



# Kids n' Horses News

## Dog Days of Summer....

Howdy to all the 4-H Horse Project members in Kansas!

Hope this letter finds you well and your life is looking somewhat normal; although it may be a new normal. Once again, included in this newsletter is some information about how things have changed for your 4-H Horse Project. If you have questions, contact your local Extension Office.

Don't forget, there is a **new Kansas 4-H Horse Show Rule Book**. Check the back cover of your rule book to make sure it is the most current; it should say: S133 Revised January 2020. Be sure to download it or have your local Extension Office order it for you. It can be found at: <https://www.kansas4-h.org/projects/animals/horse.html> under General Horse Resources. There are several rule changes you need to be aware of and this will be the rule book used at the KSF State 4-H Horse Show.

There is a TON of information about the Horse project at: <https://www.kansas4-h.org/projects/animals/horse.html> Check it out and bookmark that page for future reference.

If you would like to submit an article or have a horse event you would like to publicize, please e-mail that information to Jean at [jhuntley@ksu.edu](mailto:jhuntley@ksu.edu).  
**Happy trails and safe riding!**

## Dates to Remember:

- |            |  |
|------------|--|
| Aug 1      | State 4-H Horse Show entries due online at <a href="https://kansaseq.fairwire.com/">https://kansaseq.fairwire.com/</a> |
| Sept 17-19 | State 4-H Horse Show, Kansas State Fair, Hutchinson  |



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# Nutritional Management of Horses: Digestive Physiology

The following material is designed to reinforce the participant's understanding of the digestive physiology of the horse, and to take this understanding and apply it to the feeding management of horses. Use the word list provided at the bottom of the next page to help you fill in the blanks.

Horses are considered monogastric \_\_\_\_\_, as they evolved as an animal that does not have a rumen, but were designed to take in large amounts of forage over long periods of time. The horse's stomach is classified as \_\_\_\_\_, and is similar to what is found in humans and swine. The relative stomach capacity of horses is considered to be \_\_\_\_\_, and is an important management consideration for horses that require large amounts of feed. Another important consideration regarding the equine stomach, is that the direction of feed passage is considered \_\_\_\_\_, as horses cannot regurgitate feed like other species. This becomes important in that any substance consumed by the horse will traverse the entire tract, and can be \_\_\_\_\_ from the tract. This is the reason horsemen are encouraged to limit their horse's exposure to feeds containing any type of \_\_\_\_\_ or \_\_\_\_\_.

The next segment of the digestive tract, after the stomach, is the \_\_\_\_\_. It is considered the major site of \_\_\_\_\_ for most of the nutrients. The passage rate through this segment is relatively fast in the horse and necessitates that horses receive feeds that are readily digestible. The digestibility of most cereal grains is \_\_\_\_\_ if they are processed, although horses can do well on feeds containing whole grains.

The next portion of the digestive tract in the horse is the \_\_\_\_\_. It is often referred to as a fermentation vat due to the presence of microbes. This segment of the tract is similar to the ruminant's rumen, and may actually contain a similar microbe population, depending on the

diets fed. This segment of the tract is important in the horse, as \_\_\_\_\_ is digested here and results in the formation of \_\_\_\_\_ that are absorbed by the horse and used as a source of energy. From a management standpoint, this portion of the tract is important, in that if the system is overloaded by \_\_\_\_\_, which are the major sources of energy in traditional grain mixes, this can lead to excess fermentation, which can result in \_\_\_\_\_. To reduce the chances of this occurring, producers should limit the amount of \_\_\_\_\_ fed at any one feeding. For horses requiring a high energy intake, it may be safer to feed these animals \_\_\_\_\_ to \_\_\_\_\_ times per day. In addition, horses that require large amounts of energy, such as lactating mares and high intensity performance horses, a diet high in \_\_\_\_\_ may be advantageous, as it contains \_\_\_\_\_ times the amount of energy as \_\_\_\_\_. This difference would result in less feed being fed, and lower amounts of \_\_\_\_\_ in the total diet, which should lower the chance of digestive disease in these horses.

The type of digestive system in the horse dictates that \_\_\_\_\_ make up the basis of the equine diet, and cereal grains only be used to meet specific requirements. The minimum daily amount of \_\_\_\_\_ in the diet should be no less than \_\_\_\_\_% of the horse's body weight. Often, horses that require large amounts of energy will not be able to consume this amount and may actually be fed at \_\_\_\_\_% of body weight. Whenever possible, ad libitum amounts should be fed, as again this is how the horse evolved. The exception to this rule is in the case of obese horses, whose diets would have to be restricted for the health of this type of animal. Horses that receive adequate \_\_\_\_\_ in the diet will have healthier tracts as this helps maintain gastrointestinal motility, which helps maintain flow of digestion through the tract. Inadequate flow can result in impaction, which is another common cause of colic in horses. In addition to

\_\_\_\_\_, all horses require \_\_\_\_\_ in their diet in order to survive. This is an important point to remember when evaluating diets — there are only two “feeds” that are required to sustain the life of all horses. The additional “feeds” that can be fed, may ensure adequate nutrient intakes, but they are not required for the life of the animal (horse).

#### WORD LIST

(numbers in parentheses indicate times used)

<i>Water</i>	<i>Grain</i>
2	<i>Roughage</i>
<i>Colic</i>	1
<i>Herbivores</i>	3
<i>Carbohydrates (2)</i>	0.75
<i>Fiber (2)</i>	<i>Fat</i>
<i>Volatile Fatty Acids</i>	<i>Simple</i>
<i>Forage (2)</i>	<i>Cecum</i>
<i>Small</i>	<i>Absorbed</i>
2.5	<i>Increased</i>
<i>One-way</i>	<i>Absorption</i>
<i>Weed</i>	<i>Mold</i>
<i>Small Intestine</i>	<i>Starches</i>

Source: *Kansas 4-H Horse Standard of Excellence, Achievement Level II*

Answers may be found in *The Horse*, PP 189; and *Horse Industry Handbook*, pp 710-2

## Bathing Beauty

Bath time is a great time to assess horse health and keep your horse’s coat gleaming.

Bathing is a great opportunity to bond with your horse and assess any health conditions that may escape your attention during regular grooming. The answer to the question “How often should I bathe my horse” varies, depending on your activity, showing schedule, weather and environment. Oftentimes, a thorough rinsing to remove sweat and loose hair is enough to keep your horse's coat and skin healthy, and over-shampooing may cause dry skin and coat conditions.

For those times when a shampoo is in order, have on hand a rubber currycomb, sweat scraper, gentle horse shampoo, mane and tail detangler, hose, sponge, towel and bucket of water. When using shampoo, it's important to

use only products specifically made for bathing horses, as other products can deplete essential natural oils and dull the hair coat.

Brush the horse before the bath to remove excess dirt and hair. Then start slowly; most horses love a bath, but for those who are nervous, you may want to start by using a bucket of water (in lieu of a hose), washcloth and sponge. If it's too cold for a bath, a good going-over with a warm, damp towel might suffice until the weather improves.

If your horse is uneasy, start by rinsing legs first and then move up the body. You can also bathe in sections, like you would wash a car. For horses sensitive to water on their faces, a good wipe with a wet cloth or towel (no soap) is enough. Dunking the whole tail into a bucket of soapy water and swishing it around is a great way to rinse out dirt. Also, a good idea for brushing out a wet tail is to use a detangler.

Make sure your horse is completely dry before returning him to his stall. A freshly bathed horse will almost always roll, as he is itchy until he dries completely and you don't want your efforts to be for naught.

Still deciding if you should bathe your horse? Here are some sound bathing reasons:

- Your horse is going through his end-of-spring shed-out.
- Your horse is caked with mud that's too thick to get off with a currycomb.
- You are preparing for an event. Bathe your horse the day before show day.
- You have a light-colored horse with a stained coat and you are preparing for an event.
- You need to remove grime and sweat from under tack after a particularly strenuous workout.

Source: *America's Horse Daily*  
Updated: Mar 20, 2017; Original: Jun 25, 2013





# Vesicular Stomatitis Virus (VSV) in Horses

Vesicular stomatitis virus (VSV) is a viral disease that primarily affects horses and cattle and occasionally swine, sheep, goats, llamas, and alpacas. Humans can also become infected with the disease when handling affected animals, resulting in flu-like symptoms, but this is a rare event. Time from exposure to the onset of clinical signs is 2-8 days.

Infected premises are placed under quarantine for a minimum of 14 days. VSV is a state reportable disease.



## Symptoms:

1. Excessive salivation
2. Lesions in the mouth & nose
3. Lack of appetite
4. Lesions around the feet
5. Lameness
6. Teat, prepuce & ear lesions

## Report:

Vesicular stomatitis is a reportable disease. To report VSV, call the Kansas Division of Animal Health at 785-564-6601.

## Prevention:

1. Strict fly control in and around the farm
  - Manure management and elimination of fly breeding areas
  - Appropriate insecticide use for horses, barns, and outdoor areas
2. Do not share equipment, tools, or tack
3. Separate suspect animals immediately and report
4. Shows, fairs, and rodeos may institute new entry requirements
  - A health certificate issued within 2-5 days prior to an event can be beneficial in reducing risks