

# Diet related disorders in horses



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## EQUINE NUTRITION

The following assignment will cover

- Diet related disorders- choke, colic and tying up
- Causes, symptoms and prevention
- Gastric ulcers- the treatment and prevention
- Carbohydrate overload- risk factors
- Undesirable protein in competition horses

### CHOKER

Choke is when undigested food forms a clump and gets stuck in the esophagus, as horses are unable to throw up, they will cough excessively trying to dislodge the obstruction.

#### Causes

- Horse not chewing the food correctly which could be related to dental problems
- Horse eating food too quickly and swallowing larger quantities than they should at once
- Horse not producing enough saliva to lubricate the food when being swallowed
- Obstruction in the esophagus which could be related to a tumor or past injuries

#### Symptoms

- Horse will be distressed and will be extending their neck out
- Nasal discharge such as food and foaming

- Coughing and gasping for air
- Trying to blow out the food through mouth and nose

### Treatment

Call the vet immediately then remove all feeds such as hay and water from the stable as any further consumption may make the horse worse. Try to keep the horse calm and wipe away any nasal discharge that may occur with a clean cloth and take note of the colour and consistency. When the vet arrives, they will aim to clear the obstruction they will do this by passing a tube through the nasal passage and into the esophagus, they will flush water into the tube and syphon it back out, this will be done several times until the obstruction is cleared.

### Prevention

- Maintain regular dental checks
- Wetting the food prior to feeding helps aid digestion
- If the horse eats its food quickly you can place a large rock in the food bucket or buy specialist feeders that help slow down the rate of consumption
- Turning your horse out and enabling them to graze between meals may help with digestion and the pace in which they eat.

### COLIC

Colic is not a specific disease it is a term used to describe the clinical manifestation of abdominal pains.

### Causes

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- Distension of the stomach or intestine
- Build up of gas, fluid or feed
- Improper gut movement
- Poor blood supply leading to tissue death

### Symptoms

- Pawing the ground
- Getting up and down
- Rolling
- Sweating
- Kicking at stomach
- Turning to bite flanks
- Droppings abnormal

### Types of colic

- Spasmodic colic
- Gastric colic
- Flatulent colic
- Impacted or obstructive colic
- Twisted gut

### Treatment

Call the vet and whilst waiting for their arrival remove all food and water from the stable, make sure the stable has plenty of bedding as the horse may try rolling or pawing the ground, take a record of the horse's temperature, pulse and respiratory rate to pass on to the vet also a record of when the horse was last wormed. For minor cases of colic, the vet may

administer drugs to relieve the pain and may cause the gut to start working again, for more major cases of colic, the horse may require surgery to untwist the gut.

### Prevention

- Constant supply of clean, fresh water
- Diet high in fibre
- Regular dental checks
- A regular worming routine
- Make changes to feed or exercise gradually
- Make sure the horse is fit for the work required of them and don't over exercise
- Limiting lush grass in the spring and summer
- Prevent stressful situations
- Have a cooling off period after exercise
- Allow as much turnout time as possible

### TYING UP

Tying up is a term used to describe muscle disorders that occur in performance horses. In mild cases the horses may just be stiff after working out and in severe cases the horse may be completely immobile. Tying up is more common in certain breeds such as thoroughbreds and the Arab.

### Causes

- Over exercise
- Low sodium levels and deficient in vitamin E

- Incorrect cooling down and warming up routine
- Hormone imbalance
- Low on electrolytes

### Symptoms

- Shortened strides
- Reluctant to move
- Muscle spasms in the back or hindquarters
- Anxious and excess sweating
- Increased respiration

### Treatment

For horses with severe tying up will need a vet, they may administer intravenous fluids to combat the dehydration, they also administer a sedative to combat the anxiety and an anti-inflammatory, the vet may also place the horse on physical therapy at this time it is best to keep exercise to a minimum and keep the horse stabled.

### Prevention

- A warm up routine before the horse is exercised
- A cooling down period after exercise
- When the horse is on rest, relevant turn out time is required
- Access to clean fresh water
- Use a food which is formulated to your horses needs

### REFERENCES

<https://assignbuster.com/diet-related-disorders-in-horses/>

- <https://www.bluecross.org.uk/pet-advice/horse-colic-prevention-and-management>
- <https://www.equisearch.com/articles/horse-choking-17169>
- <https://www.horseandhound.co.uk/horse-care/vet-advice/tying-up-in-horses-56516>
- <https://www.bluecross.org.uk/pet-advice/laminitis-horses>
- <https://www.bluecross.org.uk/pet-advice/horse-obesity-prevention-and-management>

## GASTIC ULCERS

Working horses are subject to an ever-increasing workload and are more prone to ulcers. High abdominal pressure that occur when the horse is galloping squeeze the acid stomach contents into the upper acid sensitive non-glandular portion of the stomach. Intense exercise also has an adverse effect on the gastric physiology, such as reducing the blood flow to the stomach, increasing the acid secretion or delaying emptying of the stomach contents into the small intestine.

### Food management

The amount of roughage in the diet plays a role in the risk of ulcers, because it requires more chewing, roughage requires more chewing which stimulates the production of more saliva. The swallowed saliva helps neutralize the stomach acid. Roughage feeds such as alfalfa is higher in calcium and is believed to decrease the risks. Feed intake may increase or decrease depending on the amount of work required from the horse and may contribute the risk factors in getting ulcers.

## Medications

Chronic use of non-steroidal anti-inflammatory drugs such as phenylbutazone blocks the production of a chemical known as PgE2, which increases acid production. When PgE2 levels are low, acid levels are high contributing to the development of ulcers. Medications are used primarily for three purposes

- Decrease acid production
- Buffer the acid that is produced
- Protect the lining of stomach from the effects of the acid

## Treatment

- Increase the amount of roughage in the diet
- Increase the frequency of turn out time
- Mixing chaff into the concentrate feed to promote more chewing
- Decrease the amount of grain
- Use supplements to add vitamins and minerals
- Add vegetable oil to add calories the horse may need
- Give probiotics to aid in digestion

## CARBOHYDRATE OVERLOAD

Too much carbohydrates in your horses' diet can lead to many health problems including colic, laminitis and lead to your horse been overweight.

## Colic

Horses intestines have not evolved to meet the changes in which we choose to feed our them and thus so an overload of carbohydrate's in the diet can

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set off an upset in the digestive system. Colic is classed as abdominal pain in horses or a twisting in the gut.

### Laminitis

Laminitis is an inflammation within the horse's foot. The horses will show an inability to walk and the leg will be hot to the touch.

### Overweight

Excess weight on a horse puts a strain on the horse's organs and limbs, an obese horse will be more inclined to have major health problems such as laminitis and colic and may also impact their fertility.

### Preventing carbohydrate overload

- Plan a diet consistent with your horse's needs
- Do not turn a horse out on lush grass
- Daily exercise even a light to medium workout
- Read dietary labels on foods your horse consumes
- Make any changes to your horse's diet slowly and gradually
- Feed good quality food
- Feed plenty of roughage

### EXCESS PROTEIN

Protein is important in growing horses and those in production, the total protein needed in horses' diets are as follows

- Foals – 16-18%
- Weanlings – 14-16%

- Yearlings – 12-14%
- Mature horses – 10-12%
- Lactating mares – 12-14

If high levels of protein are fed to a horse when it is not required it can lead to overheating when been worked, skin rashes, lymphangitis and excess liver and kidney functions, the excess has to be broken down by the liver and waste is excreted as urea in the urine causing high levels of ammonia gas in the stable, ammonia has an irritating effect on the respiratory system of the horse. High levels of protein can also interfere with the calcium absorption of the horse.

Hay is a huge factor of your horse's protein consumption and thus so should be tested to determine exactly how much your horse is intaking.