

## Choke

### What is choke?

Your horse is always happy to see you approaching with a feed scoop in your hand. He's polite enough not to trample you as you enter his stall, but he dances from leg to leg right behind you as you dump the feed. As you turn away, he can barely wait to get his head into the feed tub, **mouth wide-open for the biggest bite he can get. In no time at all, his feeder is licked clean**, and he's eagerly peering out of his stall to see whether, by chance, there's another meal on the way. Is this a familiar scenario at your barn? If so, your horse might be at risk for choke, the term used to describe **esophageal obstruction caused by food or foreign matter**.

### What are the signs of choke?

A choking horse may suddenly **back away from the feed tub** and appear **anxious or worried**. He might extend his neck, **stand with his head down** and legs spread wider than normal, and **repeatedly snort, cough, or make gagging noises**. If the condition is not resolved within a few minutes, **saliva may begin to drip from the horse's mouth and nostrils**. This may appear as a greenish or brownish frothy discharge, often containing particles of grain.

### What causes this condition?

**Swallowing too much material** too quickly ("bolting"), or **swallowing anything that has not been thoroughly chewed** and moistened with saliva, are the major causes of choke. While concentrated **feed** is the most common material to cause choke, horses can also have problems if they swallow **corncobs, carrots, apples**, or other treats without chewing them. Tough, **fibrous plants** encountered while grazing or eating hay may occasionally lead to choke. In addition, some horses pick up **rocks, sticks, or other objects in the pasture**, whether intending to eat them or just play with them, and these objects may become lodged in the esophagus if the horse swallows them.

### Is choke a serious problem?

Why is a blocked esophagus an immediate problem for the horse? After all, horses can't breathe through their mouths the way people can, so the blockage should only inhibit further swallowing, right?

While it's true that choking horses are not in danger of suffocation, the situation can become serious if the obstruction is not removed. If enough saliva is lost and the horse is unable to drink, **dehydration** is a possibility. **Esophageal tissues at the blockage site begin to swell** and may become so irritated that they ulcerate. **Scar tissue** from this type of injury greatly increases the chance that the horse will choke again.

Possibly the most serious complication occurs when saliva backs up behind the obstruction and then is pushed into the trachea, or windpipe. Normally, the horse's head-down eating position keeps this from occurring, but when the esophagus is blocked, saliva and food particles may be forced past the epiglottis, a flap of cartilage that keeps swallowed food and water out of the trachea. In a horse with choke, some of the saliva drains harm-

lessly from the nostrils, but **saliva and grain particles may also be drawn into the lungs, and pneumonia is the common result.**

### **What treatment is necessary?**

A choking horse should **not be allowed to eat or drink**, and should be **kept as calm as possible** until the obstruction can be cleared. Some chokes resolve without treatment, but in many cases a veterinarian must administer **sedatives or muscle relaxants** to loosen contractions of the esophagus. Water or other lubricants may be given by nasogastric tube to **flush the material** out of place. If this procedure is done incorrectly, it can complicate the problem, so this is not a “home remedy” option. **Surgery** is usually not necessary, but may be performed as a treatment of last resort.

When the obstruction is cleared, the veterinarian will decide whether to administer **antibiotics** to prevent infection of the throat or lungs. He may also prescribe a **diet of wet mashes** for a few days to give the swollen esophagus time to heal.

### **Do certain types of feed cause a horse to choke?**

It would be nice if the answer to this question were “yes.” If that were the case, feed manufacturers could simply stop manufacturing that type of feed, and choke would be eliminated forever. The truth is that **ANYTHING the horse ingests**—straight grains, cracked corn, sweet feed, pellets, chunks of apples or carrots—**can theoretically cause choke if the material is too large or too dry to pass easily along the esophagus.** Some people believe that pelleted or extruded feeds are the most frequent culprits, but many farms have used these products for years and have never had a horse choke. Clearly other risk factors need to be considered.

### **How can this problem be prevented?**

Owners can make several **management changes** to help prevent choke. The time-honored custom of **placing several large, smooth rocks in the horse’s feed tub** is one way to keep a hungry horse from getting too much grain in one mouthful, but this step fails to attack the problem at its roots. Why is the horse swallowing large quantities of dry material? And how can the situation be reversed so the horse ingests small bites of moistened food?

When the problem is mostly related to a **horse bolting his feed**, owners need to determine why this is happening. If the horse is fed in a group where he must eat quickly to avoid competition, **isolating him at feeding time** may help. Making sure the horse is not quite so hungry at mealtime, either by **feeding some hay before grain or by feeding smaller meals more frequently**, may slow the greedy eater.

**Inadequate saliva** is often linked to choke. If a horse is uncomfortable when chewing because his teeth need to be floated (filed smooth), he will chew less and therefore may not produce enough saliva to moisten his food. **Teeth should be checked once or twice a year.** Minor corrections can increase comfort and encourage the horse to chew grain more thoroughly.

Low saliva production and dry throat membranes may also be related to **dehydration**, which can occur as a result of prolonged **exercise, heavy lactation, competition for water supply, low intake of salt, or poor water quality.** Water tank heaters, while keeping tanks ice-free, may also lead to dehydration. So-called “**stray voltage**” is hard to detect, but levels too low for a human to feel will back thirsty horses away from a defective tank heater. If owners suspect this problem, an electrician can evaluate the power supply and suggest ways to eliminate **shocking horses as they try to drink.**

**Horses that are ill or exhausted** may not have the energy to chew their food well, and **wet feeds can reduce the risk** that these horses will choke. Owners can **soak beet pulp and hay** before feeding, and can **add water to dry feeds** such as pellets and alfalfa cubes.