

Natural Balance Dentistry and oral biomechanics by Irene Bastholm, 7549 Tanem, Norway

Our domestic horses, like its wild ancestors, have teeth that are intended to be worn at the same rate as they grow. Unfortunately this is not the case for most domestic horses today as the feed we provide them is not abrasive enough and it is also often pre cut. This results in incisors (front teeth) that are too long and have the wrong angle. Horses' incisors are meant to have the same length and angle throughout the horse's entire life as they have when it is about 5 years old.

Incisors with excessive length and angle influence the placement and movement of the entire jaw, and also the joint where the jaw is hinged on the skull. This joint is called the temporomandibular joint, or TMJ. In, and around, this joint we find a large concentration of proprioceptors.

Proprioceptors give the body feedback about its placement in relation to the rest of the world. Dislocation of this joint may restrict the horses possibility to move and control its entire body. Dislocation of the TMJ can also be painful. Correct placement of, and pressure on, this joint is therefore especially important to allow the horse to perform to its full potential, or plainly, to let it live without discomfort or pain. An important aspect of Natural Balance Dentistry is that we always look at the incisors first. Incisors with excessive length also change the chewing pattern. This creates uneven wear of the teeth, hard rims and sharp points. These restrict the movement of the jaw even further and obstructions like these should therefore be adjusted. What the horse need is a balanced mouth that fits the individual so that he or she can have full biomechanical range of motion both forward/backward and to both sides. This freedom of movement is not only important for proper chewing and digestion, but also for the movement of the entire body.

Another important aspect is to not remove more of the tooth than what is needed. If molars are rounded off, as is quite common today, surface to surface contact between the opposing molar arcades is diminished. Maximized surface to surface contact between molars is needed to maintain stability of the jaw. Sometimes very small adjustments will make a big difference for the horse's wellbeing.

