# Expiratory Muscle Strength Training for dysphagia

- Expiratory muscle strength training (EMST) is one type of Respiratory Muscle Training (RMT).
- EMST is an evidence-based dysphagia treatment for certain impairments and patient populations.

## How can EMST improve swallowing?

EMST improves airway protection, swallow efficiency, and UES opening by:

- Increasing and prolonging activation of the submental musculature.
- Improving hyolaryngeal elevation.
- Increasing geniohyoid muscle mass.

## Who may be a good candidate for EMST?

#### By impairment:

- Reduced hyolaryngeal elevation.
- Penetration/aspiration during or after the swallow.
- Reduced UES opening.

### By condition:

- ALS
- COPD
- Head & neck cancer
- Parkinson's disease
- Stroke

## What are two types of EMST training devices?

- Pressure-threshold devices, like the EMST-75 and EMST-150.
- Resistive devices, such as The Breather.

Pressure-threshold devices deliver the intended exercise work-load, because the user has to generate enough force to break the seal on the valve. On the other hand, resistive devices are flow-dependent. This means that the exercise work-load depends on how fast the user is exhaling.

## Learn more about EMST and swallowing

- Brooke Richardson on the Speech Uncensored podcast: https://bit.ly/3Z5TxGi
- Dr. Christine Sapienza on the Swallow Your Pride podcast: https://bit.ly/41sQUzJ
- Tutorial by Dr. James Curtis:
   https://www.jamescurtisphd.me/tutorials/cough/emst
- ASHA's Evidence Maps: <a href="https://apps.asha.org/EvidenceMaps/">https://apps.asha.org/EvidenceMaps/</a>
- Dysphagia Cafe: <a href="https://bit.ly/3lSqlr8">https://bit.ly/3lSqlr8</a>
- SLP Research & Review. <a href="https://bit.ly/3IUvFzy">https://bit.ly/3IUvFzy</a>

### Primary Source:

Richardson, B. (Accessed February 2023). Foundations of Respiratory
 Muscle Training: Dysphagia Therapy. MedBridge Education.
 https://bit.ly/3SvvWMA