

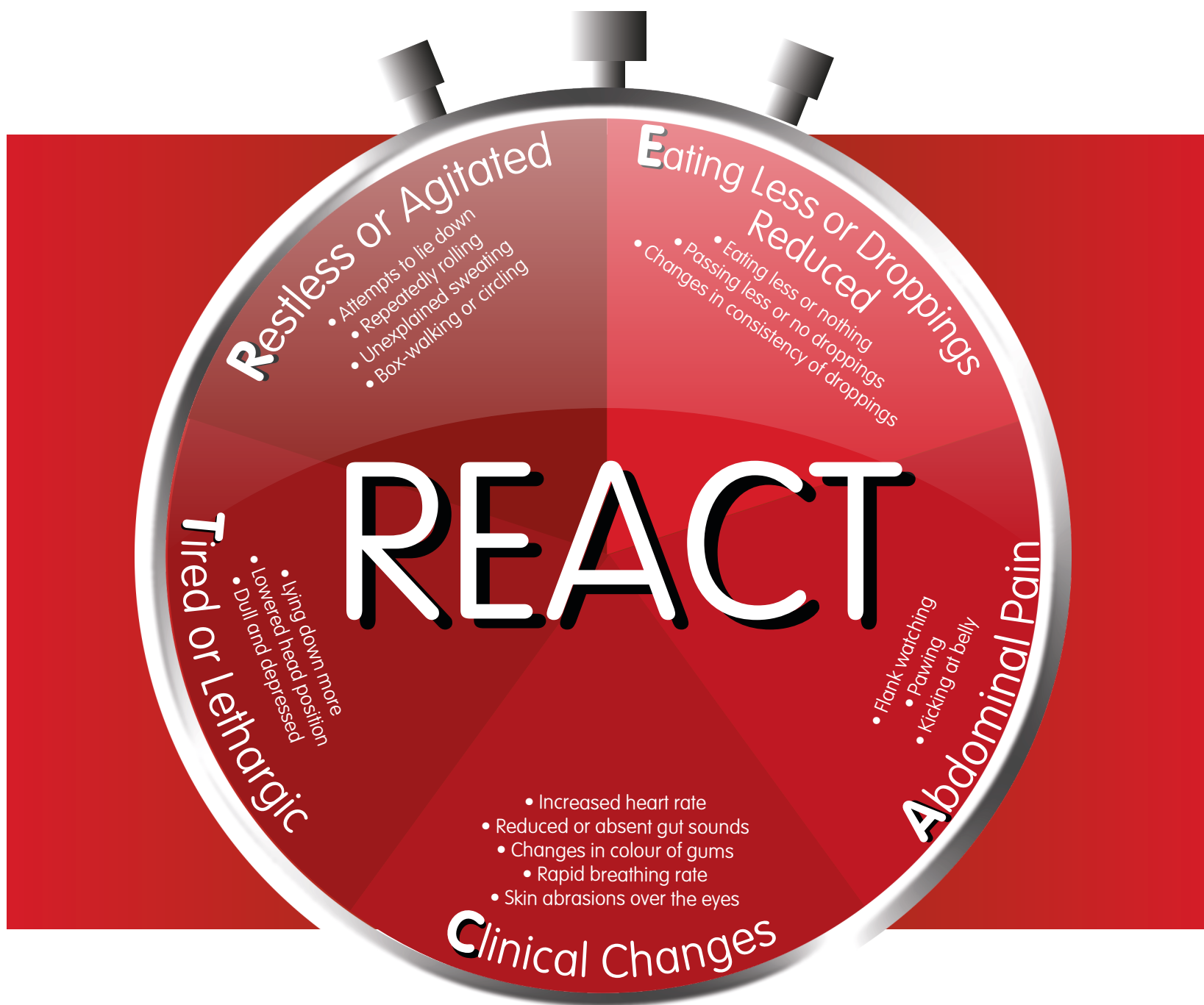
# REDUCING THE RISK OF COLIC



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Colic can occur at any time of the year in both grass-kept and stabled horses<sup>1</sup>. Studies have shown that the risk of abdominal pain in horses is higher with increasing age, within the Arab breed, following recent changes in diet or housing, and in horses with a history of previous abdominal pain<sup>2</sup>. In some horses, the specific cause of colic may never be determined and is often described as 'unknown origin'. Due to the many potential risk factors for colic there are plenty of simple steps that can be taken to help reduce the risk of it occurring.

For more information  
please visit: [bhs.org.uk/colic](https://bhs.org.uk/colic)

# Feeding and Watering

## Precautionary measure

## Why it helps

The horse's diet should be predominantly composed of forage (for example, hay, haylage, grass).

The horse is a 'hindgut fermenter', which means its intestine has evolved to process a high fibre forage diet. Feeding a forage diet is vital for a healthy digestive system and maintaining normal gut motility.

Do not make sudden changes to your horse's diet. Ensure new feeds are introduced gradually.

The horse's large intestine contains billions of bacteria which are sensitive to change. Introducing new feeds gradually, ideally over 10-14 days, will help the bacteria acclimatise and adapt. If they do not have time to adapt they will not be able to assist in digesting the food which can lead to blockages or other problems within the gut.

If concentrate feeds are really needed, feed them little and often.

The horse has evolved to eat little and often and has a relatively small stomach. Small concentrate feeds will start to be broken down effectively by the stomach. Large amounts of concentrate food will pass unprocessed through to the large intestine which could lead to gastrointestinal problems.

Ensure a constant supply of clean, fresh drinking water is available when the horse is at rest.

Water is an essential component in the digestive process. It is continually secreted into and reabsorbed from the gut. Changes in hydration can affect the digestive process and how food passes along the gut. This can lead to problems such as impaction colic. If the drinking supply is from a silty natural water source this could lead to sand colic.

Do not allow horses to graze on sandy surfaces e.g. pasture with sparse grazing<sup>3</sup>.

This prevents the horse from ingesting particles of sand and dirt which can then accumulate in the gut.

Ensure un-soaked sugar beet or grass cuttings are not fed to horses.

Un-soaked sugar beet can result in a dry ball of solid material being formed which can lead to an impaction. Make sure sugar beet is soaked and, in particular, warn any neighbours that border your horse's fields not to tip their grass cuttings into the paddock, as this can potentially lead to colic.





# Routine Healthcare

## Maintain a strategic worm control programme

It is important to maintain a strategic worm control programme to reduce the risk of high parasite burdens which can cause significant damage to the digestive tract, including disruption of the blood supply to the gut, ulcerations and perforations. A strategic programme includes pasture management, treatment based on monitoring faecal egg counts, monitoring tapeworm burdens by the use of a saliva test or blood test, selecting the most appropriate wormer and assessing the risks for different groups, such as younger and older horses.

## Regular dental checks

Dental checks should ideally be carried out every six to 12 months, by a qualified Equine Dental Technician (visit the British Association of Equine Dental Technicians for a full list) or veterinary surgeon. Dental problems can affect the horse's ability to chew correctly and effectively, therefore increasing the risk of colic; especially impactions as the swallowed feed will be in larger particles than are ideal<sup>4</sup>.

Photo: Dr Jeremy Kemp - Symonds Bransby Horses



# Change in Season



## Grass growth

Grass is normally more abundant, nutritious and lush for horses to eat during the spring and autumn. If consumed in large quantities this can result in rapid fermentation potentially leading to gas (tympenic) and spasmodic colics. During these periods of grass growth, grazing may need to be restricted to prevent the horse gorging on the grass. This is particularly important for those horses that have been kept stabled or on restricted turnout during the winter as a sudden change in management and diet can also lead to colic.

Cold icy weather can have a major impact on what the horse eats and drinks, especially if they are out at pasture. Make sure fresh water and good quality forage are always available. This may need to be supplementary forage such as hay if the weather conditions prevent the horse from grazing.

## Stabling

Stabling horses during the winter but turning them out all summer is common practice at many yards. This change in routine should be completed gradually, as it represents a significant change in the horse's diet and exercise<sup>5</sup>. Horses that are suddenly moved onto box rest are at increased risk of colic, especially impactions<sup>6</sup>. Horses should ideally have access to daily turnout; if this is not possible, horses should be exercised or turned out in a safe arena. A high forage, low concentrate diet should be fed to promote the healthy movement of food through the gut.

## Straw bedding

Using straw as bedding material should be used with particular care if the horse is being kept on a restricted diet. A straw bed can become another food source and this can increase the risk of impaction colic.



Photo: Julie Priestley

# Exercise

Exercise requirements vary, but any change in intensity or duration must be gradual. Sudden changes to exercise regimes may result in the onset of colic and other problems. Horses should always be appropriately warmed up prior to and cooled down after exercise.

Feeding and watering horses in large quantities prior to hard exercise is not recommended. Similarly, feeding too soon after exercise, before the horse has completely cooled down, also poses the risk of inducing colic. Giving very cold water to a hot horse or large amounts in a single drink is best avoided. Once the horse has cooled down normal watering may be resumed.

Exercise, especially strenuous exercise, alters the status-quo of the horse's hydration and electrolyte status. Electrolyte balance is a vital part of hydration. Horses at maintenance level or in light work will often replace these losses through a balanced diet. Horses performing at a higher level will inevitably produce a greater amount of sweat and therefore lose more electrolytes and fluids. An electrolyte supplement will be beneficial to help replace these essential salts but they should be introduced gradually. Electrolytes can be administered by syringe or added to water or feed although it is imperative that the horse does not become dehydrated if it refuses to drink due to the addition of the electrolytes. Therefore, it is advised additional clean water without electrolytes is also provided.

# Natural Predisposition

## Displacements

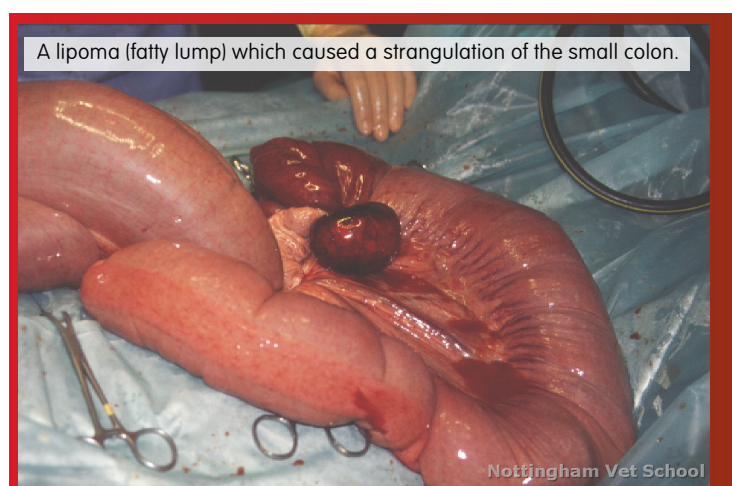
The complex system of twists, turns and suspension of the intestine within the abdomen predisposes the horse to gut health issues. Some types of displacements can be more common in larger horses and in mares after they have foaled. Large bowel displacements can be associated with impactions (and therefore have similar possible causes)<sup>7,8</sup>.

## Strangulations (also known as twisted gut)

Strangulations occur when a piece of the intestine becomes twisted around a lipoma (fatty lump within the abdomen cavity) or entrapped in other structures within the abdomen<sup>9,10</sup>.

## Torsions (rotation)

Torsions occur as a consequence of the complex composition of the horse's digestive system. Large colon torsions are more common in larger horses, mares after foaling, and following a change in management<sup>11</sup>.



A lipoma (fatty lump) which caused a strangulation of the small colon.

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# Additional Causes


All horses are individual and can react differently in various circumstances which could potentially lead to colic. This can include:

- A stressful or exciting event – it is important to monitor the horse and ensure that once settled, the horse resumes eating, drinking and passing droppings.
- Windsucking/crib-biting – the management of the horse should be reviewed. Stereotypic behaviour can be a stress relieving mechanism for some horses and the complete prevention of the ability to exhibit such behaviours (for example using a crib collar) could potentially lead to increased stress, which could lead to colic.
- Sedation can slow down gut function. Therefore, any horses which have been sedated should be monitored carefully following recovery.
- General anaesthetic – the veterinary team will closely monitor the horse following recovery.

Meconium retention in foals (meconium is the first faeces passed by a new born foal) can lead to an impaction. The new born foal should be closely monitored to ensure the first and then regular droppings are passed.



## Medical History



Some horses are more prone to colic and may have recurrent episodes of colic<sup>3</sup>. It is strongly advised that horse owners work closely with their vets for advice on prevention and management if your horse has suffered from colic previously.

Horses with a previous history of colic surgery are also at an increased risk of colic in the future.<sup>12</sup>



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