Preventive Swallowing Exercises
Head and Neck Radiation Therapy Patients

Radiation to the head and neck can lead to long-term swallowing problems called dysphagia. Patients with dysphagia have a hard time swallowing food, liquid or saliva. Swallowing problems can occur during treatment, or may develop or continue long after radiation treatment has ended.

These exercises may help reduce the potential for long-term swallowing problems and/or improve swallowing function. Your speech pathologist will show you how to do these exercises. If you have any questions about these exercises, please ask your speech pathologist.

**Goal:** Do these exercises **four times** each day. Exercises should take about 10 minutes to complete.

**Strap Muscle Exercises**

The strap muscles in the neck move the voice box up and out of the way to keep food and liquid from entering the lungs when you swallow. These exercises are designed to increase flexibility and strength.

1. **Shaker Exercise (Part 1)**
   - Lie down on your back on the bed or floor. Do not use a pillow because your shoulders must be flat against the surface.
   - Keep your shoulders flat against the bed or floor, and lift up your head, bringing your chin down to your chest (until you can see your toes) and hold for 30 seconds.
   - Then lower your head and rest for 30 seconds.
   - Repeat the exercise **three times**.

2. **Shaker Exercise (Part 2)**
   - Lie down on your back on the bed or floor. Do not use a pillow because your shoulders must be flat against the surface.
   - Keep your shoulders flat against the bed or floor, and lift up your head, bringing your chin down to your chest. Then immediately lower your head.
   - Repeat the exercise **15 times**.

3. **Mendelsohn Exercise**
   - Put your fingers over the bulge at the front of your throat, this is sometimes called the Adam’s apple in men. Swallow, and feel the Adam’s apple lift and lower as you swallow.
   - Now, as you swallow hold the Adam’s apple up for at least three seconds by squeezing your throat muscles.
• Repeat this exercise **five times**.

4. **Stretch Exercise**
   • Tilt your head back, and open your mouth.
   • Stick out your jaw forward, and then push your jaw upward toward your nose. You should feel a stretch along the front of your neck.
   • Hold this position for five seconds.
   • Repeat this exercise **five times**.

**Airway Protection Exercises**

As you swallow, it is important for the voice box to close tightly to keep food or liquid from entering the lungs. These exercises are designed to help the voice box close during swallowing.

5. **Supraglottic Swallow**
   • Hold your breath tightly. Keep your breath held tight and swallow twice, release your breath with a sharp cough and swallow again.
   • Repeat this exercise **five times**.

6. **Pitch Glides**
   • Sing “ee” starting in a low tone and then slowly raise your tone to your highest pitch. Hold pitch for 10 to 20 seconds.
   • Repeat this exercise **five times**

**Base of Tongue Exercises**

The base of tongue is the “pump” that pushes food through the throat and into the food pipe (esophagus). These exercises are designed to strengthen the base of the tongue.

7. **Masako exercise**
   • Stick out your tongue and hold it between your lips or teeth and try to swallow.
   • Repeat this exercise **five times**.

8. **Effortful swallow**
   • Swallow as hard as you can with food or saliva. Push as hard as you can with the tongue against the roof of your mouth while you swallow.
   • Repeat this exercise **five times**.