

Incisors

Six upper and six lower teeth. Incisors are located at the front of the mouth, used to pick and cut the grass. Due to the narrowing shape of the incisors, as the equine ages, gaps can appear between the teeth.

Canines

Or tusks as they were commonly known, are short, quite sharp teeth. They are found between the incisor and premolars and can be on the upper and lower sides of the mouth. Mainly found in male horses, although some can be found in mares. These teeth erupt at around 4-5 years of age. They do not play a part in digestion but would have been used as a fighting tool. They can cause a problem if they become fractured, or if they accumulate a large build up of tartar/calculus.

Wolf

These are small teeth that erupt in some horses around 6-18 months of age and vary in size and position. They sit just in front of the first pre-molar. Wolf teeth can cause sensitivity in ridden equines depending on the size and position of the tooth, as they sit just behind the bit.

Premolars and Molars

Mature horses will have 12 premolars and 12 molar teeth. These teeth have a wide grooved surface for grinding forage and preparing the food for swallowing. In an older horse the chewing efficiency is reduced and sometimes lost due to the crown wearing down totally as the tooth has completely erupted.

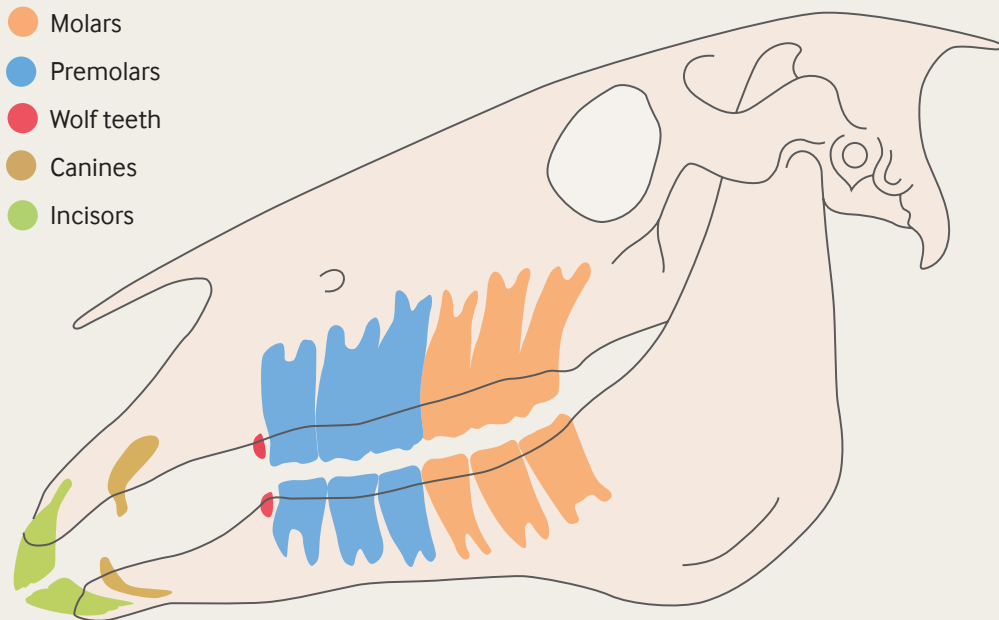
● Molars

● Premolars

● Wolf teeth

● Canines

● Incisors



If you have any questions or you would like more information as your horse gets older, please contact the Welfare Team for non-judgemental advice.

Call Bransby Horses on 01427 787369
or email us welfare@bransbyhorse.co.uk

Lines open Monday to Friday, 8.30am - 4.30pm.

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Understanding Equine Teeth

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Equine teeth continually erupt from the jaw to compensate for normal wear. Grass and hay contain silicates which wear down the teeth. As time passes, the amount of reserve crown (the portion of the tooth within the jawbone that has not yet erupted) decreases; eventually, the senior equine simply runs out of tooth. Teeth also change shape and angle as they move up through the jaw and gum – they are triangular in shape so as horses age, the teeth become narrower and gaps can form between them, potentially promoting uneven wear. Because of these factors, older equines may have dental problems not usually observed in younger equines.

If the teeth are properly maintained, are in even wear and the equine has access to good quality grass or forage, the length of the tooth above the gumline (the visible crown) remains the same. However, below the gum line, the tooth becomes shorter and shorter as the horse grows older. It is estimated that a healthy horse eating an ideal diet will have teeth that do not wear out completely for around 25 years. After this age, the teeth will eventually wear away.

It is not uncommon for horses to outlive some of their teeth and routine dental care is especially important in older horses and ponies to try to preserve good function of the teeth for as long as possible. Omnivores and carnivores have teeth that are covered in hard enamel which should allow the animal to eat their dietary requirements without wearing their teeth away. Herbivores have teeth that are made of three vertical columns, made of different materials, enamel, dentine and cementum. The infoldings of these different materials in the surface of the tooth mean it is roughened, allowing them to chew long fibres such as grass and hay. The combination of these three materials allows a natural wearing away of the teeth as they grind their forage.

Equines have 36-44 teeth.

We recommend that equines are checked at least once a year or if your equine has been diagnosed with dental issues, every 3-6 months on the advice of your dental provider. It is important to maintain regular dental health checks throughout your horse's life by a veterinary surgeon, an Equine Dental Technician registered with the British Association of Equine Dental Technicians or category 2 members of The WorldWide Association of Equine Dentistry. Ideally, sedation should be used to facilitate thorough examination and treatment of your equine's mouth.

Any signs of dental issues should be addressed as soon as possible, delaying this could cause pain and suffering. Because equines are prey animals, they will mask the signs of dental pain in the early stages, so by the time you see obvious issues dental disease may be advanced and painful. The equine may not be able to chew correctly and could start to lose condition, infections can occur, and sores and ulcers can appear within the mouth. Quidding is the term given when equines are seen to be dropping balls of food that they are unable to chew and is most commonly seen when eating forage or grass.

Other issues, look out for lengths of fibre in droppings, over 1cm in length, this can cause impaction colic, choke, or other health problems, such as, diarrhoea, sinusitis (smelly nasal

discharge), and facial swellings. This is why it is really important for your equine to have regular dental check-ups, as in many cases these issues are preventable with routine care or can be picked up early before the horse is showing signs of pain.

If your dental provider finds problems with the teeth that are more complicated than just overgrowths, it is likely they will need to take x-rays to assess the tooth roots, jawbone and sinuses. This can only be done by a vet.

Equine Odontoclastic Tooth Resorption and Hypercementosis (EOTRH)

A painful disorder called EOTRH is being noted by many equine dentists. EOTRH was first recognised as a condition in 2004. There is now improved awareness of the condition, as well as better treatment options available so is being identified and treated more regularly. The condition causes an out-of-control growth, of the outer covering of equine teeth, called cementum. Also, many equines also have destruction of the internal structure of the teeth through resorption. As the disease progresses, the front teeth can become loose and crooked, or break off due to weakness and infection. In addition, the bone of the jaw can become infected.

This condition is obviously painful, and one of the first signs of the disease may be the equine's refusal to bite a carrot or treat. Other early signs include drooling, decreased appetite, or abnormal behaviour at the water trough such as rinsing the mouth and repeatedly dunking the muzzle. You may also see pink spots or holes over the tooth roots where draining tracts are carrying inflammatory material away from the tooth roots. Tapping on the teeth may produce a painful response. To diagnose EOTRH, X-rays are required. These X-rays of affected teeth show bulbous root structures and dark spots inside the teeth, which indicate resorption.

Facts about dental conditions and management in the aged equine

- Equines over the age of 15 start to lose tooth enamel, and the chewing surface of each tooth becomes narrower as the tooth shape tapers in older equines. Chewing may be less efficient with these smaller, weaker teeth. The surfaces of the molars will also become smoother in later life, reducing the effective grinding surface.
- Narrower teeth lead to wider interdental gaps that allow feed to become impacted between the teeth, resulting in gum inflammation. These gaps are called diastema. The food that packs into the gaps allows bacteria to build up on the gumline, which then causes inflammation and infection which is called periodontal disease. This condition is extremely painful, and if left untreated can lead to the ligaments holding the tooth in place wearing away so that the tooth falls out or has to be removed. In severe cases, the infection can wear through into the surrounding bone or sinus, leading to a nasty infection. Treatment options include regularly flushing the food out of the gaps whilst the horse is sedated to allow the gum to recover, widening the gaps to stop food packing or in severe cases, removing one of the teeth next to the gap so that food packing no longer occurs.
- Incisors and other teeth may become loose in older horses and could require extraction to control pain as the horse tries to eat. This is usually due to EOTRH and the only treatment option is extraction. Diastema can also form between incisors, in these cases regular tooth brushing to remove the food can be really helpful in preventing periodontal disease.

- Sharp edges, wave mouth (uneven wear of the molars), and other conditions seen in younger horses also occur frequently in older equines. This will impact on the grinding surface and more work may be needed to try to keep the teeth as level as possible. Sharp edges are normal on the outside of the upper teeth and the inside of the lower teeth due to the normal anatomy of the mouth, but it is important these are rasped down to prevent ulceration of the gums and tongue. If left too long without rasping, then these will become really painful and prevent normal grinding of food. Only a certain amount of tooth can be removed at any one rasp (about 4mm) without causing damage to the tooth, so if teeth are left to get very long it can take several rasps to return the mouth to good condition.
- Shear mouth is seen when there is an underlying source of dental pain that means an equine refuses to eat with one side of their mouth. This means that over time the teeth on this side do not wear down and become very angled or 'sheared.' It is important to identify why the equine is not chewing on this side as well as rasping the teeth back to a normal shape.
- Infundibular caries occurs when the softer cementum in the middle of the tooth is worn away. Some equines may have a genetic disposition to the cementum being softer so infundibular caries are more likely. If this condition is identified in younger equines (under 15 years) it may be sensible to provide fillings to the affected teeth. If the disease progresses, it can lead to exposure of the sensitive structures within the tooth and lead to infection of the tooth root and abscess formation. In the end stage of the disease the tooth can also fracture.
- Peripheral caries are seen in equines that eat a high sugar diet, such as haylage or have lots of sugary treats or licks (including some mineral licks designed to go in fields). This disease is more similar to tooth decay in people, where the sugary environment allows bacteria to build up on the teeth and wear away the enamel. This can be treated with advanced dentistry and mouthwashes in the early stages, but if left untreated the teeth will become severely damaged. The best thing to do is avoid lots of sugary snacks and licks.
- Sinusitis is a common sequelae to dental disease of the upper teeth. The 3 molar (and sometimes first pre-molar) roots all sit in the sinuses, so disease of these tooth roots can cause an infection in the sinuses called sinusitis. These cases are usually easy to identify by the very smelly pus discharge coming from the nostril on the affected side. Treatment includes treating or removing the affected tooth and making a hole into the sinuses to flush the pus out.
- Tooth root abscesses occur when there is disease affecting the lower teeth and the upper pre-molars, where the roots sit in the jawbone rather than in the sinuses. In these cases, disease of the tooth means that infection occurs in the root and the bone surrounding it. Initially this may start as a bony lump but will eventually erupt into an abscess, with pus draining from it.
- If the equine has extensive dental problems or teeth have been extracted, it may be necessary to change the diet by providing soaked feeds, feeding smaller and more frequent meals, and offering some of the forage as a cubed or pelleted product that can be fed after soaking. Short chop fibres such as readigrass are also available that are easier for equines with fewer teeth or diastema to chew than hay or haylage.