



## Q&A FROM A HORSE DENTIST

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## Still in Good Condition

**Question:** I had you work on my horse's teeth in 2002 and the horses are still in good condition , when do I need to get them looked at again?

**Answer:** Young horses: (especially in training), need to be checked every six months to ensure that their baby teeth are falling out and erupting at the appropriate ages. If you follow this article each month, you will know that a young horse is changing 24 teeth between the age of one to five years old. They shed 24 baby teeth and find homes for 12 additional permanent teeth within that five year term – finding space for 36 permanent teeth (males, 40 permanent teeth – canines). Some baby teeth refuse to fall out on their own and can easily act as slivers in a young horse's mouth.,

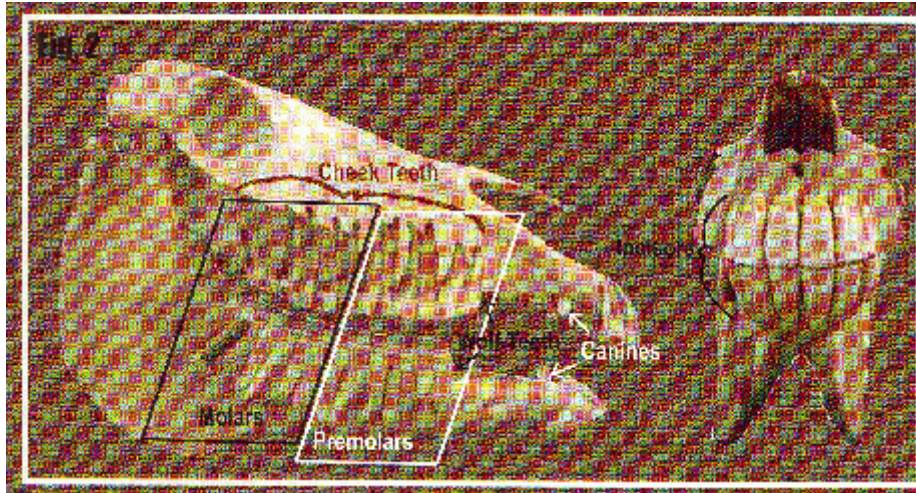
All other horses: if I want my horses to perform consistently, I believe in annually addressing their dental needs along with the other maintenance requirements. My wife has found such success with dental maintenance that she has me do her horses every six months. It is her belief that if sharp edges become *critical* to a horse's health and performance in 12 months, she would rather maintain comfort at 6 months to avoid the issues altogether.

Similar to farriers, equine dental specialists believe that proper maintenance is the key to a horse's good health and consistent performance. A close friend of mine, Garth, mentioned the other day that he couldn't go with me because he had another dentist appointment. Curious, I asked him why he was going back for the fifth time in two months. He hadn't gone to the dentist in over twenty years so now he's dealing with four root canals. His dentist told him if he had returned each year like his kids, each cavity, would have been a relatively minor incident. Now, he's looking at thousands of dollars, months of anxiety, and the realization that if he doesn't get them fixed, it won't be long before more teeth will be affected by (tooth loss, tooth displacement, grinding compromised, oral cavity odor.) Garth's dental history isn't much different than a lot of the horses we run across. Consistent annual maintenance is the key.

Unfortunately, the concept of horse dentistry is frustrating to everyone, from the horse owner to the dentist and I believe the horse sits in the middle and suffers the consequences. Horse owners talk amongst themselves. One uses a horse dentist, while another "knows" they don't need one. Some pass on harmful advice to horse owners, but all this has been going on for a long time and most likely will continue to go on for a lot longer. It is my belief that if I provide horse owners with good advice and accurate information, it can help the horses they own. Horse owners that provide their horses with regular dental care, will live longer, are more comfortable and can perform at the peak of their ability.

### Technical Equine Dental Information:

Equidae have a unique tooth structure scientifically called hypsodont teeth. Hypsodont is a tooth with a



huge amount of “reserve crown” that continually wears away and erupts, until the tooth expires. As a point of reference, human’s teeth are known as Bunodont, almost no reserve crown comparatively, remains in a stationary status once fully erupted. Some rodents and beaver’s teeth are Hypselodont, a small amount of reserve crown that grows and erupts throughout their life. They actually grow “new tooth”

constantly.

A horse’s tooth has a root, reserve crown (tooth that is not seen) and clinical crown (tooth you see). They are approximately five inches long at five years old and are designed to cut and grind as they forage 16 to 18 hours per day with minimal wear of 2 to 4 mm per year. The horse requires a strong, large mandible and maxilla to secure these long hypsodont teeth in order to perform the demanding mastication of a grazing animal. A horse’s feed requirements; ideally these animals require 1% of their body weight, daily to maintain good health. However, if their teeth are out of balance, they will eat upwards of 2-4% of their body weight. The improperly chewed feed particles merely pass through their system, unable to be converted into energy forcing the horse to eat for longer durations (more quantity), to maintain good health.

Hypsodont teeth develop and mature, but do not grow like a beaver’s incisor tooth. Horse’s teeth erupt at a rate comparable to the amount of wear they receive as they graze. Teeth are classified as a gomphalic joint, meaning there is little movement, however, periodontal ligaments in the alveolus suspend the teeth allowing for a slight amount of “give” when applying pressure. This is important in the eruption process; specialized periodontal ligaments, called sharpey’s fibers, release and reattach as the tooth erupts. This process allows the tooth to remain secure in the alveolus, and yet erupt as more clinical crown is needed.

Hypsodont teeth are somewhat “triangular”, the shape being narrower at the root than the crown. As eruption occurs, cementoblasts, located in the periodontal ligaments, produce a cementum and fill in the space between teeth to maintain the tight integrity of the clinical crown.

**Conclusion:** Since hypsodont teeth continually erupt and wearing away, it’s not difficult to understand why the surface of the horses’ teeth I worked on in 2002 are no longer present, regardless how old they are. Inside four to five years, a horse’s teeth have worn away and erupted nearly a half inch of tooth leaving the cheek teeth with very sharp edges. It’s not healthy for any horse to be left until they are in poor condition before their teeth are once again balanced. Sometimes it’s better to use “an ounce of prevention”, to be provided with a “pound of cure”.

Remember, all undesirable actions are compensatory to some 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

1-306-747-2724, 1-403-936-5394, 1-208-420-2701 or e-mail [mackequine@sasktel.net](mailto:mackequine@sasktel.net).