

- Digestive system

A horse that rolls, kicks the ground and looks round at the flank... These symptoms, well known to riders, are closely watched for. It should be said that " colic", a word that gathers together every type of abdominal pain, is the dread of every horse owner, and for good reason : This disease is the biggest cause of mortality in the horse.

The horse, possessing a unique digestive system, is of particular risk from suffering from colic. The pain can be caused by an infection, or be related directly to the horse (his age, breed...), but also may be linked to his lifestyle. It is therefore possible to minimize the risk of your horse developing colic by controlling : for example, the way he is fed, watered and housed. the small intestine, the caecum or the colon. In the large majority of cases, colic symptoms are related to a digestive blockage. This blockage may be due to a material obstruction (a very fibrous food such as straw, wood shavings, sand, parasites) or strangulation of a section of the gut. Colic symptoms can also be related to a massive build up of gases in the caecum/large colon, following the ingestion of a too large quantity of fermentable sugars (starch and/or fructans). Ulcers affecting the stomach and/or small intestine can also be at the root of colic symptoms and can become chronic.

Colic refers to pains that can affect the stomach,

WHAT SHOULD BE DONE TO REDUCE THE RISK OF COLIC ?

Colic affects different regions of the digestive system and is related to various causes, so is therefore of multifactorial origin. Thus housing, managing health and **feeding** can all play a role in preventing this digestive disorder:

HOUSING AND HEALTH

HOUSING

Reducing the time spent in the stable and increasing the time spent out at grass, lowers the risk of colic. Indeed horses turned out at least 3 times a week have less risk of colic than horses who do not get access to turnout during the week. This is even of greater importance to horses who crib-bite or windsuck as they are more subject to colic. Thus an environment which allows the horse to move around (walking stimulates the intestinal transit), and keeps him occupied, helps minimize the risks of colic.

WATERING

Offer ad-lib clean water at temperate temperature. а Dehydration is a major risk for the development of colic in the horse, due to the fact of the risk of obstructions due to dehydrated food. Horses without access to water at all times in their stable, field or paddock are more at risk of suffering from colic, more so if the horses are aged. Travelling is also a risk factor in the development of colic, in part due to insufficient watering, stress and/or heat. Thus the importance of offering the horse ad-lib access to clean water at a suitable temperature at all times.

PARASITISM AND DENTAL HEALTH

Put into place a serious worming routine and regular dental care. Horses who are not wormed, or who have been wormed recently because showing signs of massive parasite infestation (dull coat, pot belly, loss of condition...) have more risk of colic than horses whose management includes a serious parasite control programme. A large number of dead parasites (worms) suddenly dumped in the digestive system can notably cause particularly painful obstructions. Finally, dental health is of paramount importance to effective digestion, and horses suffering from dental problems are more at risk of colic. Therefore, it is important to worm with regularity (in collaboration with your vet) and to organise regular dental care.

FEEDING

FORAGE

The horse's diet is based on forage. Thus, each extra kg of hay given to the horses reduces 3 fold the risk of colic. In the same manner, a study undertaken at the Centre Hospitalier Universitaire Vétérinaire at Ghent (Belgium) demonstrated that 33% of horses that were admitted for colic received less than 1kg of hay per 100 kg live-weight per day against 0% for those horses admitted for nonintestinal related problems. Forage quality is also of importance, and horses eating poor hay have a higher risk of colic, the same applies to horses eating hay directly from the bale. We advise feeding a minimum of 1.5kg of hay per 100kg of live-weight per day. Hay must be of good quality and stored in such a way as to avoid pathogens developing.

CONCENTRATES

Feeding concentrate foods must be well thought out and fractioned into a maximum number of meals. Indeed. horses weighing 500kg and receiving more than 5kg of concentrate feed a day are 6 times more at risk of suffering from colic than those being fed less than 2.5kg a day. The ingestion of over-sized concentrate meals. can in effect, cause an obstruction. blocking the intestinal transit as well as undesirable fermentations in the caecum and/or colon if there is too much starch. The horse's ability to digest starch in the small intestine is limited. Therefore, if the there is too great a quantity of starch, it will pass directly into the large intestine where it will be fermented by lactic bacteria. This causes acidification of the environment, which is harmful to the intestinal cells and intestinal microbiota. These fermentations also lead to a large amounts of gas being produced and is painful (tympanitic colic also known as bloat, wind colic or gastric tympany). We thus advice giving no more than 150g of starch and 400g of feed for every 100kg of live-weight per meal. Furthermore, small meals are better digested by the horse, disturbing less his metabolism and gastric health.

DIETARY TRANSITIONS

In the case of a change of food, a progressive dietary transition is advised. Indeed, an abrupt change in the type of concentrate feed or forage being given leads to a rise in the risk of colic in the 14 day period following the feed change, and in particular within the first 7 days. We therefore advise spreading the dietarv transition over about 10 days so the digestive system and the intestinal microbiota can progressively adapt to the new diet.

Why Reverdy ?

100 % noble ingredients

No by-products, nor waste from the agri-food industry. No bran, distillers grains, teguments, middlings, husks, etc.

0 % molasses

By-products from sugar, responsible for pathological disorders such as choke, gastric ulcers and behavioural problems.

French cereals

Cereals harvested from production areas close to our factory in Normandy. We support regional agriculture.

100 % non- GMO* raw ingredients

Non-GMO* French maize and soybean meal. *guaranteed to 99.1 %

Feeds carrying the "Bleu Blanc Coeur" label Contain extruded linseed, naturally rich in Omega 3s. Luzerne 17 Cheval Luzerne especially for horses, certified non-doping.

Raw ingredients transported by our own lorries For added safety !

Optimal doses of vitamins

Respecting international recommendations. Our suppliers are the leading European manufacturers of vitamins = Stability and health safety guaranteed.

Easily assimilable trace elements

Zinc and Copper in « hydroxy » form. 100% of Selenium provided by digestible L-Selenomethionine.

Further information & our catalogue on www.reverdy.fr

RE-FEEDING A HORSE FOLLOWING COLIC

IF THE COLIC DOES NOT REQUIRE SURGERY

It is advocated to withdraw water and food <u>during colic</u> until the episode has finished. In the first few days following <u>colic</u>, feeding concentrate feeds is not recommended so as to limit production of gases in the large intestine. With the aim of rebalancing the intestinal microbiota, administering a pre-pro-postbiotic supplement, such as REVERDY FLORE is recommended.



<u>Rapidly after surgery</u>, if the horse shows an absence of gastric reflux, good intestinal motility and an appetite, it is recommended to feed the horse with good quality hay only, at a rate of 1.2% of his live-weight over 4 to 6 meals a day (aim at 0.1 to 0.2% of live-weight per meal). Restricting energy intake just after surgery limits the risks associated with over-nutrition such as hyperglycaemia and septic shock.



<u>At the end of 2 to 4 days</u>, depending on the state of health of the animal, the energy value of the ration can be progressively increased. A specific concentrate feed, suited to post-operative re-feeding can be given in addition to hay. We recommend therefore distributing 1.2% of the horse's live-weight in good quality hay, and approximately 0.36L of REVERDY POSTOP for each 100kg of live-weight, divided between 4 to 6 meals a day.

Morgane ROBLES, Docteur en Sciences de la Vie et de la Santé. Cyrille DAVID, Docteur Vétérinaire. REVERDY Nutrition Équine, Département Recherche & Développement, Juvigny-le-Tertre, France

> To find out more consult the full article at <u>Reverdy.fr</u>



In Reverdy's range :

Reverdy quality: 100% noble ingredients, 0% molasses, French cereals, raw ingredients 100% non-GMO*



Post Op

Pelleted feed for adult horses having undergone surgery or suffering from serious digestive disorders.



Adult Fibre Energy

Pelleted feed for adult horses in work.



Flore

An association of probiotics and postbiotics. Supports the horses' natural intestinal flora and improves the digestibility of the feed ration.



Adult specific Energy

Pelleted feed for adult horses subject to tying up and gastric ulcers.