

WHAT'S NEW: MYOFUNCTIONAL THERAPY

An *orofacial myofunctional* disorder, or *tongue thrust*, refers to a “reverse” swallowing pattern in which the tongue pushes against or between the teeth. The tongue rests low and forward in the mouth, and the lips can be flaccid with an open posture.

All babies thrust their tongues when they are sucking and swallowing. This is a normal pattern during infancy, but as we mature it is no longer the norm. A tongue thrust can become a contributing factor in both malocclusion and speech dysfunction. Most children switch over to a mature swallowing pattern, but some of us maintain the tongue thrust throughout adulthood. The constant tongue pressure to the teeth can cause damage to dental occlusions and difficulty during and after orthodontic treatment as the teeth may not remain straight. In addition, the low forward tongue placement can result in speech articulation deficits, the most common being the frontal lisp.

Causal factors of tongue thrust include improper sucking habits such as prolonged use of a bottle or certain types of sippy cups, thumb sucking, and finger sucking. Anatomical factors include presence of a high narrow palate that does not allow adequate space for the tongue to lift into the roof of the mouth, or a short lingual frenum (the small membrane that attaches the tongue to the floor of the mouth) that does not allow the tongue to lift properly into the mouth. Breathing and upper respiratory disorders may also cause and perpetuate a myofunctional disorder. If the nasal airway is blocked, you have no choice but to breathe through the mouth, enabling an open mouth and forward tongue posture. When tongue thrust swallow and forward resting posture of the tongue coexist, there is a strong link to malocclusion.

In a correct swallow, the food, liquid, or saliva is gathered on the top of the tongue and a seal is made at the roof of the mouth. The tip of the tongue lifts to the gum ridge behind the upper front teeth; the back teeth bite together; and the food, liquid, or saliva is propelled into the throat by the tongue pressing into the roof of the mouth.

During the incorrect swallow, the food, liquid, or saliva may be scattered throughout the mouth, the tongue is positioned against or between the teeth, and the muscles in the tongue appear to push down and forward instead of up and back. The back teeth are apart during the swallow and the lip and facial muscles tense in an effort to keep the food, liquid, or saliva from being pushed out of the mouth.

Some typical behaviors associated with a tongue thrust include habitual chewing on pencils, clothes, fingernails; sucking the thumb, finger, tongue or lower lip; drinking large amounts of liquid with meals to wash down the food; and frequent mouth wiping as food and liquids are pushed forward.

The purpose of myofunctional therapy is to retrain the muscles of swallowing, synchronize the movements of the swallow, and to obtain a normal resting posture of the

tongue, lips, and jaw. The approach to therapy emphasizes training in the correct resting postures of the tongue and lips, learning a variety of muscle retraining exercises, instruction in the correct swallowing of solids, liquids, and saliva, and normalization of fronted speech sounds when indicated. Treatment may be received before, during, or following orthodontic treatment. The age range can be from 4 through 50 years of age, with the most typical age of clients between the ages of 8 and 16 years.

Learning the correct swallow is not difficult, but changing a habitual pattern does take understanding, motivation, and commitment.

Center for Speech & Language Pathology