Does Everyone that has a Tongue Thrust Swallow Also have a Speech Problem?

The Swallowing Series for Therapists, Parents and Clients
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No. Not everyone that has a tongue thrust swallow has a frontal lisp, and not everyone that has a frontal lisp has a tongue thrust swallow—or at least one that is always identified and diagnosed.

Since a tongue thrust swallow and a lisp are both oral functions, and they both are characterized by horizontal tongue movements, one would think, because of that tongue-down commonality that anyone and everyone with a lowered, horizontal tongue movement would do both a tongue thrust swallow and a lisp. But they don't.

To be honest, I have struggled with this conundrum for several decades. It's been like trying to unravel a very long, very thin chain that's twisted and entwined.

Here's the first of three possible reasons.

I've carefully studied the components of each oral function, speaking, chewing, and swallowing, and they are all very different. Although speaking and swallowing necessitate the tongue to do its work up within the dental arch, what the tongue does up there is quite different for each function. Also, the level of stamina and effort is unique to each one; speaking is an endurance task, swallowing is not. Speech requires refined, almost delicate agile movements, swallowing requires an effortful, forceful whole-tongue on-top sequential compression.

You are welcome to a chart that I created **Deconstructing Speaking & Swallowing.** It details and compares the elements for both speaking and swallowing. What we know is that although all three oral functions use the same oral mechanism, *when deconstructed, each function has its own set of unique systematic components and coordinated routines. The all-important stabilization-mobilization requirements for each are quite different.*

A variable that makes a great deal of sense to me, is mid-tongue contraction, i.e., the "tongue bowl." Research indicates that to lift and/or curl the front-tongue, the mid-tongue must contract. To add to that, to expedite a tongue bowl, the tongue must have "good" tonicity. Therefore, the question is, does an individual have adequate lingual tonicity to generate a useful tongue bowl to effortlessly elevate the front-tongue? The capability to generate refined front-tongue vertical movements in speech is HUGE. Speech is a "vertical" endeavor, i.e. all consonant speech sounds require either front-tongue vertical movement or back-tongue vertical movement (except for "th."). Swallowing, however, does not require such front-tongue refinement, just vertical muscular effort.

Here's the second issue that impacts this challenge

There are numerous varieties of hard-tissue, soft-tissue, and habit hindrances that frequently cause or sustain horizontal tongue movements; vertical tongue movements are desirable. In brief, they include nasal obstruction, large tonsils, restrictive lingual frenum, narrow dental arch, thumb sucking, etc. Some hinder vertical movement more than others, depending on the oral function. So, for example, if the

tongue is unable to comfortably squeeze up into the palate both swallowing and speaking will be influenced. On the other hand, if nasal obstruction is intermittent, and the individual nose-breathes and mouth-breathes each 50% of the time, and sometimes the tongue rests on top, one or more of the oral functions may be considered normal.

The third piece of the puzzle is the Oral Resting Posture

The oral resting posture is what we do with our lips, tongue and jaw between oral functions. The oral resting posture is the preferred locations one places them until used again (for speaking, chewing, or swallowing). Ideally, the lips are closed, the tongue is on top, and the jaw is gently relaxed.

Correct positioning or not, no matter where a person's preferred positions are, The Oral Resting Posture impacts their functional zone, i.e. "wherever the lips, tongue, and jaw rest, is where they work." Most often, in individuals that either have a frontal lisp or tongue thrust swallow the tongue resting position is low. So we would naturally assume that all individuals who rest their tongue low (not on top) would have a frontal lisp and tongue thrust swallow—but they don't! We continue….

An abnormal oral resting posture is not just an abnormal resting posture; there are numerous alternatives and combinations. There are individuals whose lips are closed but the tongue is down, or down and forward, and they nose breathe. There are those whose lips are slightly apart, the tongue is down, and they mouth breathe. There are those who lips are apart, the jaw is lowered, the tongue is down, and they mouth breathe. There are those who lips are apart, the jaw is lowered, the tongue is down, and the tongue displaces forward, between teeth and blocks the oral airflow; therefore, they breathe through their nose.

There are differences and degrees of abnormal lips, tongue, jaw resting positions. The Oral Resting Posture can be a consequence of hard-tissue and soft-tissue differences and unwanted oral habits; and, it can be a cause, or at least a contributor of abnormal oral functions, like a frontal lisp or tongue thrust swallow.

So what's the answer? The answer may lie within the above three proposals. Or it may be a combination, or it may be none-of-the-above. The immediate answer, however, lies in your thorough, connect-the-dots analysis of your client's oral mechanism and their capabilities. No cranio-facial-oral-respiratory component works alone; mouth-movements are a collaborative effort. Analysis and therapy is a case-by-case endeavor. Good luck!