

A Look At Tongue Thrusting and Abnormal Swallowing

Mairead M. O'Reilly, D.D.S., M.S.

Tongue Thrusting and Abnormal Swallowing

This is a kind of habit that is difficult to notice, but has serious potential effects. This habit is called "tongue thrusting" and it occurs during swallowing. The reason it is of so much concern is that tongue thrusting can cause some of the same detrimental effects on the teeth and jaws in growing children that we see from thumb sucking.

The most common effects seen are:

- Anterior open bite (where there is a gap between the upper and lower front teeth, into which the thumb or finger fits very nicely!)
- Protrusion of the upper front teeth (where the upper front teeth are pushed out and up by the force of the thumb) and retrusion of the lower front teeth (where the lower front teeth are pushed inward by the force of the thumb)
- Narrow high-arched palates and cross bites (where the upper back teeth on one side are biting on the inside of the bottom teeth on that same side)



Patterns of Tongue Thrusting

Tongue thrust swallows that can cause deformities in the mouth are of two types:

- 1) the simple tongue thrust swallow, and
- 2) the complex tongue thrust swallow.

In a normal swallow, the teeth usually meet, the lips are lightly closed and the tongue is held against the roof of the mouth behind the upper front teeth.

Tongue thrusting is quite different from a normal swallow.

Let's look at the **simple tongue thrust** first. The simple tongue thrust swallow is usually associated with a history of thumb or finger sucking, even though the thumb sucking may no longer be practiced. The reason is that prolonged thumb sucking can cause an open bite between the front teeth. A child who has an open bite in front has to thrust his or her tongue forward into the open bite in order to achieve a seal with the lips during the swallow. This type of tongue thrust is defined as tongue thrust with a "teeth together" swallow. This force of the tongue constantly being pushed forward against the front teeth causes spacing and protrusion of the upper and lower front teeth.

The **complex tongue thrust**, on the other hand, is more likely to occur when a child has a stuffy nose that blocks normal breathing and causes him or her to breathe through the mouth. This kind of blockage can also occur with tonsillitis or pharyngitis. When the tonsils are enlarged, for example, and the nose is blocked at the same time, the back of the tongue has no room, and has to come forward (otherwise the child can't breathe!) To help the tongue move out of the way, the lower jaw drops as a reflex, separating the teeth and providing more room for the tongue to be thrust forward during swallowing to a more comfortable position. This type of swallow is called the "teeth apart" swallow. Again, the force of the tongue pushing forward on the front teeth causes an open bite in front and characteristic spacing between the upper and lower front teeth.

Both the "teeth together" and the "teeth apart" swallow favor the development of protrusion of the upper jaw, protrusion of the upper teeth and an open bite.

Is There A Cure? – Treating Simple Tongue-Thrusting

Many simple tongue thrusts are corrected spontaneously during orthodontic treatment, since this helps create a better arrangement of the teeth in which to position the tongue. Generally, a child has to relearn how to swallow. Steps in treatment include the following:

- a. Conscious learning of a new swallowing pattern by actually showing the child how "good" and "bad" swallows feel to the tongue and roof of the mouth, and having the child practice "good" swallows over and over.
- b. Using special techniques to make the conscious "good" swallow an unconscious habit. This can include using flat sugarless fruit drops held in the right position in the mouth, and asking the child to hold the fruit drop for longer and longer periods of time. The growing length of time discourages the old "bad" swallow.
- c. As a last resort, we may install something called a habit appliance which makes it difficult for the patient to put their tongue near their teeth in the improper position. It gently catches in tongue and helps to place it in the proper position, so that this new swallowing pattern becomes second nature.

Is There A Cure? – Treating Complex Tongue-Thrusting

Orthodontic treatment is essential to deal with the more serious deformities which occur from complex tongue thrusting. After successfully changing the positions of the teeth and tongue through orthodontics, the child has to begin concentrating on learning how to retrain their muscles to develop a "good" swallow again. Other steps must follow, including 'fruit drop' coaching, and using a habit appliance to discourage improper positioning of the tongue. Treatment must continue for a relatively long time after braces have been removed, to reinforce the newly-learned reflexes.

For more information or a consultation, contact:

Mairead M. O'Reilly & Associates

888 Bestgate Road
Suite 301
Annapolis, MD 21401
410-266-0025

Email: smiles@annapolisortho.com