

# EQUINE ULCERS

Symptoms | Causes | Treatment

## Prevalence of gastric ulcers

- Up to 93% of racehorses have gastric ulcers
- All horses are at risk - 11-37% of leisure horses & 60% of competitive horses have them
- Approx. 50% of foals & yearlings have gastric ulcers - stress of weaning and changes in diet

## Main Risk Factors

- Large infrequent feeds -processed, high starch, high carbohydrate, cereal based
- Stress e.g. stabling, training, travel, competition
- Intensive or prolonged exercise
- Limited turnout/grazing
- Not enough high fibre forage - hay / haylage
- Pain e.g. musculoskeletal issues, sharp teeth, ill fitting tack or incorrect training
- Exercising on an empty stomach
- Disruption to social groups



## Introduction

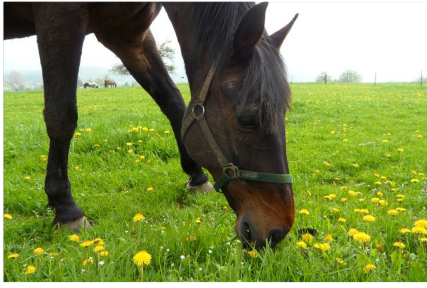
This is a basic guide to ulcers in horses. It is for information only and does not replace veterinary advice or treatment. We encourage you to do your own research and always consult your vet if you are concerned about your horse.

Equine ulcers can occur in the **stomach** or the **hind gut**. Horses can have either stomach or hind gut ulcers, or both at any one time.

### Gastric (stomach) ulcers

Equine Gastric Ulcer Syndrome (EGUS), is a collection of symptoms used to describe stomach ulcers in horses. They can be found either in the upper or lower parts of the stomach.

The upper part of the stomach (squamous region) is protected by a thin mucosal lining. This lining is easily damaged by acid splash (from the lower part of the stomach), bacteria or pathogens. Ulcers which occur here are known as Equine Squamous Gastric Ulcer Syndrome (ESGUS).



## Importance of chewing

The physiology of the horse's digestion system has never changed. All equines, wild or domestic are browsers and need to eat little and often.

The action of chewing, produces saliva. This buffers the acid continually produced by the lower part of the stomach.

Increase chewing time by:

- Providing continual access to suitable forage - grass, hay, haylage
- Use trickle nets to slow feeding down
- Use hay blocks
- Several hay nets placed around the stable
- Buckets of different roughage e.g. dried meadow grass
- Treat or hay balls

**No horse should be left for more than one hour without access to some roughage**

Stress and lack of suitable roughage are major causes of gastric ulcers

The lower part of the stomach (glandular region), produces acid. The acid is important to kill harmful organisms and helps break down proteins from food. This part of the stomach is protected from acid attack by a thick mucosal lining. Damage to the lining allows ulcers to form here, known as Equine Glandular Gastric Ulcer Syndrome (EGGUS).

## *Causes of Gastric (stomach) Ulcers*

Ulcers in both parts of the stomach are caused by the way horses are managed - see **Main Risk Factors**.

Ulcers in the lower part of the stomach are also caused by bacterial infections, or high doses of / long term use of non-steroidal anti-inflammatory drugs (NSAIDS) e.g Bute



## Prevention of gastric (stomach) ulcers

- Identify the risk factors & minimise or eliminate
- Turnout as much as possible with field mates
- Hand graze your horse if grazing is restricted
- Feed fibre before exercise e.g. small amount of roughage - meadow grass chaff, alfalfa or a small haynet
- Feed plenty of forage - low carbohydrate/low sugar, high fibre hay & haylage. Put in field if necessary.
- Use feeds that suit the physiology of the horse - e.g. cereal free, high fibre, low sugar/carbohydrate, low concentrates.
- Check teeth and saddle fit regularly
- Use a qualified physio, osteopath etc. to relieve tension and muscle soreness associated with ulcers
- Use digestive supplements to support and heal the gut

## Symptoms of Gastric (stomach) Ulcers

Not all will be seen at any one time

- Mild, acute or recurring colic
- Poor appetite / fussy feeder
- Diarrhoea / loose droppings
- Lost weight / poor condition / rough hair coat
- Teeth grinding
- Grumpy, irritated or aggressive with field mates or owners
- Food-aggressive behaviours e.g. rushing to feed bucket, pawing, threatening neighbours, kicking the wall
- Stereotypical behaviour - cribbing
- Dislikes being brushed or touched, especially around flanks and stomach areas
- Difficult to handle
- Resents saddle and girth
- Anxious / nervous
- Kicks out when ridden
- Bucks or rears
- Spooky
- Reluctant to move forward when exercised
- Saddle fitting issues
- Poor performance





## Digestive supplements

Ron Fields Nutrition make herbal supplements based on scientific & Ayurvedic principals. They heal & alleviate symptoms associated with ulcers & support the digestive system.

Our products are often used after standard treatments have failed. Fortunately results of our products can be seen very quickly.

Full details are given on the website and on separate product sheets, which can be emailed to you.

**Remount** - an all-round health boost to help recovery. Eliminates toxins from blood and boosts metabolism & appetite.

**PreUlc Powder** - for short term use before using UlcEx30+ For horses with severe symptoms. Very effective at starting the healing process & soothing sore guts

**UlcEx30+** - for long term use to heal all types of ulcers. Use to maintain digestive health.

Ron Fields Nutrition has helped hundreds of horses & ponies return to full health and fitness.

For testimonials see our Facebook page or ask for our product pages.

For advice - email [ron@ronfieldsnutrition.co.uk](mailto:ron@ronfieldsnutrition.co.uk) or phone 01432 851111

## Diagnosis of Gastric (Stomach) Ulcers

A gastroscopy performed by your vet would confirm the presence, type and severity of ulcers in the stomach. A 12 hour fasting period with no food and/ or water is needed before the test. During the test, the horse is sedated and a 3 -3.5m length of flexible video endoscope is inserted up the nostril of the horse, into the oesophagus, stomach and sometimes the first part of the duodenum. Photos of any ulcers are taken during the examination.

## Treatment of Gastric (Stomach) Ulcers

**Veterinary treatment** - oral administration of omeprazole. Omeprazole suppresses stomach acid to allow healing of the damaged tissue. More effective for ulcers in the upper part of the stomach (ESGUS), compared to the lower stomach (EGGUS).

Omeprazole may not work at all with some horses.

Antacids (for upper stomach ulcers) and drugs which protect the mucosal lining of the stomach (all stomach ulcers) may also be given.

High cost of the drugs and effects on health, limit their long term use. Long term use of acid suppressants may increase susceptibility to bacterial infections.

**Digestive supplements** can be successful in treating stomach ulcers. Improvements in appetite, behaviour and condition of the horse should be seen after a few days. Digestive supplements can be used long term and are cost effective.

**Management changes** should be always be made at the same time as treatment - see **Prevention of Stomach (Gastric) Ulcers**.

If your horse's symptoms do not improve or actually worsen, over a short time period, you should always consult your vet.



## What is acidosis?

- Microorganisms in the hind gut are responsible for maintaining immunity & good health
- To stay healthy the hind gut needs a constant supply of low sugar/low carbohydrate roughage to ferment - grass, hay or haylage
- Feeds or forage high in sugar or starch can pass undigested into the hind gut
- Fermentation of undigested sugar or starch produces lactic acid
- Lactic acid makes the hind gut acidic - **hind gut acidosis**
  - Other factors which cause acidosis are e.g. stress, pain, wormers, antibiotics

### **Acidosis can also:**

- Kill off good bacteria - releases toxins into the bloodstream
- Increase bad bacteria such as *Lactobacillus* sp. & *Streptococcus* sp. - involved in laminitis and colic
- Allow harmful viruses or bacteria to survive - cause illness
- Produce higher volumes of lactic acid in the blood - issues with muscle recovery after exercise, or tying up

## Colonic (hind gut) ulcers

The caecum and large intestine (colon) of the horse is referred to as the hind gut. Within the hind gut is a diverse range of microorganisms - fungi, yeast, parasites, protozoa, archaea, viruses and bacteria. The hind gut acts as a fermenter, using these microorganisms to digest fibrous plant material. Digestion produces energy and nutrients that the horse can utilise.

Hind gut ulcers start with **acidosis** which cause inflammation and ulceration - see **What is acidosis?**

Ulcers can appear quickly, within 5 days of acidosis occurring.

### *Causes of colonic (hind gut) ulcers*

- High starch and carbohydrate feeds
- Grass high in sugar and fructans (see grass information sheet)
- Lack of high fibre, low sugar forage
- Stress
- Physical pain
- Changes to the normal microbial population of the hind gut e.g. from wormers, illness, antibiotics
- Parasites
- Use of NSAIDs e.g. Bute
- Colitis
- Ingesting sand



## Digestive supplements

Our supplements for hind gut ulcers are very effective in relieving inflammation, healing & getting rid of toxins.

**Remount** - an all-round health boost to help recovery. Eliminates toxins from blood and boosts metabolism & appetite.

**PreUlc Powder** - for short term use before using UlcEx30+ For horses with severe or many symptoms. Very effective at starting the healing process & soothing sore guts

**UlcEx30+** - for long term use to heal all types of ulcers. Use to maintain digestive health.

In addition try:

**GutRestart** - for clearing the gut out and getting rid of stagnant/ undigested food e.g. after high starch/carbohydrate feeds; after ingesting sand. Use before any other product. Short term use only.

**Silent 4** - an effective calmer. Can be used at the same time as any of the ulcer products. Useful if your horse is anxious or nervous.

Ron Fields Nutrition has helped hundreds of horses & ponies return to full health and fitness.

For testimonials see our Facebook page or ask for our product pages.

For advice - email [ron@ronfieldsnutrition.co.uk](mailto:ron@ronfieldsnutrition.co.uk) or phone 01432 851111

## Symptoms of colonic ulcers

Not all symptoms will be seen. Mild symptoms may not be noticed.

- Lethargy
- General discomfort
- 'Tucked up' in flank area
- Shift weight between hind legs when standing in stable
- Irritability / change in behaviour
- Reactive to being saddled or girthed
- Difficulty bending, collecting or extending when ridden
- Reactive to being handled or groomed especially in the flank area
- Reactive to acupuncture points relative to GI tract
- Low grade anaemia - identified from a blood test
- Poor appetite
- Poor coat / hoof quality
- Acrid odour to droppings
- Loose droppings
- Blood in droppings
- Low immunity
- Colic - mild or acute
- Laminitic symptoms
- Poor performance



## Prevention of hind gut ulcers

- Increase high fibre forage - needed for the hind gut to ferment
- Increase chewing time
- Know when sugars or fructans are high in grass, don't graze your horse if sensitive to this
- Ensure horse always has high fibre forage to pick on after grazing or in the field shelter if they live out
- Give frequent small high fibre feeds
- Reduce stresses
- Check for pain caused from saddle fit, bits, sharp teeth, musculoskeletal issues, sore hooves etc.
- Use a worm testing programme to make sure worming is only done when necessary
- Feed the good microorganisms in the gut - use natural foods (cereal free, unprocessed feeds)
- Use herbs - let your horse browse hedgerows or grow your own
- Use a meadow grass/herb chaff
- Use a probiotic that can reach the hind gut

## Diagnosis of Colonic (Hind gut) Ulcers

### Test the pH (acidity) of your horse's manure

Although slightly subjective, it can give you an indication of acidosis.

Use an inexpensive soil pH test kit or pH strips (search on the internet) and use them on fresh manure. Normal pH is 6.8 - indicates normal fermentation. A reading of 6.5 or below indicates acidosis which will lead to colonic ulcers.

### Equine Fecal Blood Test

A sample of manure is collected by your vet and sent for laboratory testing. It uses antibodies to test for blood components in the manure. It is an objective way of getting information on hind gut issues.

### Ultrasound

Ultrasound can be done on the right hand side of the colon. Undertaken by your vet if colitis is suspected. Will not identify ulcers anywhere else in the hind gut.

## Treatment of Colonic (Hindgut) Ulcers

**Veterinary** - Sulfracrate (mix of aluminium and sugars) - coats and protects the ulcers. Antibiotics may be used if infectious colitis has been diagnosed.

**Digestive supplements** - can be very useful in treating hind gut ulcers. Improvements in symptoms should be seen quickly and keep improving over time. Can be used long term and are cost effective.

**Management** - Make changes at the same time as treatment - see **Prevention of Hind Gut Ulcers**



**Horses can recover from ulcers!**