



Speaking and Swallowing with a Tracheostomy

A tracheostomy is a small, surgically created opening in the front of the neck that goes directly into the windpipe (trachea). A plastic or metal tube, called a tracheostomy tube (or "trach tube"), is placed into this opening to help breathing.

Because air now moves in and out of the neck instead of the nose and mouth, speech and swallow will change temporarily.

This guide explains how a tracheostomy affects these functions and what steps your healthcare team will take to help you recover.

How a Tracheostomy affects speech

To understand how a trach tube changes the voice, it helps to understand how we normally speak. **Normal Speech:** When you breathe out, air travels up from your lungs, passes through your vocal cords in your throat, and flows out of your mouth and nose. As air passes through the vocal cords, they vibrate to create the sound of your voice. Your tongue, lips, and teeth then shape that sound into words. **Tracheostomy Speech:** When you have a trach tube, the air you breathe out exits through the tube in the neck rather than traveling up past the vocal cords. Because no air is moving through your vocal cords, they cannot vibrate, and cannot make a sound.

Ways to Communicate with a Tracheostomy

A speech-language pathologist (SLP) and medical team will evaluate to find the safest, most comfortable way to communicate. Depending on the medical status, options include: **Non-Verbal Communication:** In the early stages, you can use picture boards, whiteboards, writing tablets, or hand gestures to communicate your thoughts and needs to family and staff. **Cuff Deflation:** Some trach tubes have an inflatable balloon (called a cuff) at the bottom. When the cuff is inflated, it seals off the airway so air can only move through the tube. To speak, the doctor or SLP must first deflate this cuff. This allows some air to bypass the tube and travel up to the vocal cords. **Speaking Valves:** A speaking valve is a small, lightweight plastic cap that twists onto the front of the trach tube. It acts as a one-way valve: it opens when you breathe in (letting air into your lungs through the trach) but closes when you breathe out. This forces the exhaled air upward, past the vocal cords and out of the mouth, allowing you to speak normally. **Note:** The trach cuff must always be completely deflated before a speaking valve is attached or will not be able to breathe out. **Finger Occlusion:** If appropriate, the SLP may show you how to briefly place a clean, gloved finger over the opening of your trach tube while you exhale to redirect air to your vocal cords.



How a Tracheostomy affects your swallowing

Swallowing is a complex process involving dozens of muscles working in perfect harmony. Having a trach tube can make swallowing more difficult for several reasons. When we swallow, the voice box (larynx) naturally lifts up and forward to close off the airway and protect the lungs. A trach tube can act like a temporary anchor, heavy enough to restrict this natural upward lifting movement. Normal swallowing relies on air pressure in the throat to help push food down into the esophagus (the food pipe). A trach tube alters this pressure, making the muscles work harder. Because air no longer flows through the nose and throat regularly, the nerves in the throat can become less sensitive.

Risk of Aspiration: The main concern with swallowing difficulties is aspiration. Aspiration occurs when food, liquid, or saliva accidentally slips into the airway and enters the lungs instead of going into the stomach. This can lead to serious lung problems, such as pneumonia. Signs of aspiration include coughing, a wet or gurgly voice after eating, choking, or a feeling that food is stuck.

Steps to safe eating and drinking

Your medical team will guide you through a step by step process to ensure you can eat and drink safely. **The Swallow Evaluation:** Before you are allowed to eat or drink anything by mouth, a speech-language pathologist will perform a bedside swallow evaluation. They may also request a specialized X-ray or camera test to look closely at how the throat muscles are moving.

Diet Modification: Based on the evaluation, you may start with specific types of food or drink. This might include thickened liquids (which flow more slowly and are easier to control) or soft, pureed foods.

Safe Swallowing Techniques: Your SLP will teach you strategies to protect your airway. These may include sitting completely upright (at a 90-degree angle), taking small bites, tucking your chin downward while swallowing, or double-swallowing after every bite.

Using a Speaking Valve: If cleared to use a speaking valve, wearing it during meals can actually improve swallowing. The valve helps restore the normal air pressure in the throat, making it easier to push food down safely.

Tracheostomy tube is a tool to help heal and breathe. While it temporarily changes how you speak and eat, your rehabilitation team is dedicated to helping you navigate these changes safely. Always follow the specific instructions provided by your doctor and speech-language pathologist.

