

The Guide to Equine Colic Awareness

Recognize the risks and how to avoid them.

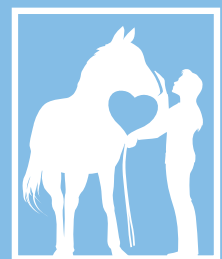


By the Crusade Against Equine Colic™
Presented by SUCCEED® Digestive Conditioning Program®

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Contents

CHAPTER 1 Know Your Horse's Risk for Colic	3
CHAPTER 2 Evaluate Your Horse for Early Warning Signs.....	5
CHAPTER 3 Know What is Normal to Recognize Colic Early	7
CHAPTER 4 Promote a Healthy Lifestyle to Reduce Equine Colic Risk	9
Conclusion	11

Introduction

EQUINE colic is a serious problem with horses. Caretakers who both intimately know their horses, and have acquired the proper knowledge, can stay steps ahead of colic. In this four chapter e-book, we provide you with a step-by-step approach for getting to know the risks to your horse and how best to reduce the risk of colic. We will discuss the following questions:

- What are your horse's risks for colic?
- What early warning signs of colic might your horse be showing?
- Are you monitoring your horse's normal, day-to-day patterns and, if so, has your horse displayed inconsistencies lately?
- How can you promote a healthy horse lifestyle, resulting in a reduced risk for colic?

This content originally appeared as a series of blog articles on www.coliccrusade.com. To see more content like this, visit the Crusade Against Equine Colic Blog.



Are you monitoring your horse's normal, day-to-day patterns and, if so, has your horse displayed inconsistencies lately?

CHAPTER 1 Know Your Horse's Risk for Colic

Despite the fact that colic is the number one medical cause of death in horses, it can be easy to assume, "it could never happen to my horse." Colic is something that happens to other people's horses, right?

In reality, your horse may be at a greater risk for colic than you realize.

The first step in preventing colic – as much as it can depend on us – is knowing the factors that increase a horse's risk for colic.

Here are some of the common care and management practices you may be using that studies have shown increase colic risk, in no particular order.



Colic Risk Factor #1: Keeping Horses in Stalls

There is no shortage of published studies indicating that keeping horses in stalls and restricting turnout time in the pasture is a major risk factor for colic. Restricted movement and a tendency to drink less while stalled have a negative effect on a horse's gut motility, the surging action that moves food through the digestive tract. This can increase a horse's risk for impactions.

Multiple studies have shown that increased turnout time with access to plenty of fresh, clean water decreases the risk for colic. Also, a sudden change from pasture to stall, such as putting a horse on stall rest to recover from injury, significantly increases colic risk.

If your horse is kept in a stall for even part of the day, its risk for colic increases.

Restricted movement and a tendency to drink less while stalled have a negative effect on a horse's gut motility, the surging action that moves food through the digestive tract.

Colic Risk Factor #2: Limiting Access to Forage

Limited access to forage such as quality hay or pasture grass often goes hand-in-hand with keeping horses stalled for all or part of the day. Common time and resource constraints mean that many horses get fed twice a day and end up spending hours between meals with nothing to munch.

For the equine digestive system, designed for a steady, constant influx of fibrous grasses, this poses multiple problems, such as:

- Constantly produced stomach acids aren't buffered by the saliva from chewing and a constant influx of grass or hay
- Horses have a tendency get hungry and bolt feed, sending undigested hard feeds into the hindgut.

Limiting forage can lead to gastric ulcers, colonic ulcers, hindgut inflammation and other general poor digestive health that also increases risk for colic.

Colic Risk Factor #3: Feeding Grain

It's not just overfeeding a horse grain that can lead to colic, it's feeding grain-based feed, period. We give horses grains to meet their additional caloric and nutritional needs when they are in work; but the equine digestive tract is really designed for a forage-only diet.

One grain meal of more than five pounds is typically more than the equine digestive tract can digest fully and appropriately in the stomach and small intestine. As a result, it gets through to the hindgut, which is not equipped to digest the large volume of simple carbohydrates and starch prevalent in grain-type feeds. This can upset the delicate microbial population of the hindgut and lead to digestive imbalance, acidosis, ulcers, and eventually even colic.

Additionally, studies have shown that grain decreases water content and increases gas production in the colon, so any amount of grain in the diet can be a recipe for colic. And colic risk actually increases with the amount of grain fed per meal.

Feeding grain-based feed can increase a horse's risk for colic.



Colic Risk Factor #4: Training and Traveling

The additional stress placed on a horse's mind or body when ridden regularly, in active training, or when traveling is also known to increase the risk for colic. Researchers have not yet found a conclusive reason for why higher activity levels and traveling put horses at risk, but studies do show a clear link.

One reason may be that these activities impact a horse's normal eating and drinking patterns. Drinking or eating less during travel are definitely problems for equine digestive health.

Also, vigorous exercise before and after eating can decrease gut motility, as blood flow redirects elsewhere to the muscles that are working hardest.

Higher activity levels as well as traveling are both known risk factors for colic in horses.

Other Serious Colic Risk Factors

The four risk factors described above are common elements of most feed and management routines that are bad for digestive health and increase a horse's risk for colic. One alone will do the trick, two or more in conjunction raises the risk even more.

Researchers have not yet found a conclusive reason for why higher activity levels and traveling put horses at risk, but studies do show a clear link.

While our goal is to draw attention to elements of basic care that you may not realize increase colic risk, it's also important to be aware of other wide-spread problems that lead to colic. They include but are not limited to:

- parasites
- poor dentition
- overfeeding
- changing feed types
- ingesting sand
- limited access to fresh, clean water

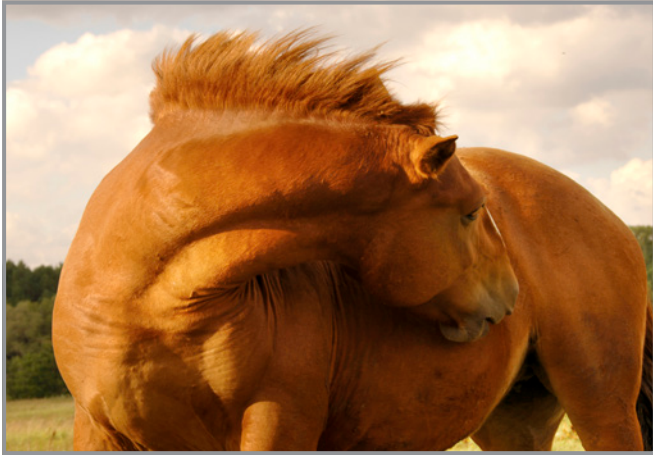
These are among the most frequent, known causes of colic and can be extremely serious. Some can bring on severe colic very quickly, while others build up over time but are equally dangerous – even deadly.

Finally, keep in mind that a small percentage of colics are related to cancers, enteroliths, gastric ruptures, enteritis and other such unavoidable conditions.

Many, but not all, colics may be prevented with careful management.

As a horse owner, manager, or care giver, it is critical to know what puts horses at risk for colic so you can take steps to eliminate or mitigate these factors – as much as avoiding colic depends on you.

CHAPTER 2 Evaluate Your Horse for Early Warning Signs



Diarrhea, loss of appetite, weight loss, and poor body condition are classic signs of poor digestive health, and may reflect an underlying disease in the horse's gut – ulcers, colitis, parasites, and more. Pawing, sweating profusely, getting up and down, thrashing, refusing to eat and drink, and kicking at the belly are several of the signs of serious digestive distress, usually colic, that requires immediate veterinary attention.

However, our goal as equestrians should be helping our horses achieve wellness – not waiting for signs they are in distress and then offering treatment. **Start looking for these early warning signs of poor gut health in horses that can signal increased colic risk.**

Early Warning Signs of Poor Gut Health

Be aware of early warning signs that a horse may be suffering from poor digestive health and you have the opportunity to head off more serious conditions and reduce the risk for colic. Here are some indications that you need to promote better digestive health in your horse:

- **Poor coat health.** Natural shine and dapples are one signal of optimal digestive health and cannot be replicated with any amount of grooming or spray sheens.
- **Sensitive flanks.** Horses may flinch or react adversely when being brushed along their flanks or to leg pressure when ridden.
- **Lamenesses.** Discomfort in the colon can lead to a horse favoring one side. This, in turn, could give rise to fatigue and even injury in the legs and joints.

- **Grain in the manure.** Birds picking at your horse's manure? This is a sign that grain is moving through your horse's system undigested, which is bad for hindgut health.
- **Intermittent or mild diarrhea.** Loose stools always result from a problem in the equine hindgut, and even when mild or intermittent could signal inflammation, digestive imbalance, or ulcers.
- **Difficulty maintaining weight.** While some horses are naturally hard keepers, difficulty maintaining weight can also result from poor nutrient absorption and gut health.

These are all signals that a horse may be suffering from poor gut health, which could increase its risk for colic.

We tend to assume bad behavior is always a personality or training issue, but it can also be a horse's way of expressing discomfort – including in its gut.

Behavioral Signs of Poor Gut Health

Behavioral problems in general, or sudden changes in behavior, can arise for a wide variety of reasons. We tend to assume bad behavior is always a personality or training issue, but it can also be a horse's way of expressing discomfort – including in its gut.

Generally grouchy, unwilling, or even mean behaviors can be a horse's response to pain or feeling unwell.

Additionally, behavioral issues like cribbing and girthing can be tied directly to poor digestive health. Studies show a direct correlation between cribbing and gastric ulcers; the behavior is thought to provide relief to the irritated stomach. And girthing may be a response to pressure placed on an unhealthy colon.

Keep in mind that one possible cause for behavior problems or sudden changes in behavior may be poor digestive health.

Performance Problems as Early Warning Signs

While there is no substitute for patient and proper training and riding, some struggles under saddle may actually be related to health issues. Flat out resistance to seeming laziness may have ties to poor digestive health. Here are some considerations for how gut health and nutrition may impact a horse's performance.

- **Starch in concentrates may cause sugar highs and lows.** Sugar imbalances may cause horses to be high-strung and unpredictable or lazy and lethargic – all in the same day.
- **Digestive discomfort displayed in resistant behaviors.** Even mild irritation in the hindgut can induce resistance behaviors in horses.
- **Poor nutrient absorption contributes to lethargy.** When a horse isn't absorbing all the nutrients available in its feed as a result of poor gut health, the resulting deficiencies can manifest under saddle in lethargy and lack of focus.
- **Hindgut dysfunction may cause lack of energy.** Imbalances in the hindgut, especially common in horses fed grain-based feeds, impact the horse's ability to produce volatile fatty acids necessary for energy.
- **Discomfort makes it difficult for horse to perform to full potential.** Low-grade inflammation, acidosis, or ulcers in the hindgut cause discomfort which may impact stride length, suppleness, collection, and jumping ability.

While performance problems have many potential causes, it's important to keep in mind that poor digestive health could be a contributing factor.



In Conclusion

If you recognize some of these health, behavior, or performance problems in your horse, they could be an early warning sign that a digestive problem is brewing. Work with your veterinarian to identify any conditions that require treatment and take steps to promote better digestive health in your horse.

And remember that a horse with a healthy, fully functioning digestive system is significantly less likely to suffer from induced colic.

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CHAPTER 3 Know What is Normal to Recognize Colic Early

The next critical step in recognizing colic early, or when poor digestive health may be increasing the risk for a colic, is knowing what is normal for your horse.

Every horse is a unique individual with a unique personality, behaviors, and routine. Any changes in these could be the first indication that a problem is brewing. Therefore, if you are intimately familiar with what is normal for your horse, you may be able spot the signs of distress before they develop into a full-blown colic episode.

Every horse is a unique individual with a unique personality, behaviors, and routine. Any changes in these could be the first indication that a problem is brewing.

Here are some suggestions to get you started as you think through the many aspects of getting to know your horse as well as possible.

Know Your Horse's Routine

Horses are creatures of habit. If we don't interrupt them, they tend to develop very consistent eating, sleeping, moving, drinking, and play patterns. And variations in these patterns could indicate that something is wrong with your horse. Here's a starter checklist of routines you should get to know:

- when, where, and for how long your horse sleeps
- how often and when your horse drinks
- favorite place to stand in the stall or pasture
- when, where and how quickly your horse eats
- how much and where your horse manures and urinates in the stall
- activity level, both alertness/movement in the stall or how he likes to play in the pasture

For instance, your horse always moves his morning hay to the back left corner of his stall and picks at it throughout the day. He's flat out in his stall, probably snoring, for 45 minutes at 2:00 each afternoon. At night when turned out,



he takes off galloping and bucking and likes to chase his buddies around for 20 minutes before settling down along the side fence to graze.

If you then notice changes in these patterns, you need to evaluate whether a health issue is possible (keeping in mind changes in environment, new pasture mates, fluctuations in the weather, and a host of other things can also affect your horse's routines).

Know Your Horse's Personality

Just like people, horses can be introverted, extroverted, shy, playful, clever, sweet, curious, anxious, easy going, over achieving and any combination of these and other personality traits.

The best way to get to know your horse is simply through interaction and learning how he responds to you, to other horses, to situations, and to stimuli. There are some online personality quizzes, such as this one from Horse Personality, Inc., that can provide a fun and insightful look into your horse.

Keep an eye out for abrupt changes in your horse's personality, which could be an indication of discomfort and distress.

Know Your Horse's Behavior

In addition to consistent routines and unique personality, your horse also has individual patterns of behavior. While all kinds of things can cause changes in behavior, or ongoing bad behavior, these can potentially signal generally poor digestive health or even a brewing colic episode.

Pay attention to behavior:

- at feed time
- in the crossties
- during grooming
- under saddle
- in the arena
- on the trail
- when traveling
- when leading
- in the stall
- in the pasture

... and during any other kinds of interactions with your horse. Get to know what is normal for him – so that if something suddenly changes you know to start evaluating.



Know Whether Your Horse is Healthy

Keep in mind that, in terms of its gut and digestion, you may have never seen your horse truly healthy. Feeding and management practices that can contribute to poor gut health are themselves so “normal” that poor gut health is a widespread issue among horses, especially in performance horses.

Keep in mind that, in terms of its gut and digestion, you may have never seen your horse truly healthy.

It's entirely possible that things you think are normal behaviors or personality traits actually reflect an underlying digestive issue. That's why it's important, even if you don't think anything is wrong, to always be aware of your horse's gut health and take steps to support it.

In Conclusion

One of the best ways you can catch and treat declining gut health or colic early is to know your horse inside and out. Pay attention to routines, personality, and behaviors – because when they change it could indicate that a problem is brewing.

CHAPTER 4 Promote a Healthy Lifestyle to Reduce Equine Colic Risk

While colic in horses is often unavoidable, many colics with unknown causes may be related to poor digestive health, and thus could have been prevented. Scientific research and experience both correlate several common management practices to poor gut health as well as increased colic risk.

As care givers and decision makers for our horses, the most important thing we can do to prevent colic is to educate ourselves:

- know what increases the risk for colic;
- recognize the early warning signs of poor gut health;
- learn what is normal for each individual horse (and notice changes); and
- take steps to promote improved digestive health.

Making digestive health a priority is important for all horses, not just those who are already clearly experiencing problems. Here are some steps you can take to start promoting better gut health and reduce the risk for colic in your horses.

Mimic a Natural Lifestyle as Closely as Possible to Prevent Colic

The equine digestive tract is designed to complement how horses live in nature: grazing up to 18 hours per day while roaming slowly over miles, with a forage-only diet, expending relatively little energy. Horses are at their healthiest when we mimic this lifestyle as closely as possible in our management. Here are some things you can do to achieve a similar result:

- **Increase turnout.** Horses should be turned out on quality pasture (or with hay) for as many hours of the day as is possible. Around the clock is best, as long as they have access to shelter. Of course, don't keep them out in severe weather or extreme temperatures which could be dangerous.
- **Reduce concentrates.** Find healthier ways to get your horse the extra calories he needs for work, such as feeding soaked beet pulp,. Also, recognize that promoting a healthy gut will enable your horse to better absorb nutrients in his feed – reducing the amount of extra calories he needs.



- **Feed smaller meals.** Most horses are fed grain dumps and several flakes of hay 2 times a day. Instead, break meals into more small meals throughout the day. Just like it's better for us to eat small amounts throughout the day, it's even more important for horses to be able to graze on their food.
- **Provide constant access to forage.** Horses should receive 1.5-2% of their body weight in forage daily, and also need it trickling through their systems constantly for optimal digestive health, function, and nutrition.
- **Slow intake.** Encouraging horses to eat more slowly allows hard feeds more time to digest properly in the foregut and intestines. Mix chopped hay in with your horse's grain to slow feeding time, use haynets, put a few large rocks in the grain bucket so your horse has to pick around them.
- **Make changes slowly.** Switch between new types of feed – grains AND hay or pasture – slowly over a period of weeks. If you are moving to a new barn, take grain and hay from the old barn to help give your horse's hindgut time to adjust. Gradually increase the ratio of new to old feed throughout this time.

Work with Your Health and Feed Partners to Focus on Wellness

Your veterinarian is highly educated and experienced in all aspects of your horse's health. Likewise, your feed rep understands nutrition. Utilize their knowledge to develop a dietary and management program that is best for your horse's individual needs. Work with your vet and feed supplier to:

- Develop a nutrition program
- Implement an appropriate deworming program
- Stay up to date on necessary vaccinations
- Provide proper dental care
- Monitor your horse's digestive wellness regularly

As they say, "an ounce of prevention is worth a pound of cure." Any time and money you spend to ensure your horse's wellness may be money saved in emergency visits, travel and treatment at a clinic, or a risky and expensive surgery in the event of a colic.

A good supplement will contain ingredients targeted to the healthy structure and function of the entire equine digestive tract (not just gastric or hindgut) to promote total gut health.

Also keep in mind that any product that has gone through the appropriate channels to get licensed for sale in each US state may not be able to provide their research directly to you due to regulatory issues. Be sure to involve your veterinarian, who will be able to access that kind of information.

So, Now What?

Talk to your veterinarian. Your barn manager. Your trainer. An equine nutritionist. Develop a specialized plan to fit your horse's unique needs and take all the steps you can to promote digestive health and prevent most colics.

Join the Crusade to pledge your support for this important cause, and to let us know that you take preventing colic seriously. LEARN. LIVE. RIDE ON.

care & feeding schedule	
Tucker	Hero
Turnout	unlimited in dry weather
Hay	5 flakes 4 x day
Grain	1/2 cup grain w/ water - AM only
Supplement	1/2 scoop Motin
Hoof care	12/9 (+2 = 12/20)
Wormed	11/18 pyrantel pamoate
Medicine	11/18 pyrantel pamoate
Blanketing conditions	below 20° cold / below 40° rain
Loves	Carrots
Notes	Apply hoof disinfectant daily

Supplement to Support Digestive Health in Your Horse

We recognize that many boarding or home-care situations may have necessary limitations that do not allow for implementation of all of the natural care recommendations discussed above. In these cases, it's important to take steps to fill in the gaps another way.

Work with your veterinarian to select a feed supplement that is scientifically researched, tested, and licensed for sale and is well recommended by those who use it. A good supplement will contain ingredients targeted to the healthy structure and function of the entire equine digestive tract (not just gastric or hindgut) to promote total gut health.

Conclusion

In this e-book, we covered four essentials for assessing your horse's risk for equine colic. By knowing your horse's risk and recognizing problems early, you have the opportunity to take better care of your horse. Spread what you've learned and contribute to the growing awareness for colic prevention in horses.

Join the Crusade against colic at www.coliccrusade.com. Pledge your support and, if you have experienced horse colic personally, then be sure to share your story. With the proper education and precautionary steps, we can provide a healthier lifestyle for all horses.

LEARN. LIVE. RIDE ON.



Freedom Health LLC
65 Aurora Industrial Parkway
Aurora OH, 44202
866-270-7939

For more information on the Crusade Against Equine Colic:
www.coliccrusade.com