

## [Open Wide, Thumb Inside \(Part One\) \(with apologies to Play School\)](#)

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Vince Borg, principal speech pathologist at Box Hill Speech Pathology Clinic, is a Certified Orofacial Myologist (C.O.M). What exactly does an orofacial myologist do? Well, Vince is trained to treat orofacial myofunctional disorders (OMDs) in children and adults. Unlike dentists, who focus on the health and stability of teeth when they are in contact, C.O.Ms concentrate on postures and patterns when teeth are apart, which they are for over 95% of the time. Myofunctional disorders consist of inappropriate postures and habits involving the muscles of the tongue, lips, jaw and face. Issues that can result include abnormal lip and tongue resting postures, drooling, difficulties chewing, tongue thrust and articulation problems. Myofunctional disorders are seen in 38% of the general population and up to 81% of children with articulation problems!

OMDs are often caused by a combination of factors. It can be due to oral habits such as thumb or finger sucking, cheek or nail biting, or teeth clenching or grinding. Individuals who breathe with an open mouth due to airway problems caused by allergies, enlarged tonsils or adenoids, asthma, or a significant deviation of the nasal septum (the wall of cartilage separating the left and right airways), may experience myofunctional disorders. Structural or physiological abnormalities like tongue-tie, or neurological or developmental abnormalities such as Down's syndrome or cerebral palsy are possible causes. Hereditary predisposition to some of the above is another cause.

You may now be wondering about your own child's thumb or finger sucking, a common contributing factor to myofunctional disorders. It is common and normal for young children to suck, and stems from the instinctive suckling reflex required to survive. Babies associate suckling with their mothers, warmth and love. The process actually releases endorphins that attach to opiate receptors in our brain, creating an addiction-like feeling of pleasure and calm. Children may suck their thumbs to reduce boredom or soothe themselves when feeling distressed, ill or tired. It is also common at bedtime when falling asleep. Thumbsucking beyond age 4, however, is a habit.

There are many potential negative effects of thumbsucking if it continues beyond ages 4-5. It can impact on the typical growth and development of the skeletal, facial and nasal structures and spaces, as well as tooth eruption and alignment, jaw alignment, lip structure and palate (roof of the mouth). Thumbsucking can also affect finger growth, speech, breathing and swallowing!

Tongue thrust is one possible consequence of prolonged thumbsucking. When children have a finger or thumb in their mouth constantly, the tongue is forced into a low and forward resting position. This is normal until ages 4-6, when it is expected that the tongue transitions to rest within the roof of the mouth, away from the teeth. This position ensures that the hard palate is moulded into the correct width and shape. This process is interrupted in the thumbsucking child.

Misarticulated or distorted speech patterns occur in 81% of individuals with OMDs. "S" errors are most common, with "z", "sh", "ch", "j", "d", "t", "n", "l" and "r" also affected.

Poor lip seal can also impact on “p”, “b” and “m”. When OMDs and related speech errors occur together, it is often difficult to address the articulation issues through traditional speech therapy alone. The advantage of seeing a speech pathologist trained in orofacial myology is that he or she is also experienced in providing intervention for speech disorders associated with OMDs.

Feeding and swallowing may be affected in OMDs. Children and adults with incorrect chewing and swallowing behaviours often chew with their lips apart, taking large mouthfuls and swallowing before they have completely chewed their food. These patterns typically result in food particles around the mouth, noisy chewing and swallowing (smacking and gulping) and messy feeding. Individuals may also experience upset stomachs due to swallowing excess air.

*By Nicola Anglin (Speech Pathologist)*



## References

Confirmational Study: A Positive-based Thumb and Finger Sucking Elimination Program

[http://www.thumblady.com/images/THUMB\\_STUDY\\_SHARI\\_GREEN\\_C.O.M.-1.pdf](http://www.thumblady.com/images/THUMB_STUDY_SHARI_GREEN_C.O.M.-1.pdf)

Frequently Asked Questions for the Thumbsucking and Fingersucking Program

<http://www.thumblady.com/faq.html>

International Association of Orofacial Myology (IAOM)

<http://www.iaom.com/OMDisorders.html>

<http://www.iaom.com/faq.html>

That Adorable Thumb

<http://www.iaom.com/pdf/ThatAdorableThumb.pdf>

That Little Thumb Can Do An Awful Lot of Damage!

[http://www.thumblady.com/images/That\\_Little\\_Thumb\\_Can\\_Do\\_an\\_Awful\\_Amount\\_of\\_Damage!.pdf](http://www.thumblady.com/images/That_Little_Thumb_Can_Do_an_Awful_Amount_of_Damage!.pdf)

Thumb Suck: Hygienetown Profile in Oral Health

[http://www.thumblady.com/images/Hygiene\\_Town\\_Article.pdf](http://www.thumblady.com/images/Hygiene_Town_Article.pdf)

***Vince Borg has a special interest in Tongue Thrust and Oro-Facial Myology. Book your child an appointment with a speech therapist at Box Hill Speech Pathology Clinic on (03) 9899 5494 or direct your child speech therapy questions to [enquiries@speech-therapy.com.au](mailto:enquiries@speech-therapy.com.au).***