

Straight from The Horse's Mouth: The Truth About Equine Dentistry

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As a veterinarian, I find equine dentistry to be one of the biggest points of confusion amongst horse owners. With so many options and opinions out there it's hard to know what is right for your horse. Is Power Floating or Hand Floating better? How often does your horse need dental care? Does your horse still need dental exams or floating when they are older? Is your veterinarian qualified to float your horse's teeth? These are among the many questions I have had before becoming a veterinarian. Now that I am a veterinarian I find, on a weekly basis, that there is no one right answer for the same question. Each horse is an individual and requires unique dental care. My goal is to provide answers to general questions about dental care (for the adult horse) that will help you make the best decision for your horse.

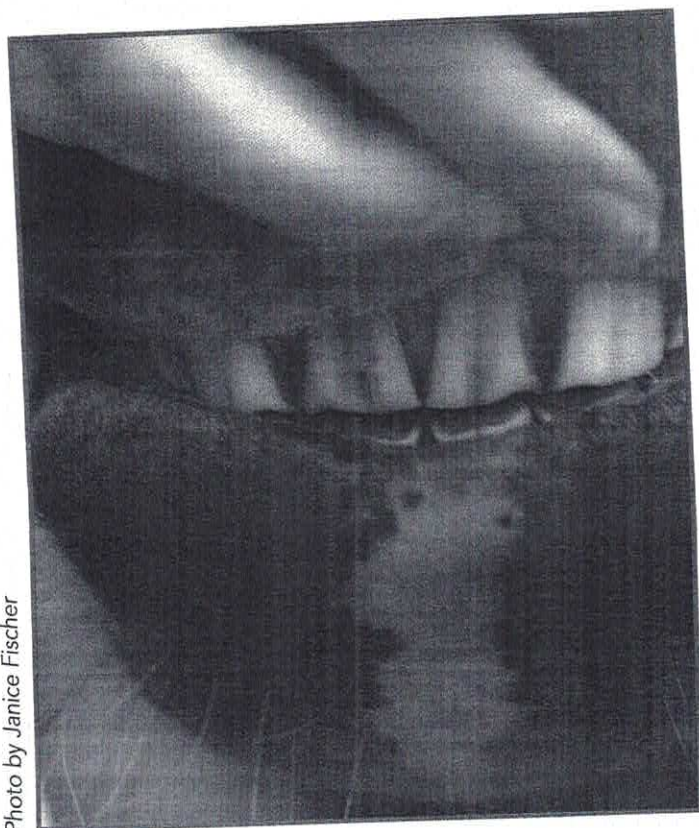
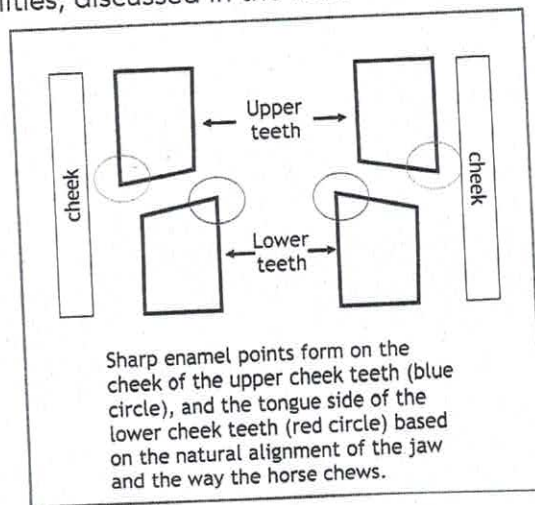


Photo by Janice Fischer

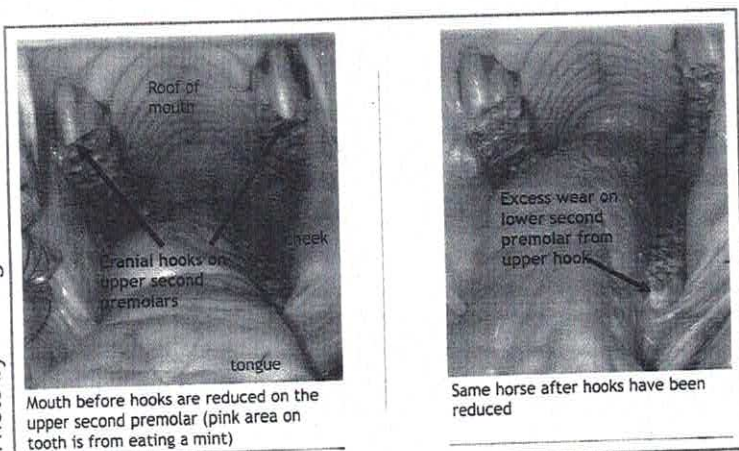
Question: *Why does my horse need his or her teeth floated?*

Answer: Unlike humans, dogs, and cats, horses have hypsodont teeth. This means that they are born with a certain amount of reserve crown (teeth stored within their skull or jaw below the gum line). As horses age their teeth continuously erupt until there is no tooth left waiting in reserve. Horses chew in a figure eight motion to break down forage. During this process their cheek teeth rub together and naturally wear the upper or lower opposing tooth down. Their maxilla (upper jaw) is wider than the mandible (lower jaw) therefore there is no opposing upper cheek tooth to the tongue side of the lower cheek tooth and no opposing lower cheek tooth to the cheek side of the upper cheek tooth. Because of this anatomy sharp points in the tooth enamel form on the tongue side of the lower cheek teeth and the cheek side of the upper cheek teeth. We reduce these sharp points with floating to prevent ulcers or cuts from forming on the cheeks and tongue. We also assess for, prevent and treat the abnormalities; discussed in the next answer below.



Q: *What are common things you find when you float teeth?*

A: The most common thing that we find when floating teeth and doing an oral exam is sharp enamel points that are created naturally by the movement of the jaw (see above for further explanation). We also commonly see hooks, or



Mouth before hooks are reduced on the upper second premolar (pink area on tooth is from eating a mint)

Same horse after hooks have been reduced

long areas, on the back of the last lower molar and the front of the upper second premolar due to the natural alignment of the jaw. We occasionally see patterns of malocclusion (improper alignment of the upper and lower teeth) such as waves and steps. Sometimes there are malocclusions caused by missing teeth which allow the opposing tooth to become excessively long since there is nothing for it to grind against. Malocclusion can also be caused by teeth becoming long and excessively wearing the opposing tooth to short. Fractures, loose teeth, missing teeth and dental carries (similar to cavities) are additional findings. We also assess for signs of periodontal (gum) disease such as redness, inflammation, receding gums and diastemas (widened spaces between the teeth which trap feed material).

Q: What are the components of an oral exam?

A: A complete oral exam starts outside the horse's mouth. Your veterinarian will assess for facial symmetry, pain or swelling of the face or jaw, the presence of nasal discharge and lateral excursion (side to side movement) of the jaw. The horse will also be assessed to make sure he or she can be sedated safely. The incisors or front teeth are then assessed for any signs of pain or disease. The horse is then sedated, has their mouth rinsed and a speculum is applied to open the mouth. Once the mouth is open the gums, tongue and cheeks are assessed for pain, ulceration, laceration or signs of disease. The occlusion (alignment) of the teeth is assessed as is each tooth individually usually with a mirror and probe. The periodontium (or gums) are also checked for signs of pain or irritation.

Q: Is power floating bad for my horse's teeth?

A: Power floating and hand floating are both safe and effective methods of equine dental correction in the hands of qualified practitioners. The power float is not only easier physically for the practitioner to use, but more importantly, it al-

lows for very specific corrections to single teeth (which is more mechanically challenging with the hand float). Typically power floating sessions are a shorter duration, cause less drag on the teeth and have a lower risk of soft tissue trauma as compared to hand floating. Alternatively, hand floating is quieter which may be preferable to some horses. There has been concern that power floating removes too much tooth, but when used appropriately it can actually make very subtle and conservative corrections. Whether your veterinarian hand floats or power floats they will not reduce the tooth more than 2 millimeters in order to avoid damaging the tooth.

Q: Does my veterinarian have the training necessary to float my horse's teeth?

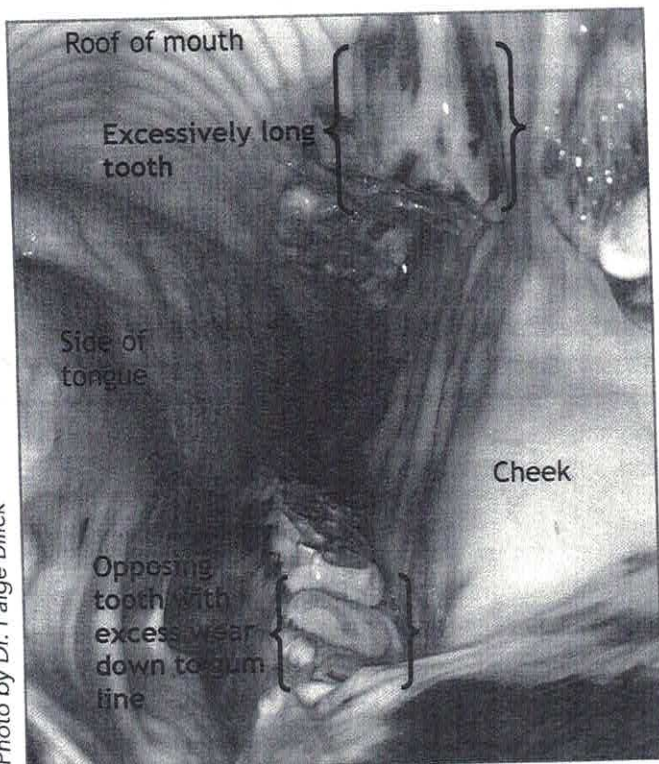
A: Veterinarians are well qualified and have the knowledge and experience to provide your horse's dental care. In veterinary school we receive extensive training in equine dentistry starting at the cellular level and extending to floating techniques, dental radiology (X-Rays), tooth extraction and dental anesthesia (sedation and nerve blocks).

Q: How often do horses need their teeth floated?

A: We recommend having your horse's teeth checked every 6 to 12 months to determine if they need to be floated. Most horses need their teeth floated every 12 to 18 months. When determining if your horse needs his or her teeth floated your veterinarian will feel for sharp enamel points on the second upper premolar, briefly look in your horse's mouth, check lateral excursion (how far the lower jaw moves before stopping) and review their dental history.

Q: What is a dental speculum. What benefit does it have for my horse's dental procedure?

A: A dental speculum is a device used to hold the horse's mouth open to allow for better access and visualization of the teeth and mouth. When used by a well-educated practitioner the speculum is only opened to the horse's comfort level. It is important to have your horse evaluated with a speculum because they have a very large mouth. The last molar extends to about the level of the eye and proper visualization cannot be achieved otherwise. Dental abnormalities such as hooks on the last lower molars, diastemas (enlarged spaces between teeth) long teeth, excessively worn teeth, fractures, ulcerations and missing teeth can't be evaluated without the use of a speculum.



Q: Should my horse be sedated to have his or her teeth floated?

A: Sedation is necessary to perform a full oral exam and dental float. By relaxing the horse with sedation your veterinarian is able to perform a more thorough dental exam with a speculum. Most importantly sedation helps ensure the safety of your horse. Sedation prevents the horse from biting down excessively on the speculum, hand float or power float causing undue stress on their TMJ (jaw). It also helps prevent any irritation of the oral soft tissues caused by excessive movement during the dental procedure.

Q: My horse is getting older. Does this mean I don't need to have his or her teeth floated?

A: As horses age they have less reserve crown left to erupt. Eventually some older horses lose their teeth because they simply run out of tooth to erupt. However, that doesn't mean that they don't need to have regular dental assessments and floating; dental corrections just need to be done conservatively. Aged horses can still develop sharp enamel points and actually have a higher likelihood of developing dental abnormalities such as periodontal disease, fractures, EOTRH (Odontoclastic Tooth Resorption and Hypercementosis), loose teeth, or infections. Regular dental assessments can screen for these abnormalities so they can be addressed before the horse becomes uncomfortable.

Q: My horse has nasal discharge. Could that have something to do with his or her teeth?

A: As mentioned above, horses have hypsodont teeth which continuously erupt as the horse ages. The reserve crown (portion of the tooth that has not erupted yet) and roots of some of the upper cheek teeth reside within the sinus. If there is an abscess or infection of those tooth roots it can lead to infection within the sinus (sinusitis) which can cause nasal discharge. Typically if nasal discharge is due to a dental problem it is one sided and has a bad odor. If your horse has nasal discharge, your veterinarian may want to do an oral exam and take radiographs (X-Rays) of the skull to determine if a tooth may be the cause.

Q: My horse isn't ridden or doesn't use a bit. Do I still need to have his or her teeth floated?

A: Even if a horse isn't in training or is ridden with a bit-less bridle it is important that they receive regular dental care. Dental abnormalities can cause training or riding issues such as reluctance to take the bit, head tossing or heaviness in hand. It is important to remember that they also can cause more generalized problems such as weight loss, difficulty eating and behavioral issues.

Q: My horse is dropping hay. What is this called and what causes it?

A: When a horse drops a ball or wad of partially chewed hay it is called quidding. Quidding can be caused by many common dental issues including missing teeth, fractured teeth and sores or ulcers from sharp enamel points to name a few. If your horse starts quidding it is a sign that he or she should have a dental exam.

Q: My horse is eating fine and is a good weight. Does this mean that his or her teeth don't need to be floated?

A: All horses benefit from having their teeth checked regularly (every 6- 12 months). Dental abnormalities are best addressed early, prior to seeing issues such as difficulty eating, dental pain or weight loss.

Q: Is it normal for my horse to be painful or not eat for a day or two following having their teeth floated?

A: When floating is done by a qualified practitioner it should not cause your horse to seem painful or have difficulty eating. As mentioned above only a small amount of tooth is reduced per session to avoid dental pain and damage and care is taken to avoid traumatizing the oral soft tissues.