



## Q&A FROM A HORSE DENTIST

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### Losing Horses Due to a Lack of Dental Care

One of the worst things about wintertime, Tom Allen DVM, IAED/C, from Patterson, Missouri, writes, "in veterinary practice, back when I was in general equine practice, was regularly being called to go see 'downer' horses. I would go to a farm and find a severely underweight horse that was down and unable to rise, due to having starved as it had been living on its muscles. Access to food was not a problem, but as a result of muscle mass being gone, the patient could not rise since the ability to grind the food was lacking, due to my standard of equine dental practice at that time: neglect." "Hindsight is usually a bit more

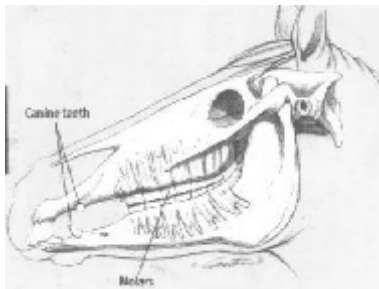


Illustration #1



Illustration #2

accurate. It is obvious to me now that the increase in 'downer' horses during those cold winter months was due not only to the low temperatures but by the lack of dental care as well as the form of food being provided to him."

With the increased awareness of equine dentistry in columns like this one, more and more veterinarians like Dr. Allen are finding the true benefits of proper horse dentistry. As noted in the above quote, winter months are more difficult for horses to weather especially if their dentition has not been properly maintained annually. Horses typically do better on tender lush blades of grass; a palatable meal easy for horses to chew and digest. During the winter months most of us supplement our horses with hay, regardless the quality, horses must work harder to chew each mouthful of hard stem dry hay. Especially our senior companions. Horse's teeth are approximately five inches long at five years old and erupt throughout their life. As horses age, the remaining root base becomes shallow (shallow reserve crown) and long stem dry hay can cause his remaining teeth to loosen. The reason why older teeth work loose is because of the repetitive grinding required. Therefore a mash supplement or a senior feed is sometimes required. However, regardless the age of your horse, proper regular dental care for all horses is the best practice to prevent winter weight loss, colic and with other nutrient related issues.

As a horse owner, there are a couple ways to determine if the condition of your horse's teeth are contributing to winter weight loss. As shown in illustration #1, horse's molar tables must work together to masticate his food properly. Clinically, proper dentistry is attained through bi-lateral symmetry throughout the horse's mouth. All teeth on the same arcade; being at the same angle and the same level; being free of points and protrusions is what allows the horse to move his jaw. In other words, your horse must be able to freely move his jaw side to side and front to back to chew properly as well as perform without pain or discomfort.

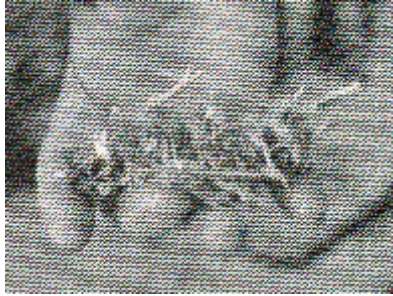


Illustration #3

Extremely protuberant teeth (illustration #2) are one of a number of dental problems that can cause a horse to quid their food. If a horse's teeth are not properly maintained, they are unable to grind their food fine enough to easily swallow. They will chew the long strands of dry hay into wads, then drop the "quids" onto the ground (illustration #3). Horses that do swallow the partially chewed stands of dry hay will leave the evidence of improperly chewed hay in their manure (illustration #4) and may be more susceptible to colic.



Illustration #4

I also submit that excessive incisor length (illustration #5) is another possible cause of quidding; improper mastication of feed occurs during summer or winter months and warrants noting at this writing. Winter is worse however, due to the excess length of front teeth which receive restricted grinding when eating hay, grain and other processed feed.



Illustration #5

This understanding comes from knowing that horses use their molars to chew every bite of food, and with every "chew", small particles of tooth surface from the molars are ground away. However, tooth particles from the incisors are only ground away evenly when a horse nips grass as a daily food source. Therefore, when horse owners provide hay, pellets or grain, nipping is done for them. Eventually a horse's incisors are so long that they prevent their molars from properly grinding together. Incisors that are too long cause soreness in and around the joint that swings the jaw. The farther the molars are held apart by overgrown incisors, the harder a horse must work at chewing his food. With this fact as a foundation of our understanding, imagine how long the incisors can excessively erupt in horses with age?

Another nutritionally related fact that should be noted is, horses grazing on free range grass will grind their teeth together when chewing up daily feed about 60,000 times a day. Horses provided with hay, whether in regular incremental feedings or 'free choice' can be expected to grind their teeth at least half that amount of time a day since they can get larger mouthfuls of feed in each bite. The ability of a horse to grind their food efficiently for their nutritional use depends solely on the condition of all their teeth, both front and back. Proper side to side grinding, forward and backward movement of the jaw is dependent of the proper angle and level of each tooth. If a horse is still losing weight when provided a sufficient, balanced diet, it may be the condition of one or more of their teeth! When one tooth can make such a critical difference in our horse's overall condition and performance it is paramount whoever you get to address your horse's teeth, must be able to recognize even the slightest anomaly.

Remember, all undesirable actions are compensatory to any point of pain and attributes to a horse's balance and ability to perform. If you are experiencing undesirable behaviors while riding your horse, have a certified equine dentist take a look, to get the answer '*straight from your horse's mouth*'.

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If you have a question about your horse's teeth and how they might relate to his health or performance call 1-306-763-0386, 1-403-936-5394, 1-208-420-2701 or e-mail [mackequine@sasktel.net](mailto:mackequine@sasktel.net).