

# MSAC – Swallowing Exercises.

## What is swallowing therapy?

For most of us, swallowing is an automatic act that we don't put much thought into. That is, until it goes wrong and you end up with a problem known as dysphagia. Swallowing is actually quite a complicated and coordinated manoeuvre that involves many muscles and nerves.

Swallowing can be damaged by neurological injury, head and neck cancers, structural changes and other causes. Whilst we are getting better at diagnosing the cause of the problem, rehabilitating swallowing function is more complicated. While there is no quick fix, and no one exercise to cure dysphagia, it is generally understood that basic neuroplasticity principals such as use it or lose it, muscle loading intensity and specificity (practising the act of swallowing itself) is a good place to start to get swallowing back on track.

At Melbourne Swallow Analysis Centre, we keep up to date with the latest research in dysphagia rehabilitation and swallowing exercises and develop a program tailored to the problem you are having. Therapies designed to improve swallowing are focused on strengthening muscles and building coordination of the nerves and muscles involved in swallowing. It is important to only do exercises specific to your swallowing problem as some exercises can make swallowing function worse. Your Speech Pathologist is a good person to help you decide which exercises will be beneficial for you.

Some of these exercises may include:

### 1. **Shaker Exercise**

This exercise aims to strengthen your throat muscles to improve swallowing.

To do this exercise, lie flat on your back and raise your head as though you were trying to fixate your gaze on your toes. While you do this, keep your shoulders on the floor/bed.

Hold your head for up to 1 minute (no longer), then relax for a minute. Repeat 3 times.

Now lift your head for 2 seconds only. Repeat 30 times.

This exercise can be done up to 3 times per day, 5 days per week (2 rest days in between).

As you improve, you can prolong the duration of each head lift and increase the number of repetitions. It is normal to feel muscle fatigue (but not pain) after this exercise. This exercise is not done with food in your mouth.



## 2. Mendelsohn Manoeuvre

This exercise is aimed at prolonging the upward movement of the voice box (larynx) and keep the top of your oesophagus (the cricopharyngeus) open for longer.

Place your fingers on your Adam's apple (the hard area halfway down the front of your neck) and swallow your saliva. Feel the Adam's apple (part of the larynx or voice box) move up then down.

To do this exercise, keep your Adam's apple elevated for about 2-5 seconds each time. Repeat 10-15 times. Your speech pathologist can make sure you are doing this properly with biofeedback such as videofluoroscopy. If safe to do so, this exercise can also be done with food.

## 3. Effortful Swallow

This exercise is aimed at improving the contraction of your throat muscles. It is like doing an ordinary swallow, but you must squeeze your tongue and throat muscles as hard as you can, pushing your tongue into the back of your soft palate. Imagine you are swallowing a golf ball! Start with 2 sets of 10 repetitions and build it from there.

It is normal for your swallowing muscles to feel tired afterwards and need a rest.

You can practise with or without food, depending on your swallowing problem and if safe to do so.

## 4. Chin Tuck Against Resistance (CTAR)

This exercise has shown similar benefits to Shaker Exercise but can be done sitting or standing. Place an object such as a rolled up towel, small ball or cylindrical piece of foam (e.g. 15cm pool noodle) under your chin. Press your chin down firmly on the object and squeeze as hard as you can.

Start with holding the squeeze for 1 minute then relax for 1 minute. Repeat 3 times. Rest.

Now squeeze as hard as possible for 2 seconds only. Repeat 30 times.

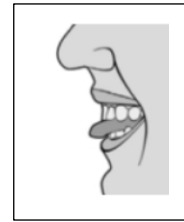
This exercise can be done up to 3 times per day, 5 days per week (2 rest days in between).

Again it is normal to feel muscle fatigue after this exercise.

## 5. Masako or tongue hold

This exercise is aimed at improving the strength of your tongue and upper throat muscles. To do the exercise, hold your tongue between your teeth and beyond your lips. Swallow your saliva without releasing your tongue. It sounds easier said than done! You will feel the tongue trying to pull back into your throat as you keep your tongue in a forward position.

As you get better, you can perform more repetitions and even hold your tongue a little further forward. You do not want to try this with food in your mouth.



## 6. Expiratory Muscle Strength Training (EMST)

A novel exercise trainer that has made its way to Australian shores, EMST training has been shown to improve saliva/ secretion clearance and strength of swallowing, cough and voice muscles.

To perform this exercise you need to purchase\* an EMST trainer (approx. \$120), and have someone who knows about it to set it up for you. The trainer has a pre-set level of resistance that you need to blow air into, which forces your muscles to contract.

There is a protocol of 5 x 5 repetitions, once per day, for 5 days in row (2 days recovery).

\*EMST-150 can be purchased from MSAC, or online from a local distributor.

In summary, there are many exercises and target therapy that can be done to improve swallowing muscles and coordination. It is important to do the right exercises, specific to your problem, to optimise recovery.