may be suffering from lack of carbon dioxide and of oxygen. This causes fatigue as the cells are forced into anaerobic respiration which produces only tiny fraction of the energy produced by aerobic respiration. As a horse gets stressed, adrenaline production increases. This increases breathing which increases loss of carbon dioxide which results in even less oxygen being available. The idea is that reducing the breathing using Equine Breathing increases oxygen supply and gives the horse more energy.

After your class

The increased activity of the event itself (possibly not the case in some showing classes) will increase production of carbon dioxide by the muscles. A few minutes of Equine Breathing after your class will slow down the loss of this extra CO₂, making it available to the body. This may for example, help in getting cells back into aerobic respiration as quickly as possible and removing lactic acid from muscles enabling muscles to recover fully and more quickly. Plus of course it is calming and enables the horse to switch off adrenaline and come back into the anabolic state. Reminding the horse how to breathe in stressful situations will also be beneficial in terms of their Equine Breathing program.

Help by improving your own breathing

The principles, and benefits in fitness, relaxation, suppleness and focus, that may be gained by Equine Breathing are equally applicable to people. Keep your mouth closed, stop talking and gentle your own breathing when you breathe your horse and it will help both of you.

Build up to keeping your mouth shut even when you compete and the benefits will be increased.

How much Equine Breathing?

Each time your horse starts to stress at shows use Equine Breathing and gradually it's likely s/he will stress less. When things are going well and the horse is calm and attentive, a little Equine Breathing can go a long way. Do some before you warm up and compete and afterwards, and at any time in the day when you feel that the horse would enjoy a chill out. It's easy to do a few minutes of Equine Breathing.

How much to do varies between one day and the next and between different horses. The best rule of thumb is to continue Equine Breathing until the horse is completely calm and relaxed and enjoying the session. Generally this will take less time to achieve as the horse's general breathing pattern improves. Once the horse immediately relaxes into a breathing session do between 5 and 30 minutes as a rough guide.

If you do more Equine Breathing and exercise than usual on a show day you might increase the rate of healing and could get a build up of toxins (see ¹) Provide unrefined (grey) salt in a bucket (not in a feed!) to facilitate excretion of toxins.

In the days after the competition, Equine Breathing may help improve the rate of recovery of any injuries or tired muscles.

The complete Equine Breathing program¹ could have further performance benefits. Other potential benefits include; muscle building in the correct form, improving outlines; skin, coat and demeanour becoming increasingly healthy; rate of healing from training or competition injuries improved, and old (even many years old) scars and lumps may even become active, heal correctly and fade away. And of course, reducing symptoms such as sweet itch, excessive fly worry, hay fever and head shaking will greatly add to your quality of performance and enjoyment.

Even if you don't have any of the issues mentioned above, it's possible that you can still improve performance. Horses that are apparently breathing normally can, with training, improve their breathing, leading to increased stamina and endurance, resistance to injury and a significant competitive advantage.

Equine Breathing is easy to do and the 1N technique can be learnt for free.
See www.equinebreathing.com/how_to_do_Equine_Breathing.htm to get started

¹ The Equine Breathing program, what to expect and how to manage healing are detailed in the instructional video/DVD that accompanies the Equine and Grazing Breathers and in the Equine Breathing Starter Guide.

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