



Swallowing After BI

Brain injury (BI) can cause weakness or poor coordination of the swallowing muscles. These muscles are located in the lips, tongue, and throat. Changes in thinking or behavior can also affect the ability to swallow food and/or liquid safely. Food, drink or saliva can go into the lungs instead of the stomach when unable to swallow normally or unable to pay attention when eating. This is called aspiration and can be dangerous. It can cause choking. Some people are unable to feel food/liquid going into the lungs and might not react by choking or coughing. Aspiration can also lead to a respiratory infection.

Sometimes after a BI, a tracheostomy tube (trach) is placed in the trachea. This is done to help the individual breathe. Having a trach does not prevent the ability to swallow; however, some factors may make it more difficult. Talk to your SLP to learn more about a tracheostomy tube and its impact on swallowing.

There are a number of ways to assess the ability to swallow safely. The SLP is usually the primary person to test an individual's swallow. The decision to start the individual eating or drinking is then made based on input from Respiratory, Nursing, and the physician. Some tests used for swallowing include:

- **Bedside Swallow Evaluation (BSE):** Trying small amounts of food or liquid to test how well the muscles are moving.
- **Blue Dye Test:** This is only completed if there is a tracheostomy. This test will give the SLP more information about whether or not it is likely that food/liquid is going into a person's lungs.
- **Modified Barium Swallow Study (MBSS):** An x-ray test that looks more closely at the swallow.

- **Fiberoptic Endoscopic Evaluation of the Swallow (FEES):** A test using a small camera to look at the swallow.

A variety of techniques are used to improve swallowing. Some therapies involve stimulation techniques or exercises, while others involve the use of special positions, special diets, and/or feeding and eating routines.

After the swallow evaluation is completed, the SLP, with input from the team, will decide whether the person is ready to begin eating food and/or liquid by mouth. The types and textures of foods and liquids that the individual can safely swallow will be determined, along with strategies to help the person eat safely. He or she may need to begin with eating small amounts of food each day and may need to be supervised by the SLP. Signs of swallowing problems may include:

- Drooling, or having difficulty managing saliva
- Difficulty chewing
- Problems moving food and liquid to the back of the mouth
- Food getting “stuck” in the cheeks
- Coughing, choking, or throat-clearing while eating, drinking, or swallowing saliva
- A wet-sounding voice
- Increased congestion in the chest and/or a low-grade fever
- Becoming tired and/or short of breath while eating or drinking

Sometimes there are no clear signs of swallowing problems. This is when tests such as the MBSS or FEES can be helpful to see what’s going on inside the throat.

What You Can Do

- Only offer food or liquid that the SLP has approved. Offering food, or liquids with textures, before talking to the SLP, may increase risk for choking or developing a lung infection.
- Learn how to best assist during meal times, including diet modifications, positional techniques, and/or exercises.
- Allow time to eat and drink at a slow, safe pace.