

## **The Equine Balance Equation, Part 3: Balanced Muscles**

By Kathy Arroyo

### **The Equine Balance Equation:**

#### **Balanced Teeth**

+ **Balanced Feet**

+ **Balanced Muscles**

+ **A Balanced Rider**

= **A Balanced Horse**

Balanced muscles are an essential part of the equine balance equation. The horse world knows too well that horses, like people, are expected to perform to the best of their ability. The horse owner/trainer wants the horse to run faster, jump higher and perform longer. Muscles are what move the horse, so a balanced musculature is essential. But daily training, especially in an unbalanced horse, can cause injury and aches and pains, some subtle enough to be overlooked, until there is substantial damage. Or, the horses get treated with drugs - which allows them to continue with their daily routine - and although the horses *seem* to be doing well, more and more injury occurs. Either way, the real origin of the problem is not muscle imbalance; muscle imbalance is merely the result of another basic problem.

If the horse owners/trainers were more aware of the horse's muscular structure and biomechanics, they would be able to have more insight as to what might be the true origin of their horses' problems. We have taken the horse out of his natural habitat, fed him processed food, given him little grazing or room to run, put bits in his mouth, altered his feet, put riders on him that are out of balance, etc. And we wonder why he has problems. It is our responsibility as owners and guardians to learn and understand as much as we can to avoid unknowingly hurting our horses. We can also learn how to help make our horses' lives better and keep them comfortable in their efforts to accommodate and please us.

#### Cause or result?

Muscles have to work together and be symmetrical for a horse to be well balanced. If you look at your horse, you can see if each side of the body is equal. If a horse is being worked in one direction more often than the other direction, such as with racehorses, he will become unbalanced and be tighter or more restricted to one side or the other. The horse owner/trainer has to work the horse equally in both directions.

Musculature can be affected by other problems as well. The temporomandibular joint (TMJ) and how well it works has a large effect on the muscles of the neck, shoulders, and legs, and the rest of the body as well. TMJ problems are usually caused by dental problems. Rotation of the jaw is the way the horse grinds his food, but dental issues, which can greatly interfere, are something most people don't think about - the horse's teeth are not easily seen or felt. Horses, who have 44 teeth erupting throughout their lifetime, need their teeth floated and balanced at least yearly. The teeth develop points, ridges, ramps, and waves, and can become out of alignment. Proper dental care is just as

important as proper hoof trimming. If any of these dental problems are not addressed, the horse's musculature from the muzzle to the shoulders becomes affected. The muscles in the face and shoulders will become visibly out of balance or atrophied. As time goes on the spine, hips, hocks, and other joints can become negatively affected, just as the balance of the hooves affects the muscular and skeletal systems.

Equally as common and troublesome are the instances of a body imbalance altering the proper wear of hooves, and, yes, even teeth. All parts of the body are inter-related and inter-dependent.

For instance, sore backs in the thoracic, lumbar, or sacral areas are frequent problems in the horse. It is believed that in many cases these problems are due to muscle spasms caused by riding carelessly or riding in a poorly-fitting saddle (this will be addressed in a future article). Sore shoulders, less common, are often thought to be from overwork. All of the above, however, are problems that are secondary, typically occurring because of the animal altering his gait to compensate for sore leg joints and/or sore hooves. The muscle spasms are a result of the stress and strain of compensation. Blood circulation and energy flow are disrupted, and nerves are disturbed – by a decrease in the blood and oxygen supply and/or by pressure or pinching in the vertebrae due to the altered gait and body carriage. The altered gait and body carriage negatively affect the entire body, including the original problem. See how one uncomfortable hoof can create a self-perpetuating vicious cycle of imbalance and pain?

#### Breaking the cycle

So how can this self-perpetuating course of events be stopped, or better yet, prevented? First of all, practice preventive maintenance. Schedule regular appointments with your hoof trimmer (typically 4 to 8 weeks apart), your equine dentist (typically yearly for mature horses), and your equine bodyworker (as needed).

Second, learn to recognize the signs of a problem or imbalance so it can be addressed right away, before compensation kicks in and further complicates things. There will be differences from side to side in the tone of his muscles at first, then later in their development. Asymmetry of the musculature indicates that problems have already been in existence and that further problems (skeletal changes included) are probably in progress. Skeletal imbalances will result over time, so be observant and address problems as soon as they are noticed. Look for any slightly-off gait or body carriage. Compensation can hide a lameness, but it would show up in the body carriage. Learn to look for any unevenness when your horse is standing and when he is moving. Note which lead he uses most. Watch him on hard and soft surfaces, hills, and flats. Look at him from all angles and compare sides. Ask him to do carrot stretches and see where he has less and more stretch.

Third, if you suspect a problem or imbalance, call in some help.

### Getting help

A team of experts is the best approach since each area of expertise depends on the other. Aiming to fix an isolated problem, such as reducing the swelling in a strained hock, does not necessarily address the original problem. If the hock is swollen from strain due to compensating for an improperly trimmed hoof, or compensating for a TMJ problem affecting the hips, then the hock problem will return.

**Veterinarian** – Your holistic vet will look at the whole horse and take all factors into consideration when assessing the situation, before treatment is prescribed. Good health depends on balance.

**Equine dentist** – Your equine dentist can recognize and address the problems in the horse's mouth that may be causing (or be caused by) a body asymmetry or TMJ imbalance.

**Hoof trimmer** – Your hoof trimmer can recognize and address the hoof problems that may be causing (or be caused by) a body imbalance.

**Bodyworker** – Your horse's bodyworker can recognize and address the muscular imbalances and discomfort, enabling your horse to regain muscular comfort, balance and flexibility. Once the biomechanical cause (hooves, teeth, etc) is corrected then the muscles and soft tissue can be addressed. Treating the secondary problem first will bring only temporary relief.

There are many different types of massage and hands-on therapies that work on the soft tissue and energy system of the horse. A knowledgeable therapist will look, listen, and try to understand what is bothering the horse, but understands that the whole body is involved. Therefore he or she will address more than the 'sore shoulder' and will use a holistic approach. When circulation has been restored, and energy in the horse's meridian system flows correctly, the horse will start to heal himself. Behavioral and emotional problems that affect muscles can be addressed with some types of bodywork, such as Equine Touch, T-Touch, acupressure, Reiki, and massage with aromatherapy. You can learn to do these kinds of bodywork yourself, either as a bodyworker by trade or as a caring and responsible owner and guardian.

**Trainer** – How you ride and what your horse wears when you ride all have an effect on his balance. A knowledgeable trainer is another valuable member of the team.

All of these experts play an important role in preventing and stopping the vicious cycle of imbalance. It is the horse owner's responsibility to call on these experts when needed, learn from them and other sources, and to become observant – for the good of the horse.

Strive to find and correct the original biomechanical problem first. Three important places to look are the hooves, the teeth, and the rider's influence. Then work on correcting muscle and soft tissue imbalance by enabling the horse, through appropriate

bodywork, to rebalance himself. Remember a horse's 'parts' are interactive and interdependent – he is not just the sum of his parts.

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