

Horse Dental Care



The horse evolved from a small forest dweller, eating succulent foods, to a plains animal living on a drier coarse diet. In addition, they grew in size creating the need for a greatly increased food intake. As a result considerable changes developed in the way they chewed their food and the actual structure of the teeth.

The incisor teeth at the front of the mouth function to bite off grass which is then moved to the back of the mouth by the action of the tongue. Molar or cheek teeth act to grind the food into smaller particles prior to swallowing.

The molar teeth have some unique characteristics, which make them adapted to chewing grass.

1. Eating coarse diets such as grass cause the teeth to slowly wear away. To compensate for this, when a horse is born, not only do their teeth have tooth roots but they also have what is known as reserve crown below the gums. The reserve crown will slowly and continuously erupt throughout the life of the horse.
2. Each tooth is composed of a number of different materials including cementum, dentine and enamel. These materials have different strengths or hardness. The construction of the teeth allows the grinding surface to be a combination of these materials, so it is rough not smooth and more efficient at breaking down the grass.
3. The molar teeth are configured into a single grinding unit which means there are no gaps in between. Adult horses have six cheek teeth forming each unit, in the top and bottom jaw, on both sides of the mouth.

Finally a unique anatomical characteristic influencing teeth wear is important to understand. The lower jaw in the horse is narrower than the upper jaw and this combined with the chewing action, causes the grinding or occlusal surface of the cheek teeth to become inclined at an angle. It is not horizontal! It stands to reason that the inside of the lower teeth will be higher and the outside of the upper teeth will be lower. These are the areas which develop sharp points.

All of the above evolutionary developments create significant advantages but can also lead to problems. The continual eruption of the cheek teeth can result in overgrown teeth especially if there are no opposing teeth to wear against.

This occurs more commonly in aged horses when poor dental care causes loss of some teeth. The teeth construction will produce sharp enamel points because enamel does not wear away as fast as cementum or dentine. Any gaps between cheek teeth can result in grass material becoming wedged in these pockets and bacterial attack against the tooth surface and gum disease. When the sides of the teeth become pointed because of the normal grinding process these edges can be sharp enough to cut into the cheeks or tongue.

So with all this information in mind it can be understood that any disruption to the single arcade or grinding unit of the cheek teeth will have dire consequences. If your horse is spilling food from its mouth when chewing, if they have a habit of tossing their head when being ridden or reluctant to turn to left or right or they appear to be losing weight when there is plenty of grass in the paddock, then these problems could be associated with teeth abnormalities.

However, something can be done to prevent cheek ulceration, gum disease and loss of teeth. The process designed to correct teeth abnormalities is called dental floating. It is a grinding process, which can be done manually with “hand tools” or with power instruments. The aim is to remove as little tooth material as necessary to return the horse’s mouth to a condition where teeth abnormalities no longer interfere with the normal chewing process. Not all abnormalities can be fixed with one floating. The tooth is living tissue with blood and nerve supply contained in a hollow cavity at the centre. If this cavity is exposed, bacterial infection can cause the tooth to die.

Appropriate dental examinations completed at regular intervals will prolong the useful life of your horse’s teeth and as a consequence allow your horse to continue as a healthy athlete well into old age. Remember the teeth will continue to erupt throughout the life of the horse, which provides us with some scope to rectify many problems if they are addressed early enough. Once the reserve crown is exhausted in the older horse however, few problems can be reversed and often extractions are the only option to give these horses relief from pain.