



Your Guide to Swallowing Difficulties (Dysphagia)



Changi
General Hospital

SingHealth

What is dysphagia?

Dysphagia is a medical term for swallowing difficulties.

People with dysphagia are not able to swallow safely. When they eat or drink, there is a risk of food or fluids going into their lungs instead of their stomach.

Normal swallowing

Swallowing is the process where food and fluids travel from the mouth to the stomach. There are three stages in a normal swallow:

Oral Stage (Mouth)

- Opening mouth to eat or drink
- Chewing and forming food or fluids into a bolus on the tongue
- Moving bolus towards back of mouth



Pharyngeal Stage (Throat)

- Swallowing starts
- Bolus passes through throat
- Windpipe closes to prevent choking



Oesophageal Stage (Food pipe)

- Entrance of food pipe relaxes
- Bolus moves through food pipe
- Bolus is transported to stomach

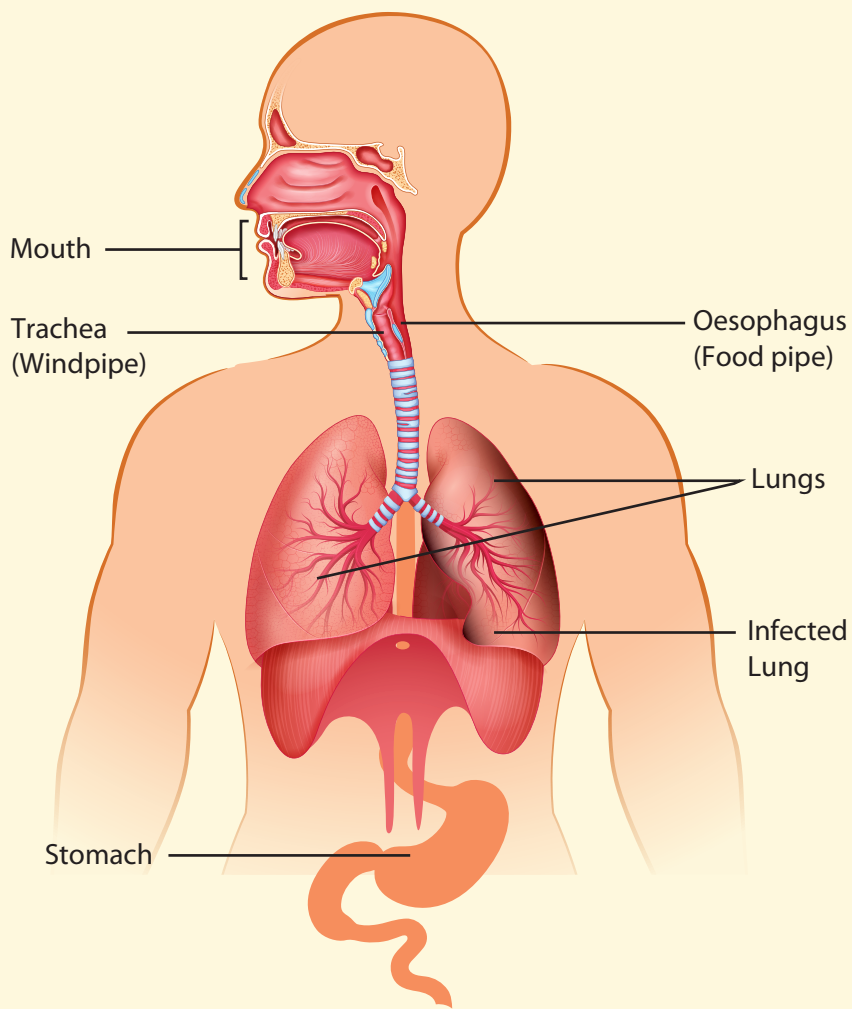


Abnormal swallowing (dysphagia)

People with dysphagia may have difficulties at any of the three stages of swallowing.

Muscle and/ or sensory weakness in the mouth and/ or throat increases the risk of food and fluids entering the windpipe instead of the food pipe. This is because the windpipe and the food pipe are next to each other. This can then lead to food and fluids entering the lungs.

When food or fluids enter the windpipe, most people cough to expel the food or fluids to protect the lungs. However, people with a weak or absent cough reflex may not be able to do so effectively. Over time, the presence of food and fluids in the lungs may result in inflammation and infection of the lungs, known as aspiration pneumonia. This will require immediate medical attention.



What are the signs and symptoms of dysphagia?

- Drooling
- Pocketing food/ fluids inside of mouth
- Chewing difficulty
- Gurgly voice/ throat noises after eating or drinking
- Coughing/ choking when eating or drinking
- Inability to swallow
- Shortness of breath when eating or drinking

Possible consequences of poorly managed dysphagia include:

- Fever
- Loss of appetite
- Weight loss
- Frequent episodes of lung infection

What are the feeding options for a person with dysphagia?

Full oral feeding

These people receive their daily nutritional requirements through oral feeding only. Depending on the severity of dysphagia, the following recommendations may be made:

- Changes to food and fluid consistencies
- Trial of swallow strategies
- Changes to meal timings and frequencies



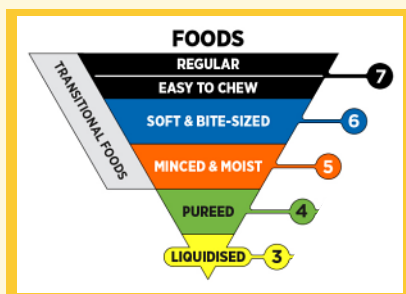
Food and fluid modifications

Based on the person's swallowing ability, food and fluids may be modified to ensure safer swallowing. This is done in accordance with the International Dysphagia Diet Standardisation Initiative (IDDSI).

Food consistencies

Food consistencies can be modified to make chewing easier and swallowing safer.

These are the food consistencies that may be recommended:



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7 Regular

- Normal, everyday food of various textures (e.g., hard, crunchy or naturally soft)



EC 7 Easy to Chew

- Normal, everyday food of soft/ tender textures that can be cut apart with the side of a fork/ spoon



6 Soft and Bite-Sized

- Food particles of $\leq 15\text{mm} \times 15\text{mm} \times 15\text{mm}$
- Each food particle is soft enough to be squashed by a fork/ spoon with effort as needed



5 Minced and Moist

- Food particles of $\leq 4\text{mm} \times 4\text{mm} \times 15\text{mm}$
- Each food particle is soft enough to be squashed by a fork/ spoon with minimal effort



4 Pureed

- Slides off a spoon with little residue left on it
- Sits on a mound above a fork and does not drip continuously through the prongs



Fluid consistencies

Fluid (e.g., water, beverages, soups, gravy) consistencies can be modified by adding a thickener.

Normal (thin) fluids flow quickly and require good muscular control and coordination for safe swallowing. Thickened fluids flow more slowly, therefore allowing more time for safe swallowing.



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Dissolve or mix the required amount of thickening agent in a corresponding volume of fluids. Please refer to manufacturer's instructions.

4 Extremely Thick

- Cannot be drunk from a cup
- Cannot be sucked through a straw

3 Moderately Thick

- Can be drunk from a cup
- Moderate effort is required to suck through a straw

2 Mildly Thick

- Flows off a spoon quickly but slower than thin fluids
- Sippable

1 Slightly Thick

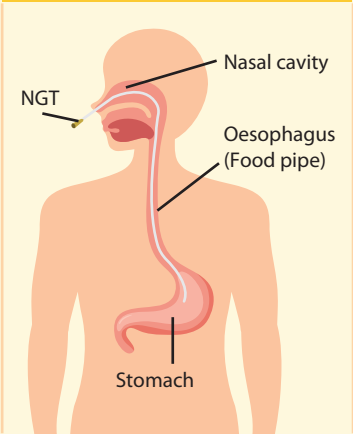
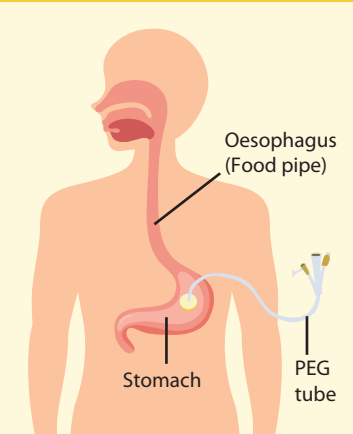
- Thicker than water
- Requires a little more effort to suck through a straw than thin fluids

0 Thin

- Flows like water
 - Fast flow
-

Non-oral feeding

Some people require non-oral feeding methods to meet their nutritional requirements, such as feeding tubes that deliver supplements directly to the stomach. Two common types of feeding tubes used are the Nasogastric Tube (NGT) and Percutaneous Endoscopic Gastronomy (PEG) tube.

	Nasogastric Tube (NGT)	Percutaneous Endoscopic Gastronomy (PEG) Tube
		
What is it?	A flexible tube passed down through the nose, back of throat and into the stomach	A semi-rigid tube placed through the abdominal wall to the stomach
How is it administered?	Trained nurse by the bedside	Surgeon in the operating theatre
Frequency of change	Ranges between 1 to 12 weeks, depending on type of tube	Ranges between 6 to 12 months, with good maintenance

Oral trials

Oral trials are given in the early stages of weaning a person off tube feeding. Small amounts of food and/ or fluids are given through the mouth while the person is still on tube feeding. The aim of oral trials is to assess the person's receptiveness and tolerance of eating and drinking.

Transitional feeding

Transitional feeding is the later stage of weaning a person off tube feeding to oral feeding.

At the start of transitional feeding, the person will receive nutrition partially by mouth (food and fluids) and partially through the tube directly into the stomach (nutritional supplements and water). Gradually, when he/ she is able to complete a whole meal by mouth without symptoms of dysphagia, the care team will review if the feeding tube may be removed.

Management and care for a person with dysphagia

Care support from a speech therapist

Speech therapists specialise in caring for and treating people with swallowing disorders. They are able to assess the swallow profile of a person with dysphagia and make recommendations to manage the condition.

The speech therapist may recommend:

- Modifying food and fluid consistencies
- Exercises to strengthen the muscles used during swallowing
- Strategies to help with swallowing difficulties



Practise safe feeding

Practising safe feeding strategies can help reduce the risk of food or fluids entering the airway. Here are some areas to look out for when feeding a person with dysphagia:



Check body positioning

- Ensure that the person is seated upright during meals
- Provide support using rolled-up towels or pillows to ensure that the upright position is maintained



Use appropriate utensils

- Use recommended utensils e.g., teaspoon, tablespoon, drinking from cup, sipping from straw



Maintain a slow feeding pace

- Feed slowly and observe for swallow



Observe for swallows

- Look for the 'up-down' movements of the throat during a swallow
- Alternatively, gently place your fingers over the throat area to feel for the swallow movements

Managing dysphagia at home

Dysphagia can be managed with the appropriate education and support. Caregivers also play an important supporting role.

People with dysphagia should:

- Adhere to the recommended food and fluid consistencies
- Carry out recommended swallow exercises and strategies
- Maintain good oral hygiene
- Keep active by exercising regularly
- Monitor for signs of aspiration pneumonia and seek immediate medical assistance when detected

For more information on the International Dysphagia Diet Standardisation Initiative (IDDSI), please visit <https://iddsi.org> or scan this QR code:



Disclaimer

The information in this brochure is not meant to be exhaustive, and personalised advice may be provided for specific conditions. Patients are advised to follow these specific guidelines from your doctor or healthcare professional. Please seek medical attention if you notice any worsening of dysphagia symptoms.

Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



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