

Temporomandibular Joint (TMJ)

The jaw joint, which is termed the temporomandibular joint (TMJ) gets its name from the two bones that make up the joint. The temporal bone of the skull and the mandible (the jaw bone) fit together to form the hinge-like joint of the jaw.

Dentists have known for a long time that temporomandibular joint dysfunction can cause symptoms far away from the joint itself. Headaches, back pain, and pain across the shoulders are commonly relieved after the temporomandibular joint dysfunction is corrected. More recent evidence shows that the temporomandibular joint can cause functional problems throughout the body.

First, let's look at the temporomandibular joint, how it functions, what causes problems, and how dysfunction can cause problems throughout the body.

The temporomandibular joint is classified as a hinge-type joint, but it has a much more complex action than that. When strictly opening and closing the mouth, the temporomandibular joint acts as a hinge. However, in the actions of chewing, there is a complex movement of the joint to give the grinding action of the teeth. It is impossible for only one side of the jaw to move at a time. During the grinding action, one temporomandibular joint slides forward while the other slides back. You can observe this by placing your fingers on your jaw joints and moving your jaw to the side, as if chewing. (When you place your fingers on your jaw joint, they should be just in front of and below the opening of your ears.)

While your fingers are in this position, you can observe for clicking of the jaw. As the temporomandibular joint moves through its complete range of motion, there should be no clicking or popping of the joint. Sometimes this is a noise audible to people who are close to you. Other times it can only be felt as a lack of smooth movement and heard by one's self. In any event, the popping and clicking of the temporomandibular joint is an indication that the joint is not functioning normally.

Examination is conducted by determining the balance of temporomandibular joint activity and the muscles which move the jaw through its range of motion. When an imbalance is found, it can often be corrected by balancing the jaw's muscular activity.

It is sometimes necessary to have the bite (occlusion) balanced by a dentist to maintain temporomandibular joint balance.

Closely associated with temporomandibular joint activity is the balance of the hyoid bone in the neck. The hyoid bone has no direct contact with other bones, but is held in the neck by the muscles which hold it like a sling. Again, the muscular balance of the hyoid is very important for normal body harmony. The balance of the hyoid and its muscular structures is monitored by nerve receptors within the muscles and tendons of the hyoid. These receptors are called proprioceptors, and send information to other muscles and into the network of the nerve system. The hyoid and its associated structures can be examined for balance similar to the muscles of the temporomandibular joint. Applied kinesiology techniques are also capable of balancing these structures when necessary.

When the temporomandibular articulation or the hyoid and its associated structures are functioning abnormally, neurologic confusion can result. This particular area of the body receives a very high percentage of nerve communication from the brain. Confusion within this system can override into other systems of the body, and cause health problems literally throughout the body by way of improper nerve function.

As modern science learns more about controlling mechanisms within the body, we are able to treat more health problems to which man is subjected. Interestingly, we find that more and more symptoms are treated far from the site of the symptom itself. It is not uncommon to have a sacroiliac pain treated at the site of the jaw joint. A few years back, this would have been unheard of.