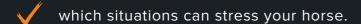


Stress - Symptoms





IN THIS E-BOOK YOU WILL LEARN...



what stress means for your horse.

whow your horse deals with stress.

how you can avoid stress for your horse.

wawhat stomach ulcers and colic have to do with stress.



TABLE OF CONTENTS

1. 1	Introduction 1.1 The five freedoms 1.2 How do horses relieve stress? 1.3 How can I tell if my horse is stressed? 1.4 How can I avoid stress in horses?	1 2 3 4 4
2.	Stress vs. instinct and routine 2.1 Very sensitive: your horse's senses 2.2 So important: stress-free feeding! 2.3 The stress memory	5 5 6 7
3.	What can trigger stress in my horse? 3.1 Nine possible stress situations	8
4.	Stomach ulcers and stress 4.1 The link between gastric ulcers and stress 4.2 Prevention of gastric ulcers	20 20 20
5.	Symptoms of stress in horses 5.1 Different reactions to stress 5.2 Identification of stress symptoms	22 22 23
6.	Prevention and avoidance of stress in everyday life 6.1 Optimum housing and feeding conditions 6.2 Colic and stomach ulcers as stress triggers 6.3 Boredom as a stress factor 6.4 Mastering stressful situations 6.5 Avoiding stress transmission	24 24 25 26 27
	Take Home Message Stress Check	28 29

For reasons of better readability, gender-neutral terms are used throughout the e-book. All personal designations apply to all genders.



1. INTRODUCTION

The bond between humans and horses is a very special one.

The proverb "Some of my best friends never say a word to me" describes the relationship between humans and horses perfectly: we communicate without words and yet we understand each other. As riders, we think we know what our four-legged partner wants from us when he lovingly nudges us in the side or what his favourite food is. But can we really always be sure that our horses are doing well and feeling comfortable? Or could they possibly be under stress?

SStress in horses is a complex and often underestimated issue that can affect both the physical and mental health of our beloved four-legged friends. Horses are highly sensitive creatures that react extremely sensitively to their environment and interactions with their owners and conspecifics. The various aspects of keeping, training and handling can cause stress and therefore have far-reaching effects on the animals' well-being and performance.

Horses are flight animals by nature.

OAlthough humans have turned horses into loyal and reliable companions in the course of evolution and domestication, horses retain their innate flight instinct - some more, some less. As a horse owner, it can therefore sometimes be a challenge to deal with our four-legged friends. Horses react individually to stress and can display different behaviours. A horse's temperament, confidence and sensitivity influence how it reacts to stressful situations and how its flight instinct manifests itself. However, as owners, we can take steps to minimise stress for our horses and provide them with a comfortable environment.

In this e-book, we will look in detail at what stress means in horses, how it can be recognised and what measures can be taken to promote the well-being and quality of life of our horses. Ultimately, as responsible horse owners, we want to ensure that our faithful companions are happy and healthy.



1.1. THE FIVE FREEDOMS

The five freedoms are a guideline that describes the basic needs of animals to lead a species-appropriate life. They include freedom from hunger and thirst, from discomfort, from pain, injury and disease, from fear and stress, from restrictions on natural behaviour and from social isolation. By respecting these freedoms and ensuring that your horse is well cared for in all these aspects, you are actively contributing to the well-being of your beloved riding partner.

How can you realise these freedoms?

It's not just about feeding and caring for your horse, but also about providing it with a species-appropriate environment in which it can feel safe, comfortable and free. Make sure your horse has enough exercise so that it can move naturally and follow its natural behaviour. Ensure regular veterinary examinations to recognise and treat potential health problems at an early stage. Make sure it has enough food and water available and that its needs for social interaction are met.

Freedom from fear and suffering
Horses are herd animals and therefore
appreciate the presence of other horses,
but coactly what is going on so that your
horse is a pared unnecessary trouble.

Freedom from hunger, thirst and
mainutrition
The animals should have access to good
quality food and clean water at all times.
The type of feeding is also important in
order to avoid metabolic disorders.

Freedom from disconfort
In order fer the animals to feel
conformation, there are such as resting areas
in indoor systems.



By observing the five freedoms, you are not only showing interest in your horse, but also a sense of responsibility as a horse owner. Therefore, take the time to inform yourself about these freedoms and actively apply them when dealing with your horse. This will have a positive effect on his well-being and strengthen your bond.

It is important to know and take into account the natural behaviour and characteristics of horses. Animal handling and horsemanship are common concepts in English-speaking countries that offer recommendations for handling horses with as little stress as possible. Examples include the guidelines of the Alberta Farm Animal Care Association (afac.ab.ca) and the Alberta Equestrian Federation or the "Techniques for Safely Handling Horses" from Oklahoma State University.

1.2. HOW DO HORSES RELIEVE STRESS?

In nature, horses relieve stress by fleeing. If the horse is exposed to threatening situations that cause it fear and stress, it responds by fleeing. However, unlike in nature, horses today cannot always flee as they would instinctively do, for example because they are in the stable, tied up in the grooming area or being ridden. Escape is usually not possible in these situations, so horses relieve their stress through other behaviours.





1.3. HOW CAN I RECOGNISE IF MY HORSE IS STRESSED?

While horses would flee in stressful situations in the wild, they usually express stress in human care depending on the situation and individually. If they are tied up, they may start to prance nervously on the spot, pull on the rope or throw themselves down. Under saddle, running is a common sign of stress. However, mounting, bucking or frequent defecation also indicate that the horse is stressed. We have summarised further symptoms of stress in horses for you in Chapter 5.

1.4. HOW CAN I REDUCE STRESS IN HORSES?

Horses are creatures of habit and a structured daily routine with fixed times for feeding and exercise gives your horse a sense of security. If a change is imminent, we should therefore give our horses time to adapt to the new situation and settle in.

It is also important to remain calm when dealing with your horse. After all, you can't explain to it what is happening. Your horse's world is not characterised by words, but by impressions. These can be visual impressions, but sounds or odours also play a role. Your horse associates positive or negative experiences with these impressions.

For example, if your horse is only transported when it goes to the vet, it will associate the trailer with little to no positive feelings, as nothing pleasant awaits it at the end of the journey - which only makes loading more difficult. Regular training with the trailer will make it seem more commonplace to the horse. Rewards can help the horse to associate the trailer with something positive.

Sometimes it is also we ourselves who stress our horses through our behaviour and certain ideas. Our ideas of the perfect environment for our horse do not always correspond to the needs of our horses. For example, there are horses that prefer to be kept in a box rather than an open stable or prefer to stand alone in a paddock rather than in a group.

AnOn the other hand, horses are social animals and form friendships. When it comes to relocations or sales and separation, this can be a potential stress factor. In chapter 6 you will find helpful tips and advice on how to reduce stress for your horse in everyday life.



2. STRESS VS. INSTINCT AND ROUTINE

2.1. VERY SENSITIVE: YOUR HORSE'S SENSES

As flight animals, horses perceive their environment in an extremely sensitive and instinctive way. Their senses are designed to recognise potential dangers at an early stage so that they can flee as quickly as possible.

Sense of sight

Horses have a wide field of vision of around 340 degrees, which gives them almost all-round vision. This wide-angle vision is a remnant of their evolutionary development as prey animals. However, they are colour-blind and perceive the world largely in shades of grey. Movements are recognised particularly quickly, which further supports their ability to detect potential threats at an early stage. In addition, horses have a remarkable ability to perceive minute details in their environment, such as the wobble of a blade of grass or the flutter of a bird in the wind.

Sense of hearing

Horses have excellent hearing. They can perceive higher frequencies than humans and pick up sounds from a great distance. The ears can be moved independently of each other to better localise sounds from different directions. Horses are also able to recognise subtle differences in the sound patterns of noises, allowing them to distinguish between familiar and potentially threatening sounds.

Sense of smell

Horses have a well-developed sense of smell. They can detect certain odours from a great distance. Horses use their sense of smell to recognise conspecifics, but also to detect food or water. In addition, they are able to perceive human emotions through odours and can therefore also detect our moods and intentions.

Sense of touch

The sense of touch plays an important role in communication between horses. Through touch and physical contact, they can gather information about their surroundings and their conspecifics. Horses also use their sense of touch to perceive the nature of the ground, which helps them to move safely and avoid potential dangers. Tactile sensors in the lips also enable horses to recognise subtle differences in the structure of food. This enables them to distinguish between poisonous plants and edible grass, for example.



These well-developed senses help horses to recognise dangers and find their way around their environment. An understanding of these natural instincts is crucial for optimising our dealings with horses and taking their needs into account in terms of husbandry, training and care. In this way we can build a harmonious relationship with them and support their natural abilities in the best possible way.

2.2. SO IMPORTANT: STRESS-FREE FEEDING!

As you probably know, horses are creatures of habit and need a regular daily routine with fixed times. These habits are very important to them as they offer them security and stability. One of the most important activities in a horse's daily routine is undoubtedly feeding.

To ensure a horse's well-being and avoid stress, it is therefore crucial that food is given at regular times. Horses have an internal clock and are used to receiving food at certain times. If this routine is interrupted or the feed is delayed, this can lead to restlessness and stress. Horses are very sensitive and quickly notice changes in their daily routine.

By giving the feed punctually and reliably at the usual time, you can therefore avoid a lot of stress. The horse feels safe and secure because it knows that it will be fed regularly and reliably. This in turn has a positive effect on the horse's health and well-being.

Care should also be taken to ensure that the feed rations are balanced and adapted to the horse's individual needs. A healthy diet is essential for the horse's health and performance. In addition to punctual feed distribution, the quality and composition of the feed should therefore also be taken into account.



2.3. THE STRESS MEMORY

In addition to the goal of creating a safe environment for people and animals, it is also important to maintain a stress-free environment for horses and ensure that they have positive everyday experiences.

Let's come back to the example of loading: if a horse has had a negative experience, for example because it was shouted at and people were running around frantically, this will also have an effect on future loadings. The horse will always associate this with stress, whereby not only the situation but also certain objects are memorised by the horse.

The horse's memory is extremely specific - you could even call it photographic. One example: US animal scientist and behavioural researcher Temple Grandin reports of a horse that was mistreated in the past by a human wearing a black cowboy hat. This specific piece of clothing was burnt into the horse's memory in precisely this terrible situation - which is why the animal still reacted fearfully later when other people also wore a black cowboy hat. Light-coloured variations or baseball caps, on the other hand, were completely unproblematic for the horse and did not trigger any negative reactions.





3. WHAT CAN CAUSE STRESS IN MY HORSE?

Not all horses are equally susceptible to stress. As mentioned above, a horse's susceptibility to stress can depend on a number of factors, including their genetic make-up, their experiences and their environment.

Therefore, it is important to look at each horse individually and consider their needs and reactions to minimise potential stress factors and create a healthy environment. Below are nine potential stressful situations and what you can do to minimise them.

1. Visit to the vet



2. Riding out

3. Loading





5. Farrier



4. Show



6. Lunging



7. Outdoor training



8. Indoor training

9. Grooming area









3.1 NINE POSSIBLE STRESS SITUATIONS



Visit to the vet

Tomorrow is the day again: vaccinations are on the agenda. The appointment has been on the cards for three weeks and you've had a slightly queasy feeling in your stomach ever since, because you know that this means stress for you and your horse again. Your vet is very empathetic and careful when dealing with your horse, but it's still a challenge every time.

As soon as you enter the stable, your horse senses that something is about to happen. It realises that you are nervous and you know that your mare will turn her back on you as soon as you enter the box with your vet. That's why you put the halter on beforehand, to make sure you can get to her at all. Your mare puts her ears back and clearly shows that she's not in the mood - because she suspects that it could be unpleasant.

Many horses associate a visit to the vet with stress and/or pain and react with flight behaviour. However, they are often unable to flee because they are in the box, for example, and instead show defensive behaviour such as turning away or pinning their ears back.

Can I train my horse to make visits to the vet less stressful?

Training for vet visits is difficult for two reasons. Firstly, your vet probably doesn't have the time to visit regularly to show your horse that he means him no harm and is actually a nice person. Secondly, if you had to pay for every training visit from the vet, your wallet would eventually veto the idea.

However, you can try to alleviate your horse's anxiety by remaining calm yourself and minimising your nervousness as much as possible. 'Bribery' with carrots or beetroot during the vet visit can sometimes work wonders.

If none of this helps, it can also be a good solution to ask a stable friend or someone else from the stable for support. Even if you know your horse best, in some situations it can help to have someone with you who has a little more distance and is a bit more relaxed in their approach.





Ride out

The sun is shining, you were able to finish work on time today and your best friend is at the riding stable with you at the same time - perfect conditions for a long ride! Just get out, relax and enjoy a few long gallops. You'd love to saddle up your old gelding - with him you know that everything will be relaxed. But your young mare also needs her learning experiences. At four years old and with just a quarter of a year's training under the saddle, rides are still very unsettling for her and you have to constantly expect her to jump to the side.

You had imagined the end of the day to be a little quieter, but this is the perfect opportunity to practise with your mare. Your friend's experienced gelding is relaxed, you have plenty of time today and of course you know that young horses have to learn to deal with new situations at an early age. What horses learn at a young age doesn't have to be taught later on. And here, of course, it's not about advanced lessons, but about getting to know everyday situations and reacting calmly.

It usually helps young horses to have a calm older horse with them that they can take their lead from. You will also notice that your mare is less nervous. Normally she is constantly hacking, starts prancing around quickly and is jumpy when she is alone in the field. This time it's different: she walks at a more relaxed pace, you can even drop the reins at times without having to worry that she might suddenly bolt or jump to the side at the slightest uncertainty.

Such rides give young horses a lot of confidence and security and it is often the case that they are more relaxed on the next ride and can be ridden calmly and routinely on the reins.





3 Loading

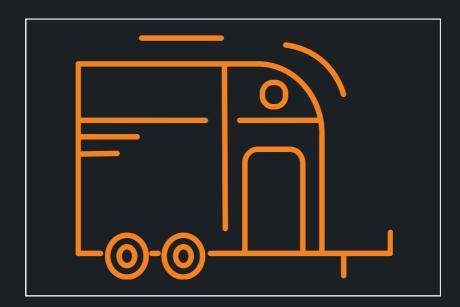
Loading and trailer driving is stressful for many horses. It is cramped on the trailer, the horse is stuck, cannot escape and then the ground moves under its hooves. For many horses, this is often scary at first.

If horses are not familiarised with loading and driving with a trailer as foals or young horses, this can be a test of patience for both humans and animals. It usually takes a lot of persuasion to get the horse onto the trailer, and if there's a deadline on top of that, stress is inevitable for everyone. Stress for us, as we have to arrive on time, and double stress for the horse - because on the one hand it doesn't want to get on the trailer and on the other it realises that we are stressed - an unfavourable combination.

What can I do to avoid stress when loading?

The three magic words when loading are time, calm and patience. The best time to practise loading is when you don't have to go out with the horse - i.e. when you don't have an appointment and there is no pressure. Prepare yourself well:

- It is best to position the trailer so that the side on which you want to load your horse is close to a wall. This way, your horse has a side boundary and cannot get away.
- Spread straw or shavings in the trailer and also put some on the flap. Many horses do not like to step on the "naked" flap.
- Open the small side door at the front. Insecure horses usually walk onto the trailer better if it is open at the front.
- A treat from your hand, some concentrated feed or hay will also ensure that the horse associates the trailer with something positive.





What can I do if my horse absolutely does not want to get on the trailer?

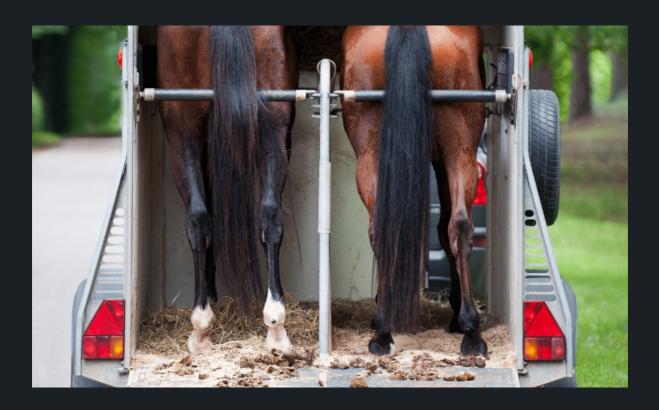
It is very important to have help when loading. Always load the horse with at least two people - one person leads the horse by the halter and the other provides the boundary, the rear frame of the horse.

- Do not look at your horse when leading it into the trailer, but focus your gaze on the inside of the trailer. If you look at your horse or even turn towards it, it will most likely stop.
- When the horse is up, the second person can first close the bar and then the flap.
- Important: Only tie the horse when the bar and flap are closed. This prevents the horse from pulling back when the flap and bar are still open.

To give your horse a sense of security, it can also be useful to put an old, calm horse on the trailer first. Anxious horses will then get on better and stand more calmly on the trailer during the journey.

You can also move the partition to the side so that your horse has more space to get onto the trailer. This makes it easier for young horses in particular to get on.

Some trailers also offer the option of turning the flap into a door. This provides the horses with a lateral boundary and young horses in particular sometimes prefer to go up a step rather than step onto the flap, which is unsafe for them.







When a show is coming up at the weekend, it is always associated with nervousness and tension. Getting up early, travelling to the stables, getting the horse ready, packing everything and being there on time for the competition. Declaring readiness to start, unloading, bridling, saddling, riding off - stress can quickly build up. Then there is the competition atmosphere. Especially with inexperienced horses, this can lead to a tense round in the competition. It is therefore all the more important to keep your nerve before and during the test.

Prepare yourself well:

- Make a list of everything you need to pack so that you don't forget anything.
- Prepare as much as possible the evening before this avoids stress on the morning of departure. This way, you won't have to think about everything you've already packed..
- Make a timetable so that you set off with your horse in good time and have enough time to ride off before the test..

Take the pressure off

If you have an inexperienced horse, don't put too much pressure on yourself. Go to the show with the aim of showing your horse something new and going home with a good feeling. Less is usually more.

The whole day will be exciting enough for your horse. Horses have very sensitive antennae and several factors come together on such eventful days: The tension and nervousness of the human, the loading and trailer driving, the unfamiliar surroundings and then, of course, the competition atmosphere with all the new impressions and all the strange horses. This is not only stressful for young and inexperienced horses.

Give your horse security

What's more, the warm-up arenas can often be full. Especially with inexperienced or sensitive horses, it is therefore all the more important to give your horse security and avoid stressful situations. Keep enough distance from other horses and try to stay where there is less going on. Together you will master the day!





Not every horse is afraid of the same things. However, there are situations in which many horses experience stress and which pose a problem for both humans and animals - this includes an appointment with the farrier. An appointment that is unavoidable for every horse and yet is always associated with stress for some horses: a stranger comes, touches the horse's belly, back and legs and works on its hooves.

Practise with your horse

Especially if the horse is young or has had bad experiences with a farrier, you should practise beforehand to establish a routine. A nervous horse that is likely to strike or rear can be dangerous for both the farrier or hoof trimmer and the person at the horse's head.

Get your horse used to being handled easily on its legs, belly and back. If you don't know your horse that well yet, you can use a whip at the beginning to see how it reacts to being touched on different parts of its body.

To ensure that your horse stands calmly on three legs when the farrier is working, the hoof trimming should be familiar to your horse and routine. You can also practise standing up with it, as young horses often find it unfamiliar at first when the farrier picks up their hooves to work on them.





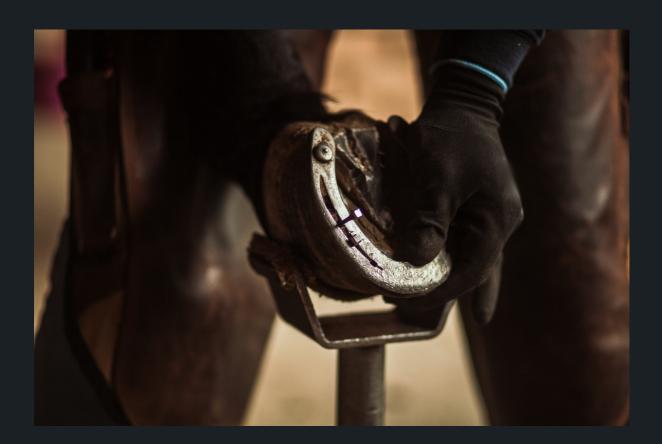
Flight not possible

In stressful situations, horses usually react by fleeing at first. The difficult thing for and with nervous horses at the farrier's is that they cannot or are not allowed to act out this flight instinct. To ensure the farrier's safety, it is essential that the horse and the people around the horse are calm.

Things can also get dicey during the first shoeings. For young and inexperienced horses or horses with weak nerves, working on the iron, burning it on with the resulting smoke and nailing the iron is associated with stress and anxiety.

Shoeing in particular can put an inexperienced horse on alert: The smoke initially triggers fear and panic in many horses. The first reaction to such a situation in the wild would be to flee. Although the horse would prefer to flee the situation, it has to stand still and put up with the unfamiliar work.

Therefore, try to be a calming influence for your horse. Give it reassurance by talking to it in a calming manner and reward it so that it associates the farrier's visit with positive things. The calmer the people around the horse are, the less excited and ready to bolt the horse will be and the more relaxed the appointment with the farrier will be.







Lunging

Opinions differ when it comes to lunging. Some integrate it into their weekly training, others prefer to work their horse from above. Lunging also varies in popularity among horses. Whilst some horses are great at suppling when lunging and are easy to work with, there are also horses that constantly run away on the lunge line, hold on tightly and hollow their backs. Lunging can quickly become stressful for and with these horses.

Variety is required

To be able to work hectic horses effectively on the lunge line, calm and variety are required. It is important that the lunger in the centre is a calming influence for the horse and gives clear, consistent instructions.

Incorporate various changes of pace into the training session. Reduce, enlarge and shift the circle and challenge your horse mentally. Poles on the ground also provide variety and ensure that your horse activates its hindquarters.

It all depends on the frame

Your posture and body language are essential. As with riding, you need to maintain body tension and always be present when lunging. To frame your horse well, the back of the lunging hand, the lunge line and the bit form a straight line. The other hand and your horse's whip and hock form the other line. The whip is the driving aid, while the lunge aid is the accepting and yielding aid.

Voice is important

More than when riding, the voice of the lunger is important when lunging. Even if parades and the whip are responsible for the main aids, it is important to support the aids with a calm voice. Especially with nervous, hectic or tense horses, a calming voice is very effective when it comes to reassuring and calming the horse.





Outdoor training

The indoor season is over, the weather is nice and it is light for a long time in the evening. Many riders therefore prefer the outdoor arena when the weather permits.

However, unlike in the indoor arena, there are many more things in the outdoor arena that can distract the horse and prevent it from concentrating. These are varied and differ from horse to horse: from rustling leaves on the trees, puddles in the arena, horses in the pasture next door, to the lawn sprinkler on the neighbouring property.

How do I recognise that my horse is stressed when riding?

If horses are hot-tempered, jumpy and won't let go under the saddle, this is a clear sign that they are stressed. However, not every horse immediately shows signs of stress on the outside. If the horse sweats without effort, grinds its teeth or flaps its tail more often, this can signal that the horse is stressed. Frequent neighing and diarrhoea can also be signs of acute stress.

How do I react if my horse is stressed in the outdoor arena?

If your horse signals that it is stressed out in the arena, you should react calmly. It is not bad form for your horse not to let go, run or refuse to be put on the reins, and your horse is not doing this on purpose. You should therefore react calmly and adjust your training goals.

- Respond to your horse and reward it so that it associates positive things with the outdoor arena. A calm voice and reassuring stroking and patting of the horse's neck will signal to your horse that everything is good and that it can relax.
- Keep it busy so that it has to concentrate on you and make the training varied.
- If your horse is afraid of a certain object or doesn't want to go into a certain corner, you should confront your horse about it - but it doesn't make much sense to ride past it over and over again and possibly get into a fight with your horse.

Show your horse that there is no reason to be afraid by not avoiding the situation altogether, but don't risk clashing by confronting your horse with the same scary thing over and over again.

Sometimes it's also good not to attach too much importance to things - the next training session could be a completely different story.





Indoor training

We've all been there: After work, you quickly go to the stable to move the horse - and then the training simply doesn't go as you had imagined. The horse is tense, not very supple and the lessons don't work at all. And yet your training progress has been so good recently! But today your horse is just stressed and his concentration leaves a lot to be desired.

Is it me?

Be honest, how was your day today? Stress that we have or that we cause ourselves is transferred to your horse. Can you concentrate when you're under pressure? Your horse feels the same way. If your head is not free and able to concentrate, it is simply harder to work. So if you are stressed, so is your horse and an effective training session can become a test of patience.

Work on yourself!

If you notice that you are stressed and tense, try to get your tension and emotions under control. Pay attention to your breathing, take deep breaths in and out and try to concentrate.

Small steps to great success

Less is often more. If your horse is so stressed in the arena that effective training is not possible, you should adapt your training requirements with your horse to the situation. Don't set your goals too high, because nothing is more demotivating than a goal that is not achieved or even not achievable.

At the end of the day, both you and your horse will leave the training session happier if the goal was just a relaxed lead in the arena than if you had sat in the saddle and you had clashed. It is more positive and effective to achieve a small goal than to stagnate in front of an insurmountable obstacle - because both horse and rider will leave training with a positive feeling.

If none of this helps, you can always stop and simply take your horse out for a ride or just let it graze in hand.





Grooming area

Hoof scratching in the grooming area: What many riders dismiss as a bad habit when horses are bored can be a clear sign of stress. Grooming areas are usually a hive of activity: horses arrive, are groomed, saddled, bridled and led away again, plus riders who feel like they are constantly running from A to B. This can stress horses. It is not surprising that this can stress horses.

How do I recognise whether my horse is stressed in the grooming area?

Horses are flight animals and have the urge to escape unpleasant situations. However, as horses are usually tied up in the grooming area, flight is not possible - the result is stress for the horse.

You can recognise this by wide open eyes and puffed out nostrils. The horses start prancing and scratching with their hooves. If the horse is under extreme stress, it may also pull on the rope or throw itself down. The latter is also a common sign when horses are scared and stressed during saddling.

What can I do if my horse is stressed in the grooming area?

If horses cannot cope with being tied up in a grooming area, it is a good idea to get the horse ready in the box or possibly choose an area where there is less activity.

However, standing quietly in the grooming area should also be practised, as this is more relaxed for everyone involved. Work with rewards, talk to your horse a lot and be relaxed yourself. It is counterproductive to shout at the horse when it scratches - this tends to cause more stress and discomfort.

Calm your horse down and reward it when it stands in a well-behaved and relaxed position. Try not to make the grooming and saddling period too long. Get your horse ready quickly, but also make sure that you don't cause any stress.

If young horses have a lot of stress in the grooming area at the beginning, you can, for example, groom them in the box first and saddle them in the area or only groom them in the area and then saddle them in the box to keep the time on the rope short if there is a lot of hustle and bustle in the grooming area. The time can then be gradually extended to get the young horses used to it and to show them that the grooming area is not a bad thing.

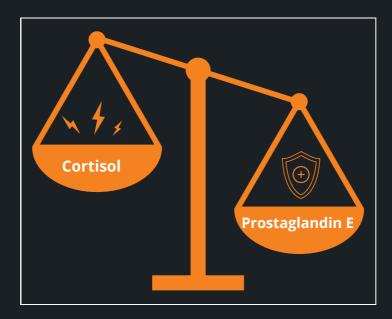


4. GASTRIC ULCERS AND STRESS

4.1. CONNECTION BETWEEN GASTRIC ULCERS AND STRESS

When a horse is stressed, the hormone cortisol is increasingly released. Cortisol signals the body to produce energy and deal with the stress reaction. At the same time, the production of the hormone Prostaglandin E is interrupted. Prostaglandin E is important for the production and regeneration of the gastric mucosa, which protects the stomach from damage.

The increased cortisol level and the lack of prostaglandin E can lead to a disturbed balance in the stomach. The protective function of the stomach lining is impaired, which increases the risk of stomach ulcers. Without sufficient prostaglandin E, the gastric mucosa cannot be regenerated effectively, which can lead to inflammation and damage.



4.2. PREVENTION OF GASTRIC ULCERS

Feeding and husbandry tailored to your horse's individual needs plays a crucial role in preventing gastric ulcers.

Our horses' bodies are perfectly adapted to a life in the pasture. They have food all around them, they can graze practically continuously and thus buffer the stomach acid they constantly produce. But there are some challenges in human care: Pasture is not always available, be it when travelling, during winter or in bad weather.



It is therefore essential that sufficient fibre-rich roughage is always available. On the one hand, so that the constantly produced stomach acid is kept busy with digestion and does not suddenly attack the stomach walls - because this damage to the stomach lining can ultimately lead to stomach ulcers.

On the other hand, roughage must be carefully salivated by your horse due to its fibre-rich structure. This allows more bicarbonate-containing saliva to enter the stomach, which acts as a buffer for the acid and slows down its effect. In addition, roughage remains in the stomach for a while.

None of this applies to concentrated feed, or only to a limited extent. It is less structured and therefore does not need to be chewed as thoroughly, which means that less saliva enters the stomach than feed. In addition, the reduced structure of concentrated feed leads to another problem: a lump forms in the horse's stomach that is difficult for stomach acid to penetrate.

Concentrated feed is therefore less effective at protecting the stomach from its own acidity than roughage. A horse should therefore first eat roughage to create a solid foundation before being given concentrates.

The roughage should be supplemented with suitable mineral feed if necessary.

Long breaks between feedings or irregular feeding times should be avoided to ensure high saliva production to neutralise stomach acid and to minimise stress.

Stress should generally be avoided in your horse as it favours the development of stomach ulcers. The biggest stress triggers for horses are related to their behaviour and interaction with humans, including riding.

Make sure you take regular breaks between training sessions. This is because intensive exercise reduces digestive activity and blood supply, while at the same time gastric juice enters the glandless part of the horse's stomach.

Unfortunately, many horse owners realise too late that their horse's feeding or husbandry is not optimal or that it is suffering from stress, which means that gastric ulcers usually occur unnoticed. Even after successful treatment, gastric ulcers often recur. It is therefore still important to counteract the development of gastric ulcers by providing a structurally rich and balanced diet and to minimise possible stress factors for the affected horse as much as possible.



5. SYMPTOMS OF STRESS IN HORSES

5.1. DIFFERENT REACTIONS TO STRESS

Stress is not always immediately recognizable, as not every horse shows clear symptoms, as they do in the case of laminitis or mud fever, for example. The stress factors can have very different origins. Stress is often a consequence of the way the horse is kept, but training, general excessive demands or an increased sensitivity of the horse can also trigger stress.

Horses react very differently to stress. While one horse reacts aggressively, another horse may freeze or flee in the same situation. Stress is often easier to recognise during work, e.g. under saddle or in hand, than when the horse is in the stable or in the pasture.

On the one hand, this is because we then have the horse directly with us and can therefore recognise a change in its nature, such as tension, a tight mouth and raised eyes, difficulties when riding or constant restlessness with a wagging tail and the constant threat of an explosion.

Secondly, it requires longer and closer observation to determine whether the horse is stressed by its environment and attitude, as horses do not always show this clearly and often change their behaviour when the owner approaches.

As an owner of a horse with gastric ulcers, one hears and reads again and again that the stress factors must be eliminated. The problem with this is if you don't know what triggers are stressing the horse. You should therefore take the time to find out why the horse is stressed. If the horse is stressed because it is standing next to another horse in the box, this is often easy to recognise when it shows clear defensive behaviour.

It can be worth trying out and testing what helps the horse best. However, you should not move from stable to stable and then realise after the fifth change of stable in a year that nothing has changed.



5.2. IDENTIFICATION OF STRESS SYMPTOMS

Identifying stress in a horse requires careful observation of behaviour, body language and physical signs. Here are some clues that may indicate that a horse is stressed:

1. Changes in behaviour:

- Excessive nervousness or restlessness
- Frequent flightiness or jumpiness
- Aggressive behaviour towards conspecifics or humans
- Withdrawal and social isolation
- Reduced concentration during training
- Grinding of teeth
- Increased tail swishing

2. Physical signs:

- Sweating for no apparent reason
- Noticeable muscle tension or trembling
- Loss of appetite or excessive grazing
- Changed body posture, such as a lowered head
- Mild colic
- Stomach ulcers
- Flatual water and/or diarrhoea

3. Changes in eating behaviour

- Reduced feed intake or conspicuous eating breaks
- Hasty eating or excessive turning away from food

4. Altered activity

- Less willingness to move or increased restlessness
- Changed walking speed or reduced performance

5. Altered communication

- · Changed vocalisations such as increased or decreased neighing
- Changed ear play, e.g. ears constantly laid back

6. Changes in sleeping behaviour

- Lack of sleep or excessive tiredness
- Restless sleeping or frequent waking up



6. PREVENTION AND STRESS AVOIDANCE IN EVERYDAY LIFE

6.1. OPTIMAL HOUSING AND FEEDING CONDITIONS

Stress in horses can be caused not only by handling, but also by daily management and illness. Prevention is therefore crucial. A balanced diet and sufficient drinking water are a good start.

Exercise is of course also important for your horse. Exercise is often mentioned as a preventative measure in connection with colic. This is absolutely correct, because despite their ability to adapt to a life in the pasture, there is still room for improvement in your horse's anatomy.

The intestines, for example, lack the necessary attachments in the abdominal cavity, which can lead to problems. Accumulated gases, liquids or lumps of feed can cause parts of the intestine to be pushed into unwanted areas. Extensive exercise in the form of a walk can counteract this and ensure that gases can escape and the food is digested further.

6.2 COLIC AND STOMACH ULCERS AS STRESS TRIGGERS

As already mentioned, a visit to the vet and transport to a veterinary clinic are stressful events in your horse's life. But the actual main reason for this stress is the illness itself.

Colic and gastric ulcers are among the most common diseases in horses and can be extremely painful - and pain means stress for the horse.

Horses suffering from colic, for example, may sweat profusely or roll aggressively on the ground - these are reactions of the body to somehow cope with the situation. This stress can cause the horse to behave more aggressively. For mild colic, a slow walk can help to distract your horse and make the wait for the vet to arrive feel shorter.



6.3 BOREDOM AS A STRESS FACTOR

It is sometimes overlooked that exercise not only helps against colic, but is also good in general. After all, your horse can't spend the whole day staring at the walls of its stall in the stable. Especially in a situation like this, where your horse really wants to do something but can't, stress is actively created.

It is important to fulfil your horse's basic needs for sufficient exercise and time with other horses. But you should also not underestimate your importance as a carer.

In fact, you also need to be well so that you can take good care of your horse and recognise its characteristics. Ultimately, your horse just wants to enjoy its time with you. This aspect is often overlooked: As a human, you are not an extra, but an important part of the relationship between human and horse.

Only in a good relationship can stress be avoided - or at least reduced in exceptional situations.





6.4 MASTERING STRESSFUL SITUATIONS

Harmonious co-operation should be a matter of course in everyday life, but it is all the more important in exceptional situations. A classic example of this is a visit to the vet. The horse is already feeling poorly and then this visit comes on top of that. Of course, this is even more important if you have to take your horse to the veterinary clinic. In moments like these, you are the emotional support.

The following applies not only in these situations: Loud noises such as screaming and shouting as well as hectic movements are taboo. Always stay within sight of your horse. If this is not possible at the moment, make sure it knows you are there.

Always remember: your horse is a flight animal. If it perceives a noise or movement out of the corner of its eye as a threat, it will always want to flee. This behaviour ensures its own survival.

What is correct and not a problem in the wide open spaces of the prairie can lead to injuries to humans and animals in cramped stables or trailers. And it also costs time. If your horse panics, it takes about half an hour for it to calm down again and you can continue working with it. Keeping calm also saves time.

No matter how well you look after your horse during the journey to the vet clinic, it is always stressful and cannot be avoided. Occasional stressful situations are not a major problem.

In everyday life, however, situations can arise that cause stress over a longer period of time. Do you have neighbours you don't particularly like? It can also happen between horses that two don't like each other. To avoid a permanent confrontation, they should be kept at a certain distance from each other.



6.5 AVOID STRESS TRANSMISSION

When we are stressed, this stress is usually transferred to our horses. However, it is often unclear who is causing the other's stress. What is clear, however, is that the stress is transferred both from the horse to the human and from the human to the horse.

Tense riders often go hand in hand with tense and non-relaxed horses. This often leads to a vicious circle, as the stressed rider becomes more and more tense and thus transfers the tension to the horse, which in turn leads to even more stress in the horse.

We should therefore always remember that we need to relax when dealing with our horses and not take our everyday stress into the stable.

Sometimes we also need to lower our expectations of our horses a little in order to have a relaxed and supple horse again. Only then can the communication between rider and horse function smoothly again.





7. TAKE HOME MESSAGE

Five things you should bear in mind when dealing with your horse:

1

Horses are flight animals. In a panic situation, even well-trained animals are almost impossible to control.

2

The way you approach your horse is very important. Horses have areas directly in front of their nose and directly behind them that they cannot see directly. To avoid startling your horse and thus prevent injuries from running over or kicking, it is recommended that you approach from the side - preferably focussing on the shoulder.

3

Stress-free interaction with flight animals also includes avoiding sudden loud noises - this also includes your tone of voice when interacting with your horse. Avoid "getting loud". Instead, you should communicate in calm language. This lets the animal know who is moving around. Hectic movements on the part of those working with the animals should also be avoided.

4

Horses are very sensitive to touch.

5

Safety - the aim of horsemanship or stress-free handling of horses is not only to avoid stress for the animal, but also to create a safe environment for humans and animals. This starts with correct positioning, see point 2.



8. STRESS CHECK

_		Points
1	What is your horse's main task?	0
U	Leisure horseFoal or young horse	1
	Competition horse	2
	Racehorse	3
	Million to the first of the control	
2	What training is your horse currently undergoing? Normal exercise	0
	Build-up training	1
3	How often does your horse compete?	0
U	│	1
	More than 2 competitions per month	2
	_ man a man = componitions per manin	
4	How often is your horse transported?	0
V	Only when necessary (moving, vet) 1-2 transports per month	1
	More than 2 transports per month	2
	How is your horse kept?	•
5	Open stable	0
	Stabling with access to pastureStabling without access to pasture	1 2
	Clasming miniout access to pastare	2
6	How often does your horse change stables?	0
U	☐ Never ☐ Every 5 years at most	1
	About once a year	2
		_
a	How much concentrated feed does your horse get?	0
U	Low daily ration (< 2 kg)Normal daily ration (2-4 kg)	1
	Higher daily ration (> 4 kg)	2
		_
8	How well does your horse eat?	0
U	☐ Normal feed intake ☐ Refusal to eat	1
	- Kerusur to eat	
9	Does your horse show one or more of the following symptoms?	1
U	Dull coat	2
	Frequent colic Salivation	1
	Diarrhoea	1
	Apathetic or nervous behaviour	1

And this is how it works:

Choose the answers that apply to your horse and add up all the points from these answers at the end. What is your horse?

Cool fish (< 4 points): The horse's stress level is harmless.

Still (all) in the green zone (4 - 9 points): The horse's stress level is slightly elevated.

Stress is my middle name (> 9 points): The horse's stress level is significantly increased.