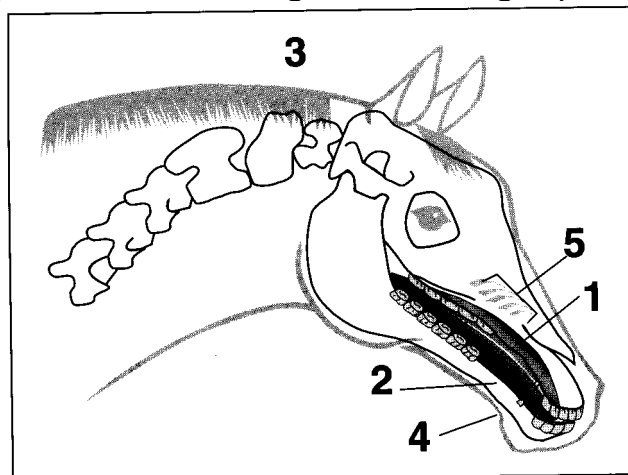


HOW BITS WORK and HOW THEY DON'T

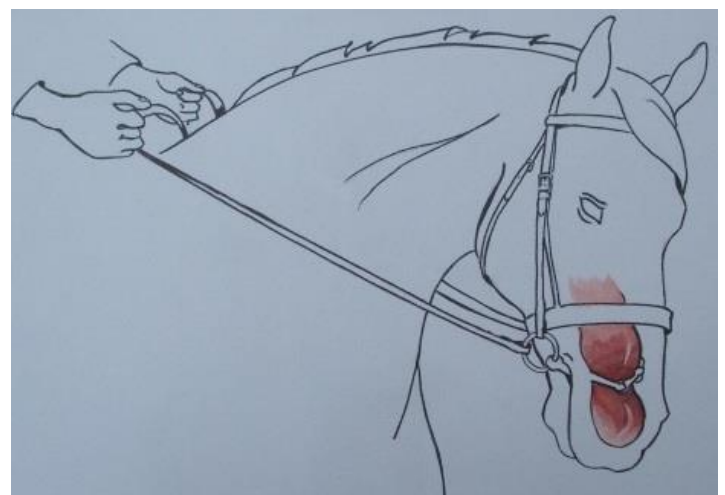
The bit works by causing pressure on various points on the horse's mouth and/or head as the rider pulls on the reins.

With the correct bit; adequate training; and competent riding, the rider is able to communicate effectively with his much larger and stronger partner.



POINTS OF PRESSURE
 1. Tongue 2. Bars 3. Poll 4. Chin or Curb 5. Palate

It is important to recognise that a horse's tongue goes down his face, and so if his head is on the vertical, so is his tongue. Therefore, the angle of pull from the bit to the rider's hands will mainly cause backward and downward pressure onto the horse's tongue, NOT into the corners of the lips.

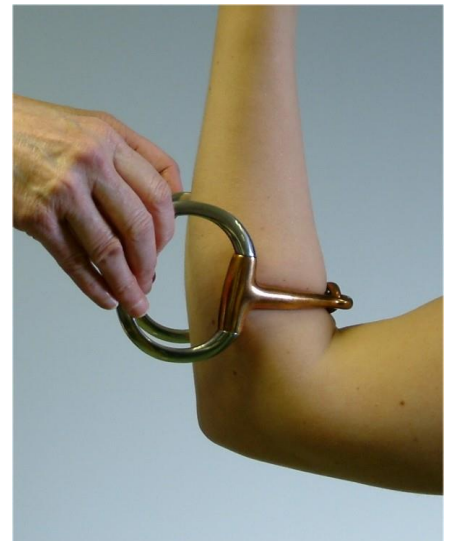


Tongue pressure

Most bits work largely off a horse's tongue, creating a backward and downward pressure into the tongue when pressure is exerted on the reins. Solid, unjointed bits can only act on the part of the tongue which sticks up above the top of the bars. Jointed bits, however, can drive downwards into the centre of the tongue way past the level of the bars.

To get an idea of how this feels: put the tip of your finger onto the centre of your tongue and press down with just a little pressure. Now try walking around for a few minutes while still pressing on your tongue. Try and swallow. NOW imagine replacing your finger with a pound of cold steel and replacing the pressure with the full body-weight of a rider standing in their stirrups and hauling on the reins.

Get a friend to place a snaffle on your arm as shown and pull gently as if they were pulling on their reins. Imagine your arm is actually your tongue: how does it feel?

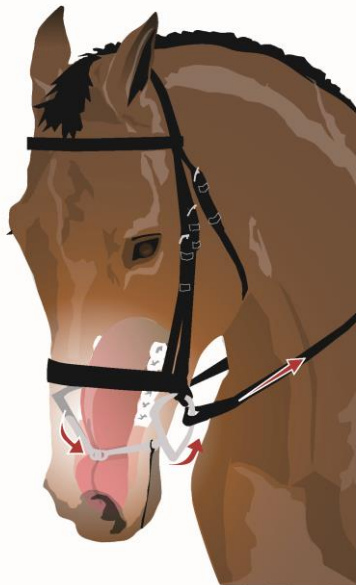


Swallowing

Horses produce an average of around 38 litres of saliva a day (2 office water cooler bottles), – salivating at the highest rates when eating and when exercising strenuously (eg. being ridden). Horse's tongues are just like ours, they must twist and elevate in order to swallow. If the bit is pulled hard onto the horse's tongue by the rider, he will not be able to swallow.

The horse will seek relief from the tongue pressure, and ideally will relax at the poll and bring his head down onto the vertical (the front of his face at a 90° angle to the ground). When the horse responds in this way, the rider will hopefully respond straight back, releasing the pressure on the reins and allowing the horse to work in a “Comfort Zone”. In practice, however, inadequate rider knowledge or skill and poor bit design will often not give the horse enough tongue relief even if he does come onto the vertical, so he will continue to resist and evade the action of the bit.

In addition, if a horse is constantly working against the rein pressure on his tongue, he builds up tension through his entire lower neck. This will lead to the horse overdeveloping muscles in the underside of his neck as opposed to his top line, weakening his entire action, giving him a poor appearance and making it harder for him to relax at the poll and come onto the vertical in the first place.



Bar Pressure

Bits act on the bars with backwards and downwards pressure on the top of the bars, or inward pressure on the sides of the bars, depending on the mouthpiece. Whilst the horse is generally more tolerant of bar pressure than tongue pressure, the bars can be bruised and damaged permanently, so the tongue is the best buffer to use for the rein aids in the training of a young horse.

Poll Pressure

Poll pressure is exerted when the bit cheek is designed to give a little leverage. Poll pressure will release endorphins which have a calming, analgesic effect. Most horses therefore respond well to poll pressure, which encourages them to break at the poll.

Curb Pressure

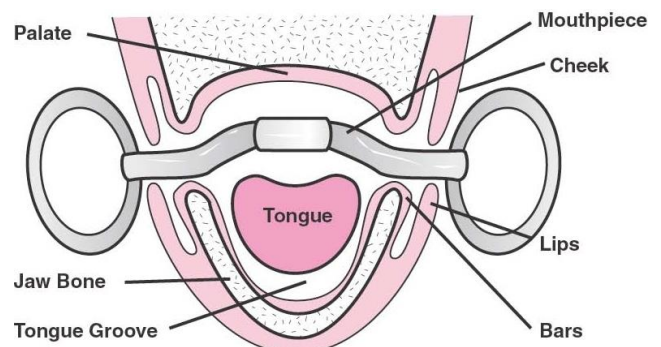
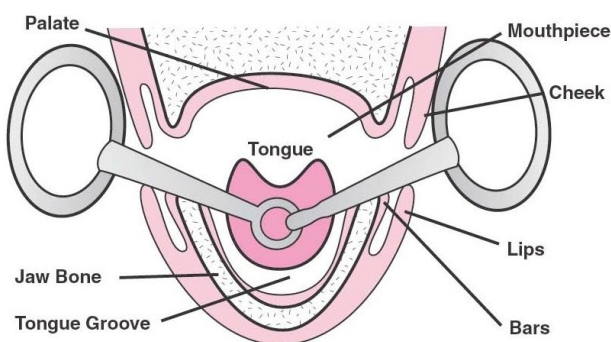
Curb Pressure from double bridles, Pelhams and Kimblewicks acts upwards and forwards against the chin groove where the mandible nerve is located, and will encourage the horse to flex at the poll. Too tight a chain will cause its over-engagement without using the pressure points of the mouth, thereby causing unnecessary pain to the horse. Too loose a curb chain causes the mouthpiece to roll too far forward before the chain comes into effect.

With a Myler snaffle, the curb chain sits far higher up the back of the horse's jaw (see information on the curb chain). The chain will help the bit remain stable in the horse's mouth; it provides another signalling point and shares the rein pressure exerted by the rider; and it encourages the horse not only to flex at the poll but also to "roll over from the withers" ie. raise his front end, round his back and neck for the optimum working position.

More problems

Most bits, when no pressure is exerted by the rider, lie directly on the surface of the tongue and bars, and so a thick heavy bit can be uncomfortable even without rein pressure.

Traditionally-jointed bits can catch the tongue in the joint, even making it bleed in extreme cases. There is also no limit to their degree of collapse, so they "nutcracker" in onto the outside of the lips and bars.





Miscommunication

Bit design can lead to the horse receiving confusing signals: If a rider is trying to lift a shoulder or work on a stiff side, the rein signal will be partially carried through to the other side of the bit, either because the mouthpiece is solid, or because the joint rings can lock. With a single jointed snaffle, the rider can be giving the correct aid to the horse to lift his shoulder, whilst the bit design causes the joint to lock and the centre of the bit to drive down into the middle of the horse's tongue. This results in "miscommunication" or contradictory signals from rider to horse.

Myler Bits

Myler Bits are designed to avoid many of these problems. They are comparatively thin, so the horse has less to accommodate in his mouth. All the mouthpieces are curved and many are ported to allow greater tongue room, and most cheeks have the facility, with the hooks (see information sheet on Hooks), to stand the bit up in the horse's mouth so it doesn't lie on the tongue and bars unless actively pulled there by the rider.

There is a wide variety of mouthpiece shapes to suit different mouth structures. The centre barrel acts as a safe, comfortable sleeve over the patented bushing system which allows each side of the mouthpiece to be activated independently, thus avoiding miscommunication. The barrel also restricts the degree of collapse of jointed mouthpieces, giving them more of a wrap feel rather than a nutcracker effect.

If the horse is comfortable and relaxed in his mouth, he can focus on what his rider is asking him to do.

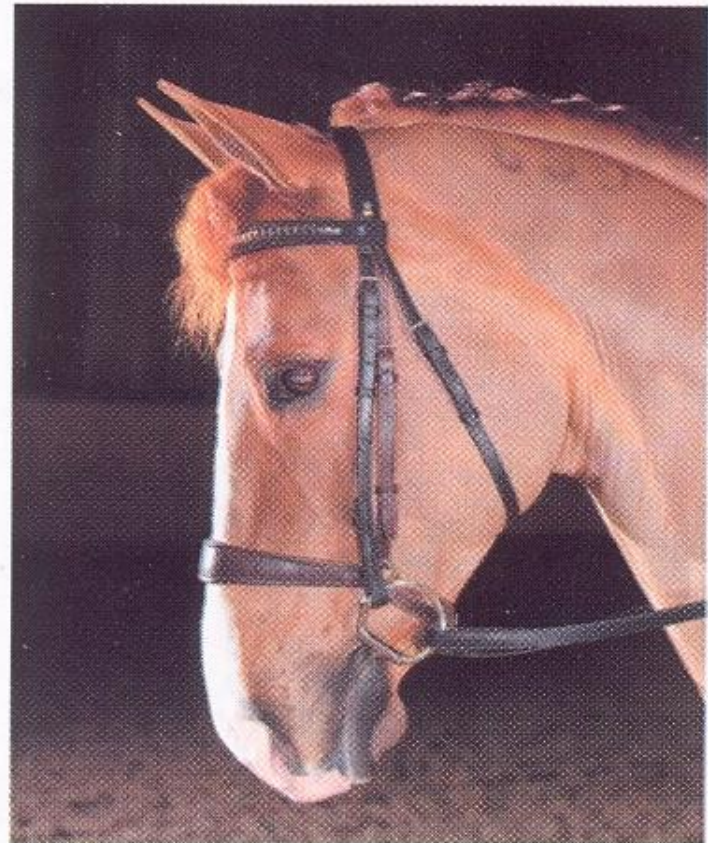
Remember:

- A bit cannot train a horse
- A bit is only a training aid to help the rider train the horse
- A bit cannot hurt a horse without a rider hauling on the reins
- The rider must relax his signals when the horse has obeyed them, or there is no reward, or incentive for the horse to do so again
- A bit is a vital communication tool, but it will NOT make up for bad horsemanship; poor riding; or lack of time and patience

RESISTANCE

or

RELAXATION



COERCION

or

COMMUNICATION