

# Orofacial Myofunctional Disorders (OMD)



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## **What are orofacial myofunctional disorders (OMD)?**

With OMD, the tongue moves forward in an exaggerated way during speech and/or swallowing. The tongue may lie too far forward during rest or may protrude between the upper and lower teeth during speech and swallowing, and at rest.

## **What are some signs or symptoms of OMD?**

Although a "tongue thrust" swallow is normal in infancy, it usually decreases and disappears as a child grows. If the tongue thrust continues, a child may look, speak, and swallow differently than other children of the same age. Older children may become self-conscious about their appearance.

## **What effect does OMD have on speech?**

Some children produce sounds incorrectly as a result of OMD. OMD most often causes sounds like /s/, /z/, "sh", "zh", "ch" and "j" to sound differently. For example, the child may say "thumb" instead of "some" if they produce an /s/ like a "th". Also, the sounds /t/, /d/, /n/, and /l/ may be produced incorrectly because of weak tongue tip muscles. Sometimes speech may not be affected at all.

## **How is OMD diagnosed?**

OMD is often diagnosed by a team of professionals. In addition to the child and his or her family or caregivers, the team may include:

- a dentist

- an orthodontist
- a physician
- a speech-language pathologist (SLP)

Both dentists and orthodontists may be involved when constant, continued tongue pressure against the teeth interferes with normal tooth eruption and alignment of the teeth and jaws. Physicians rule out the presence of a blocked airway (e.g., from enlarged tonsils or adenoids or from allergies) that may cause forward tongue posture. SLPs assess and treat the effects of OMD on speech, rest postures, and swallowing.

### **What treatment is available for individuals with OMD?**

A speech-language pathologist (SLP) with experience and training in the treatment of OMD will evaluate and treat the following:

- open-mouth posture
- [speech sound errors](#)
- [swallowing disorders](#)

SLPs develop a treatment plan to help a child change his or her oral posture and articulation, when indicated. If tongue movement during swallowing is a problem, the SLP will address this as well.

Treatment techniques to help both speech and swallowing problems caused by OMD may include the following:

- increasing awareness of mouth and facial muscles
- increasing awareness of mouth and tongue postures
- improving muscle strength and coordination
- improving speech sound productions
- improving swallowing patterns

If airways are blocked due to enlarged tonsils and adenoids or allergies, speech treatment may be postponed until medical treatment for these conditions is completed. If a child has unwanted oral habits (e.g., thumb/finger sucking, lip biting), speech treatment may first focus on eliminating these behaviors.

### **What other organizations have information on OMD?**

*This list is not exhaustive, and inclusion does not imply endorsement of the organization or the content of the Web site by ASHA.*

- [International Association of Orofacial Myology](#)

## What causes OMD?

The following may cause OMD:

- allergies
- enlarged tonsils and adenoids
- excessive thumb or finger sucking, lip and fingernail biting, lip picking, and teeth clenching and grinding
- family heredity

**Allergies** can cause problems with the functioning of the mouth or face muscles. For children with allergies, it is often hard to breath normally through the nose because of nasal airway blockage. They often breath with their mouths open, tongues lying flat on the bottom of their mouths. Lip muscles may lose their strength and tone if an open-mouth posture continues for a long time.

**Enlarged tonsils and adenoids** can block airways, causing an open-mouth breathing pattern. This pattern can become habit forming and continue even after medical treatment for the blocked airway is received.

**Excessive thumb or finger sucking, lip and fingernail biting, lip picking, and teeth clenching and grinding** can result in OMD. Constant thumb sucking in particular may change the shape of the child's upper and lower jaw and teeth, requiring speech, dental, and orthodontic intervention. The effect of the problem depends on how often and how long the oral habit is practiced.

**Family heredity** can be involved in determining the size of a child's mouth, the arrangement and number of teeth, and the strength of the lip, tongue, mouth, and facial muscles.

## What does a speech-language pathologist do when working with individuals with OMD?



The [Preferred Practice Patterns for the Professional of Speech-Language Pathology](#)

outline the common practices followed by SLPs when engaging in various aspects of the profession. The Preferred Practice Patterns for orofacial myofunctional disorders assessment and treatment are outlined in Sections 38 and 39.