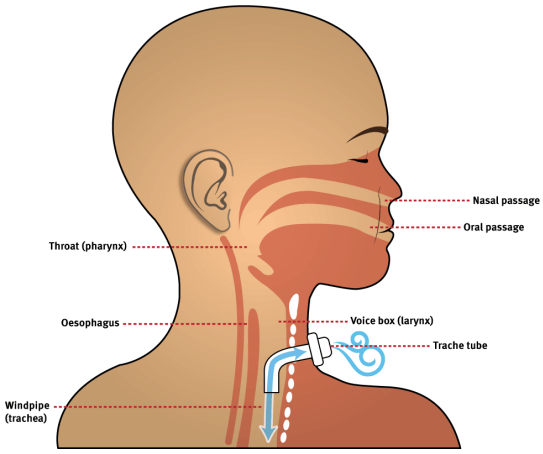
Tracheostomy tubes – feeding, eating and drinking



How does a tracheostomy tube affect swallowing?

- By tethering the larynx – sometimes, a tracheostomy tube can stop the upward and forward movement of the larynx (voicebox) during swallowing. The movement of the larynx helps protect the airway and open the food pipe (oesophagus). This can mean that some fluid or food can run into the airway and that some food will not clear all the way through the throat into the food pipe. Some food might be left in pockets in the throat, which may fall into the airway after the swallow is completed.
- By removing subglottal pressure during swallowing (during a swallow), the vocal cords close off and air pressure is generated underneath the vocal cords. When the swallow finishes, this air is exhaled (breathed out) and any fluid that might have entered the airway can be cleared by the exhaled air. The presence of a tracheostomy tube prevents the creation of subglottal pressure when a child swallows.
- By changing the sensitivity of the upper airway and throat – because air passes in and out of the tracheostomy tube, little or no air passes through the vocal cords or the throat, mouth and nose. This can dull the sensitivity of airway protection reflexes and stop them from responding to food and fluid going into the airway and lungs.

Wearing a speaking valve can help restore subglottal pressure and increase the sensitivity of the airway for swallowing. A speaking valve is a one-way device which allows your child to breathe in through the tracheostomy tube, but not out. When your child breathes out, the valve shuts, blocks the tracheostomy tube and redirects air out of the tracheostomy tube into your child's airway to pass through the vocal cords and up out of the mouth and nose.

What kinds of behaviours may indicate my child has a feeding or swallowing problem?

- Difficulty/refusal to eat, drink or breast/bottle feed
- Over-reaction or no reaction to food in the mouth
- Gagging while eating
- Excessive drooling
- Obvious signs of food/fluid in secretions suctioned out of the tracheostomy tube
- Frequent respiratory (chest) infections
- Crying, back arching, and batting/throwing food
- Choking or coughing while eating or drinking
- Vomiting with meals
- Congested lung sounds
- Large amount of watery secretions from the tracheostomy tube
- Not progressing to purees or textured foods

What are some general eating and drinking guidelines for a child with a tracheostomy tube?

- Sit toddlers upright in a highchair to ensure their chin is pointing down with good body, trunk and head support. This protects their airways and directs the food/fluid into the oesophagus instead of the lungs.
- Suction your child's airways prior to the start of a meal. This helps clear their airway and limits the need for suctioning during the meal, which may stimulate excessive coughing and result in your child vomiting.
- Use a loose cotton bib or heat moisture exchanger (HME) or Swedish nose to prevent spilt or dribbled food or fluid from sliding down your child's neck and entering their tracheostomy tube or stoma. Do not use plastic bibs, as these stop the air from moving in and out of the tube, affecting your child's breathing.
- Observe your child closely during eating to ensure he/she does not put food into the tracheostomy tube.
- If your child wears a speaking valve, put it on during meals to restore subglottal pressure.
- Allow your toddler to sit upright for a little while after eating and drinking to allow clearance of the food out of the throat and through the food pipe into the stomach. This helps to reduce reflux or vomiting.
- Burp your infant after feeding to help reduce reflux or vomiting.

How do I know if my child is safe to eat and drink orally?

- Do the doctors think your child is medically well enough to start to eat or drink?
- How healthy are your child's lungs?
- Was your child able to feed, eat or drink successfully before their tracheostomy tube was inserted?
- Does your child demonstrate some sucking, mouthing or talking behaviours that indicate the muscles of the mouth and throat are working?
- Has your infant or toddler had experience sucking on a pacifier/dummy?
- Can your child swallow their own saliva or do they need frequent suctioning to keep a clear airway/lungs?
- Has your child experienced intubation, nasogastric tube feeding and taping around the face, and/or lots of suctioning in the mouth and throat? Children who have had these negative experiences often have strong oral hypersensitivity, a hyperactive gag reflex and/or anxiety with feeding attempts.

Who should I contact to talk about my child's feeding, eating and drinking development?

A speech pathologist can assess your child's eating, drinking and swallowing skills. This may involve:

- Taking a case history and watching your child eat (or attempt to eat) age-appropriate foods and fluids.
- Observing your child's mealtime behaviours that may indicate problems with sensation and movement of the muscles of the mouth and throat and any signs of food or fluid going into the lungs.
- A blue dye test – your child's food or fluid will be dyed blue to assess for the presence of any blue material in their airway when the tracheostomy tube is suctioned.
- Instrumental assessments that can show whether food or fluid is going the correct way (for example, into the food pipe rather than the airway) and how the muscles of the throat are working.

For more information

See these other fact sheets in our Tracheostomy tubes series:
Tracheostomy tubes (general information)
Tracheostomy tubes: Using a speaking valve
Tracheostomy tubes: Communication options

Contact us

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