How to Do a Tube Feeding via Nasogastric Tube: A Patient Care Procedure

A nasogastric (NG) feeding tube is a special tube used to deliver oral nutrition supplements and medication directly into the stomach when a patient cannot take these by mouth. This procedure explains how to do a tube feeding safely at each stage, from preparing supplies to administering feeds and medication, and what to watch for afterward. It is intended for caregivers and nursing staff who feed a patient with an NG tube in place, typically following hospital discharge.

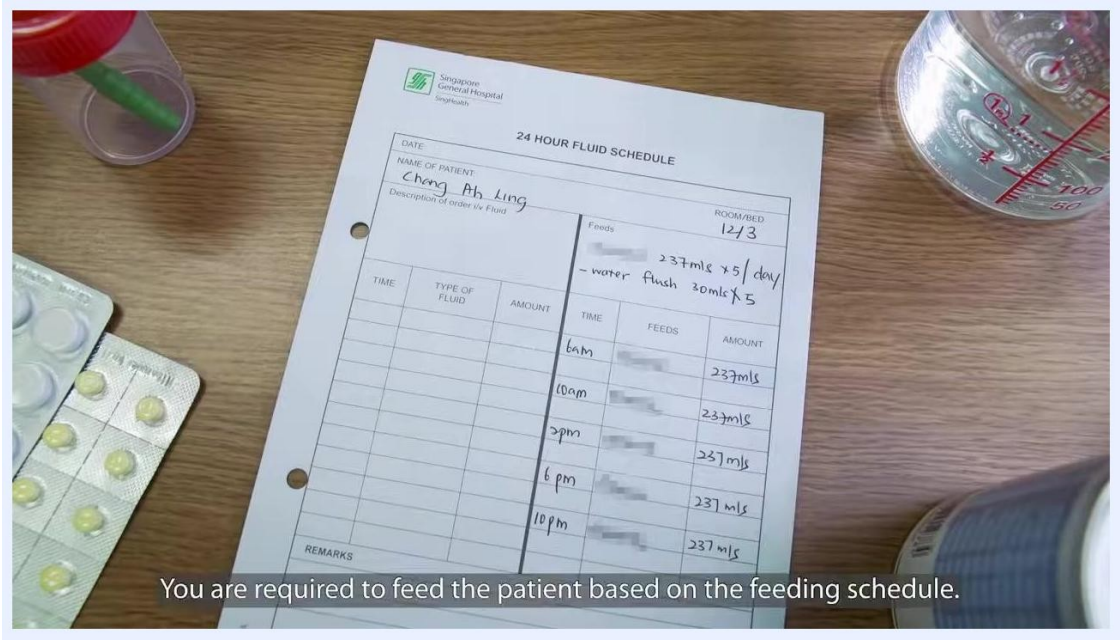


Diagram of a nasogastric tube inserted from the nose to the stomach, highlighting the tube's route for delivering oral nutrition supplements and medication into the stomach

Precaution notice on avoiding tube blockage during feeding

Purpose and scope

The NG tube passes from the nose, down the throat, and into the stomach, allowing oral nutrition supplements and medication to bypass the mouth and esophagus and reach the stomach directly and efficiently.

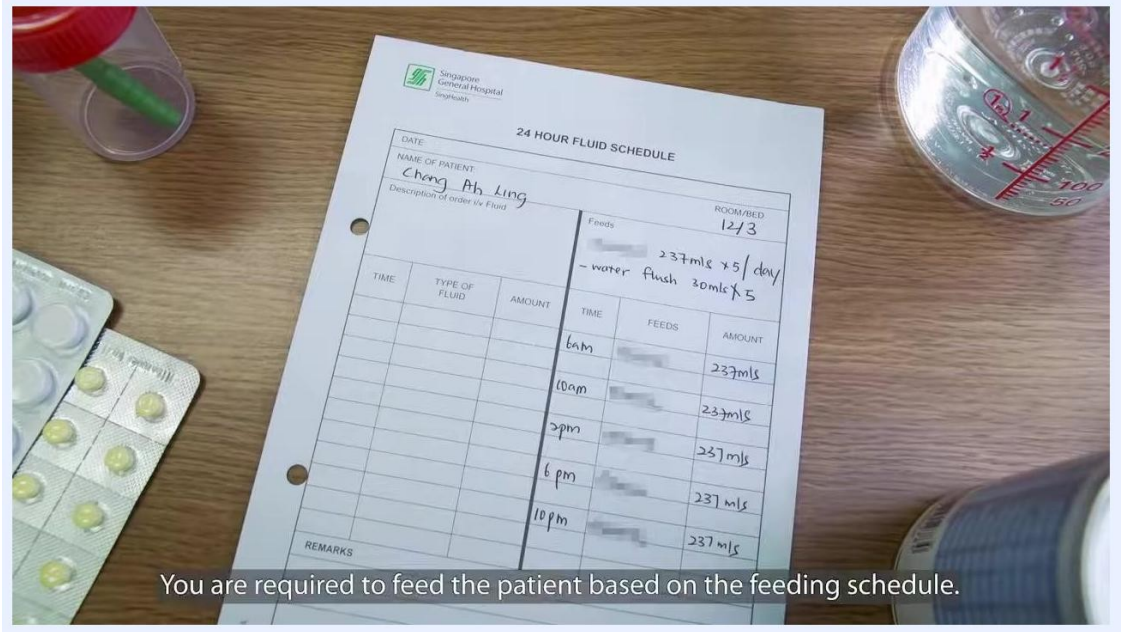


Diagram showing the NG tube path from the nose to the stomach, labeled "Nose" and "Stomach"

This guide covers what to prepare, the feeding steps (hand hygiene, patient positioning, and checking tube placement), and the general precautions caregivers must observe during every feed.

Warning slide listing emergency symptoms and escalation instructions: contact your healthcare provider during office hours, or go to Accident and Emergency after hours

You are required to feed the patient according to a specific feeding schedule provided at discharge, which will be referenced throughout this procedure.

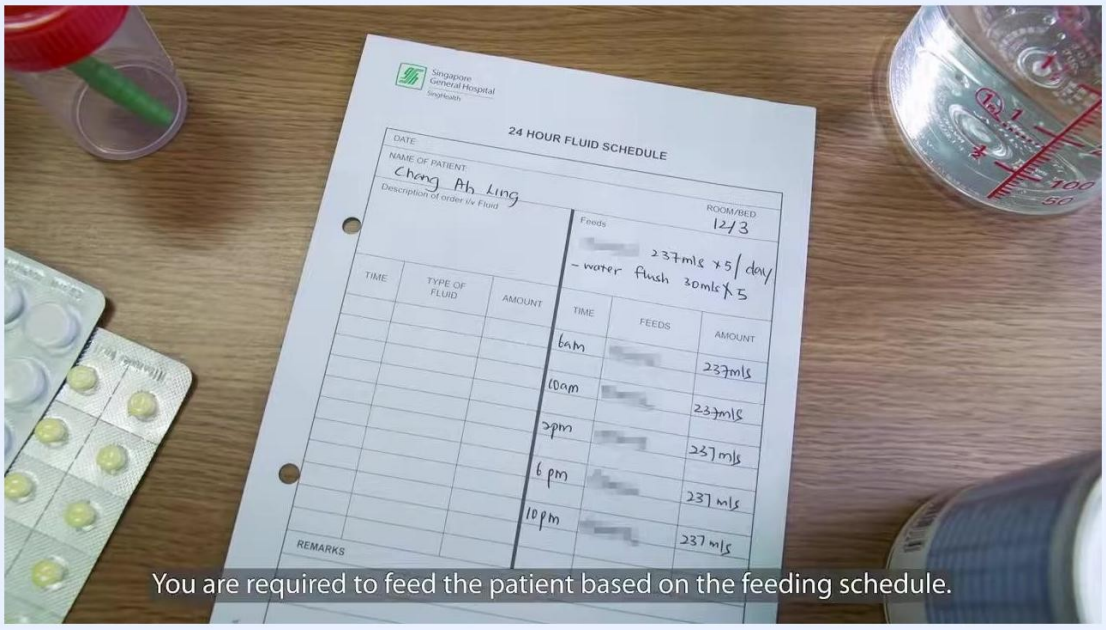
Patient assessment

Before every feed, complete the checks below to confirm the patient is correctly positioned and that the tube is safely and correctly placed in the stomach.

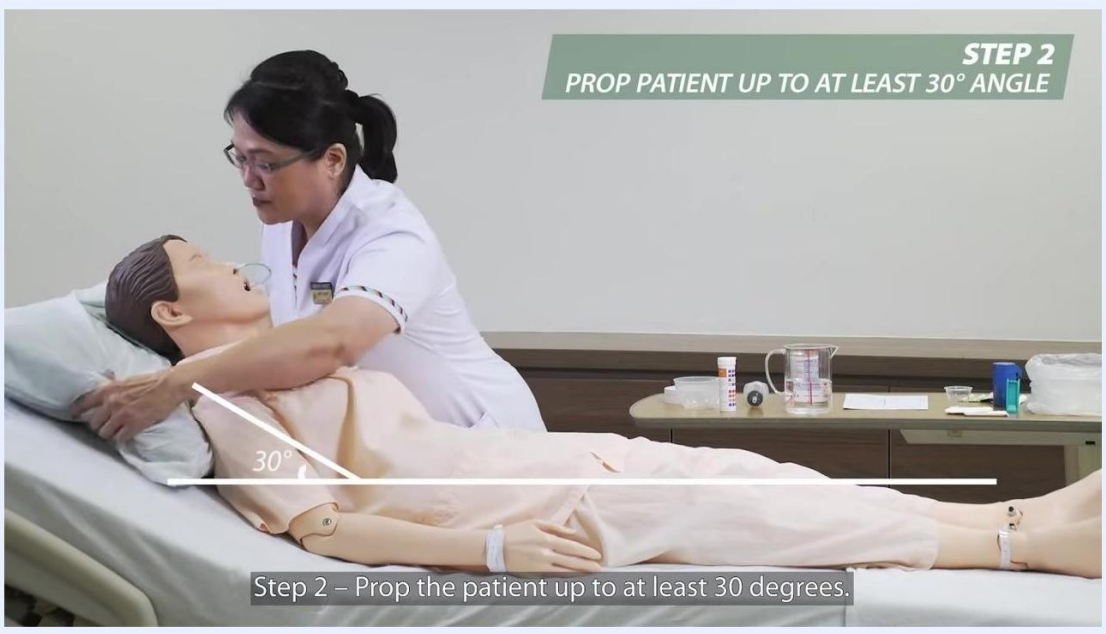
Pre-feed assessment checklist

Check	What to do
Feeding schedule	Note the time, type of oral nutrition supplement, and amount required for each feed
Hand hygiene	Wash your hands thoroughly with soap and water before handling any feeding equipment
Patient position	Prop the patient up to at least a 30-degree angle to reduce the risk of aspiration

Tube coiling	Ask the patient to open their mouth and check the back of the throat to ensure the tube is not coiled
External tube length	Measure the external length of the tube to confirm it matches the recommended length used consistently at each feed
Tube security	Confirm the tube is taped firmly to the nose and cheek
Gastric aspirate	Withdraw gastric content with a 50 ml syringe to confirm the tube is in the stomach
Gastric pH	Test aspirated content with a pH strip against the reference chart

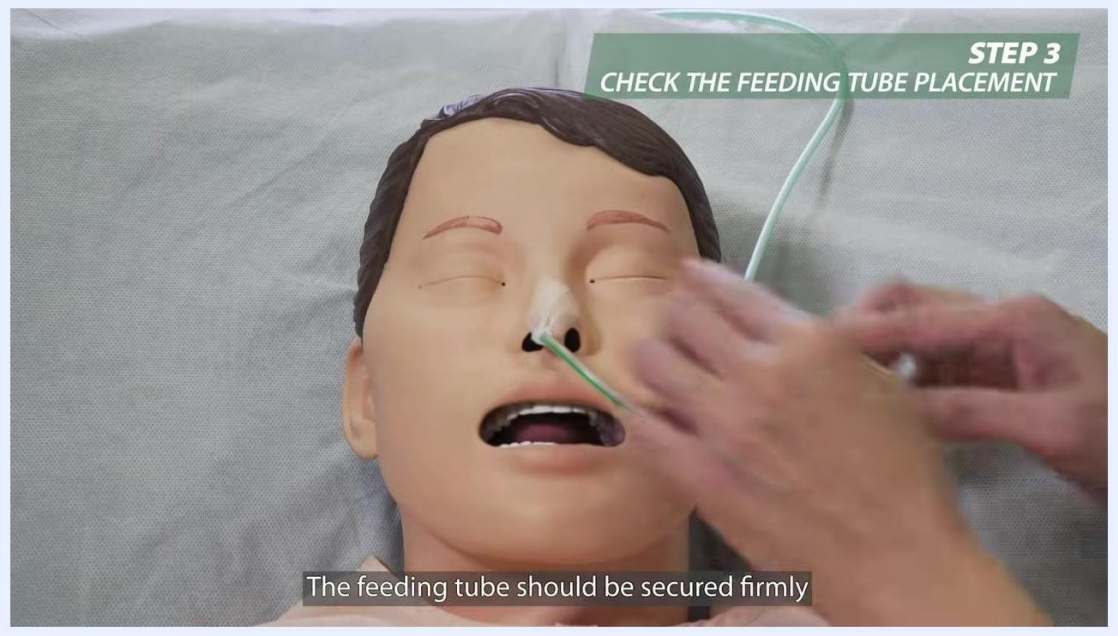


List of topics covered: what to prepare, feeding steps (wash hands, prop the patient up, check tube placement), and general precautions



A nurse measuring the external length of the feeding tube at the patient's nostril

If you are unable to obtain gastric content, turn the patient onto their left side to facilitate collection.



A nurse turning a patient onto their left side in bed

If content is still not obtained, inject 10 to 20 ml of air into the tube with the syringe and attempt to withdraw content again.

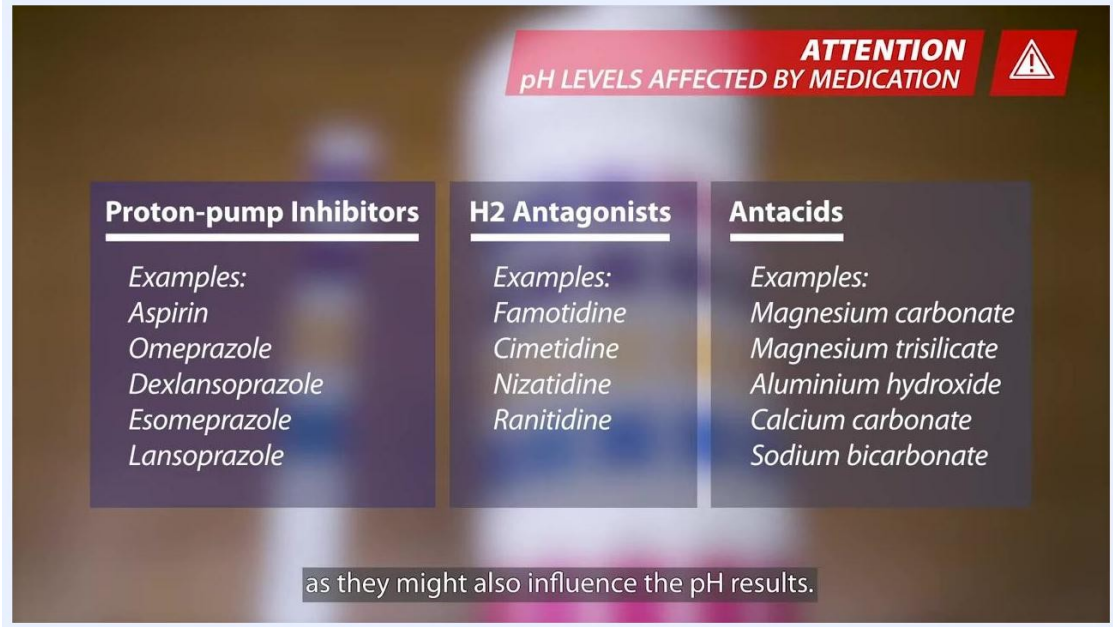
If this is still unsuccessful, wait 15 to 30 minutes and try again. Contact your healthcare provider if you remain unable to obtain any gastric content.

Compare the pH strip color to the reference chart. A pH level of 5 or lower confirms the tube is in the stomach and feeding can proceed.

Note: Certain medications can affect gastric pH readings and should be discussed with your doctor or pharmacist.

Medication class	Examples
Proton-pump inhibitors	Aspirin, Omeprazole, Dexlansoprazole, Esomeprazole, Lansoprazole
H2 antagonists	Famotidine, Cimetidine, Nizatidine, Ranitidine
Antacids	Magnesium carbonate, Magnesium trisilicate, Aluminium hydroxide, Calcium carbonate, Sodium bicarbonate

Close-up of a syringe connected to the feeding tube, preparing to inject air



A pH strip beside a color reference chart showing pH values from 1 to 12

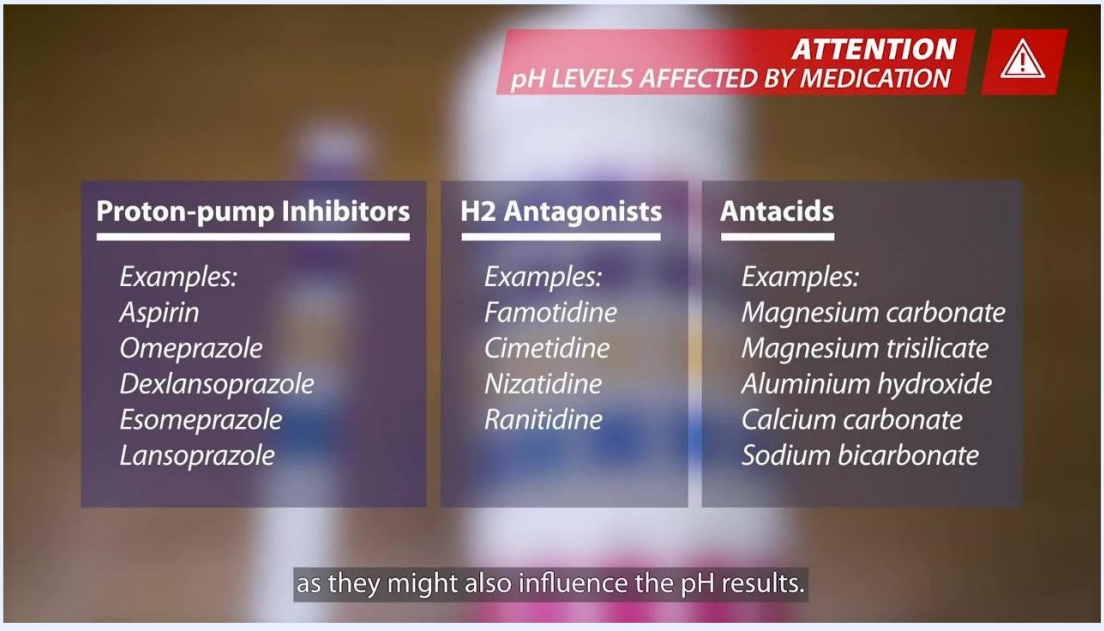


Table listing proton-pump inhibitors, H2 antagonists, and antacids that can affect pH readings

Care protocol

Phase 1: Gather supplies

Prepare the following items before each feed:

- Oral nutrition supplement as prescribed
- 50 ml syringe
- Jug of water
- pH strips
- Small bowl
- Small cups
- Measuring tape
- Medication (if any)

- Feeding schedule

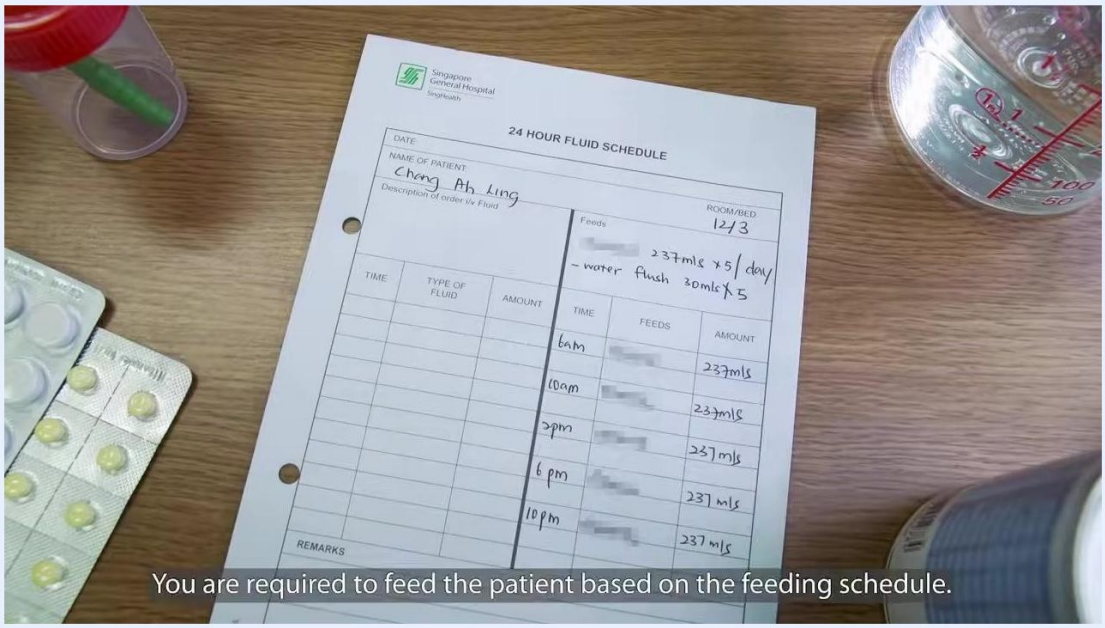
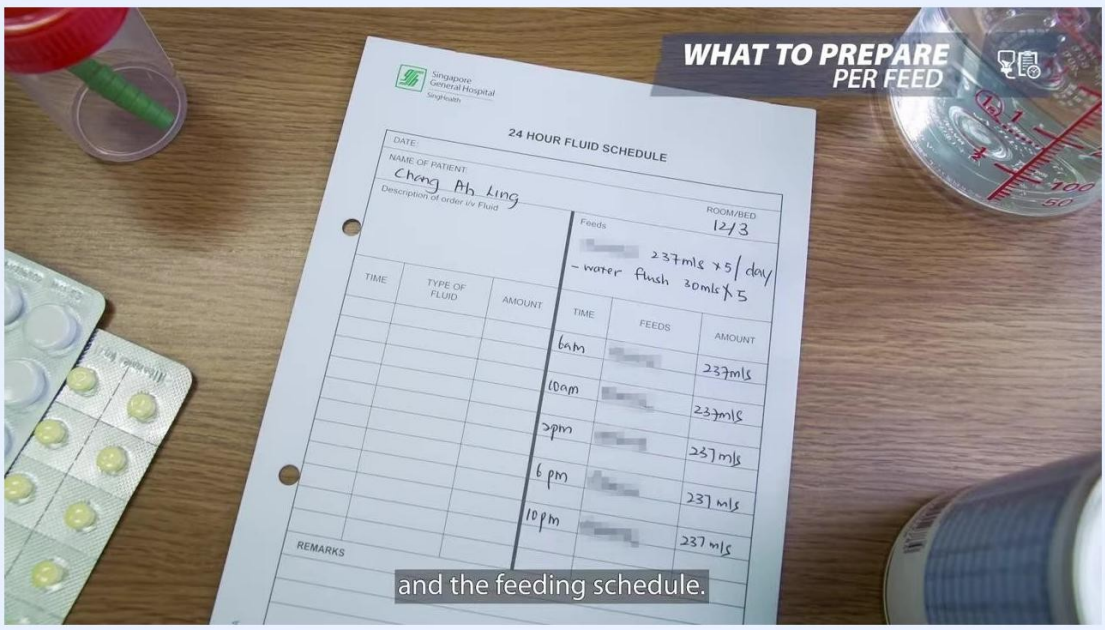


Table of items required per feed: oral nutrition supplement, 50 ml syringe, jug of water, pH strips, small bowl, small cups, measuring tape, medication, and feeding schedule

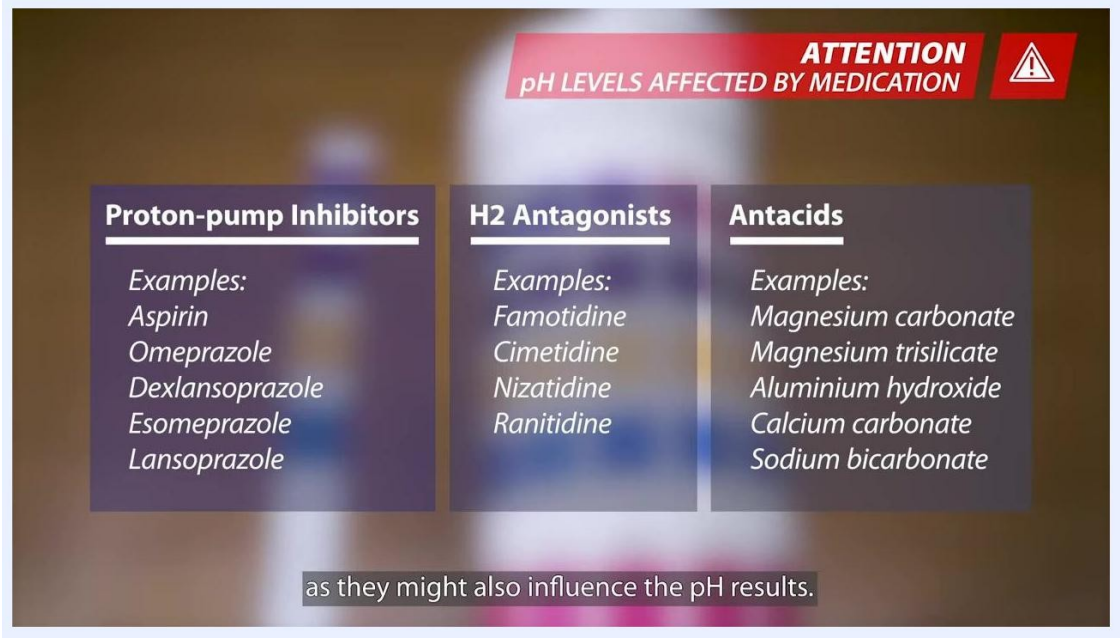


Close-up of a 50 ml syringe, jug of water, oral nutrition supplement, and pH strips

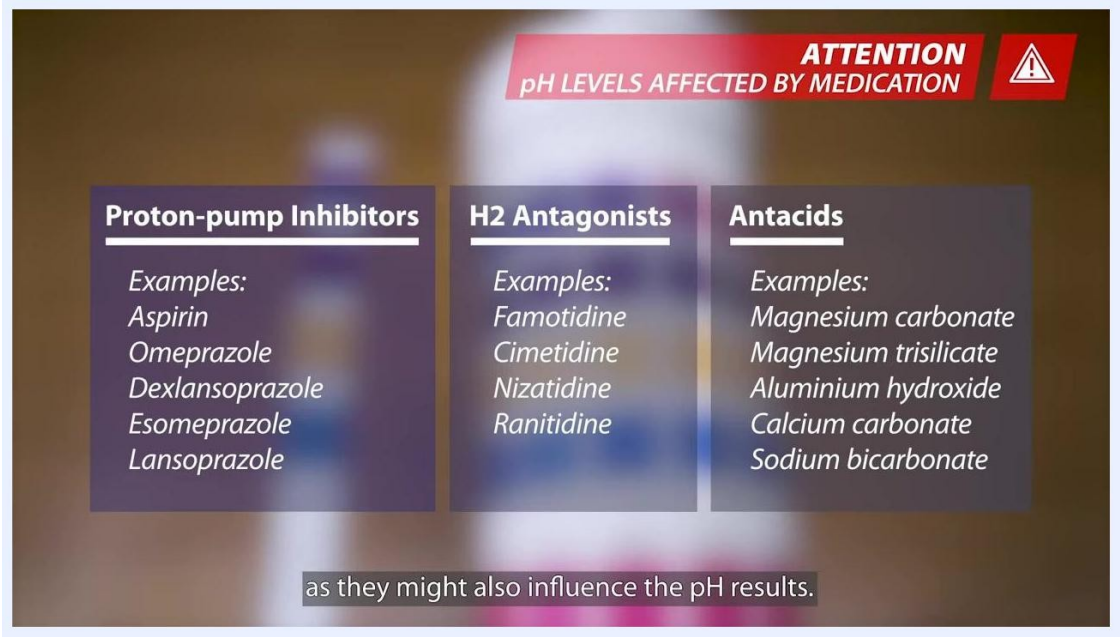
Ensure the syringe is clean and ready for use, and double-check the feeding schedule for the correct time, type, and amount.

Phase 2: Feed the oral nutrition supplement

If the supplement has been refrigerated, thaw it for 15 minutes before use. Kink the feeding tube before connecting the syringe to prevent air from entering the stomach.



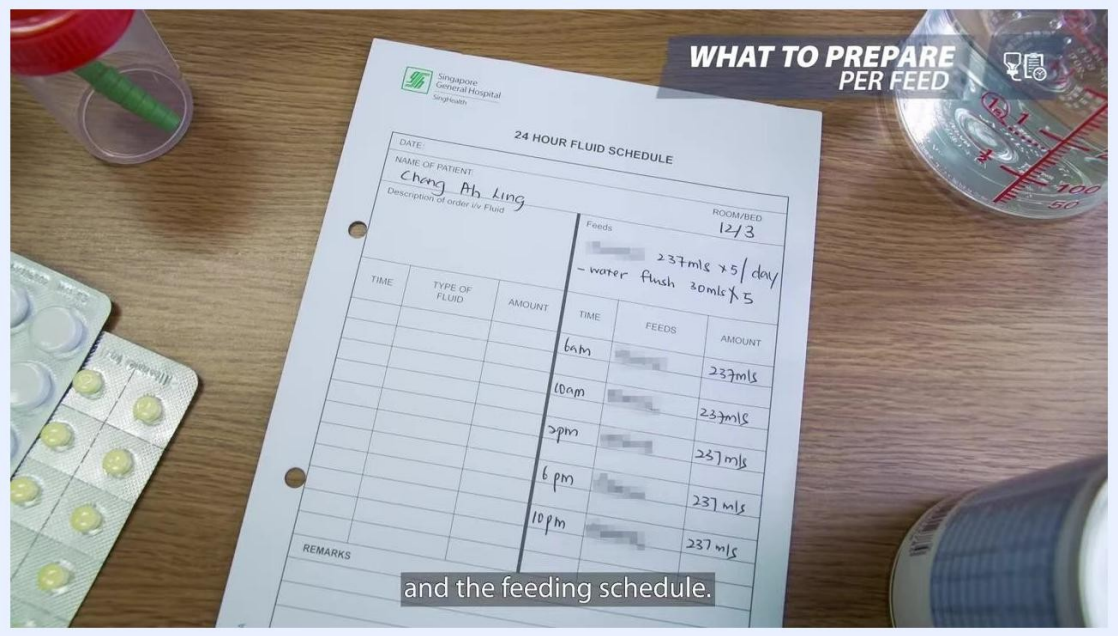
A nurse kinking the feeding tube before attaching the syringe



Water being poured from a measuring jug into a syringe connected to the feeding tube

Flush the tube with 20 ml of water, or as prescribed, before starting the feed.

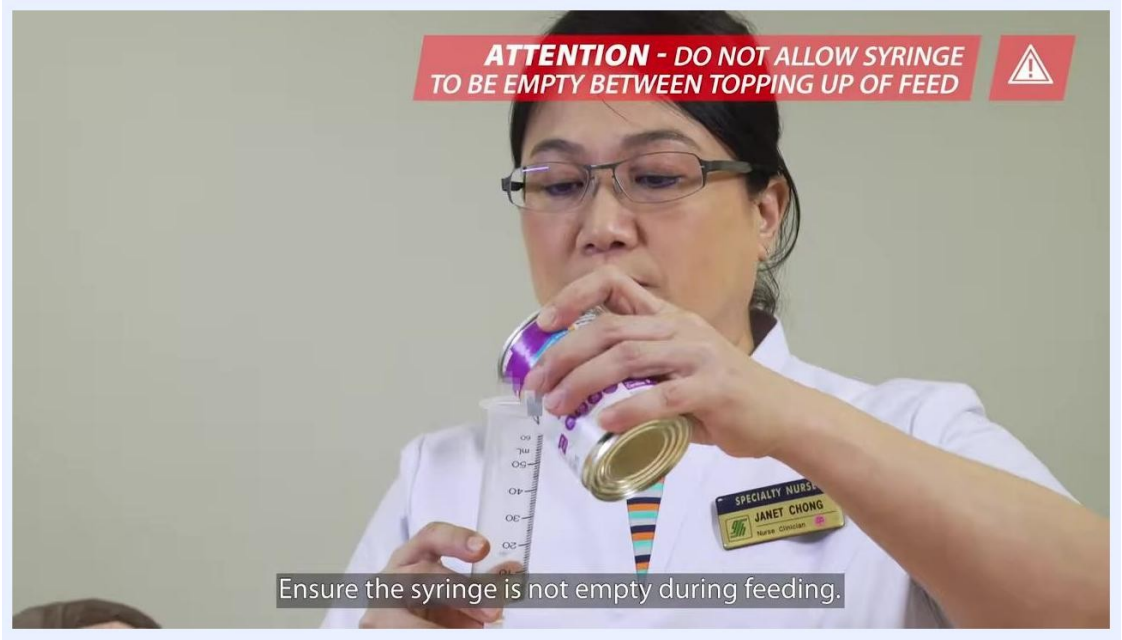
Position the syringe slightly above the patient's head and pour the oral nutrition supplement into the syringe, feeding at the correct time, type, and amount as prescribed.



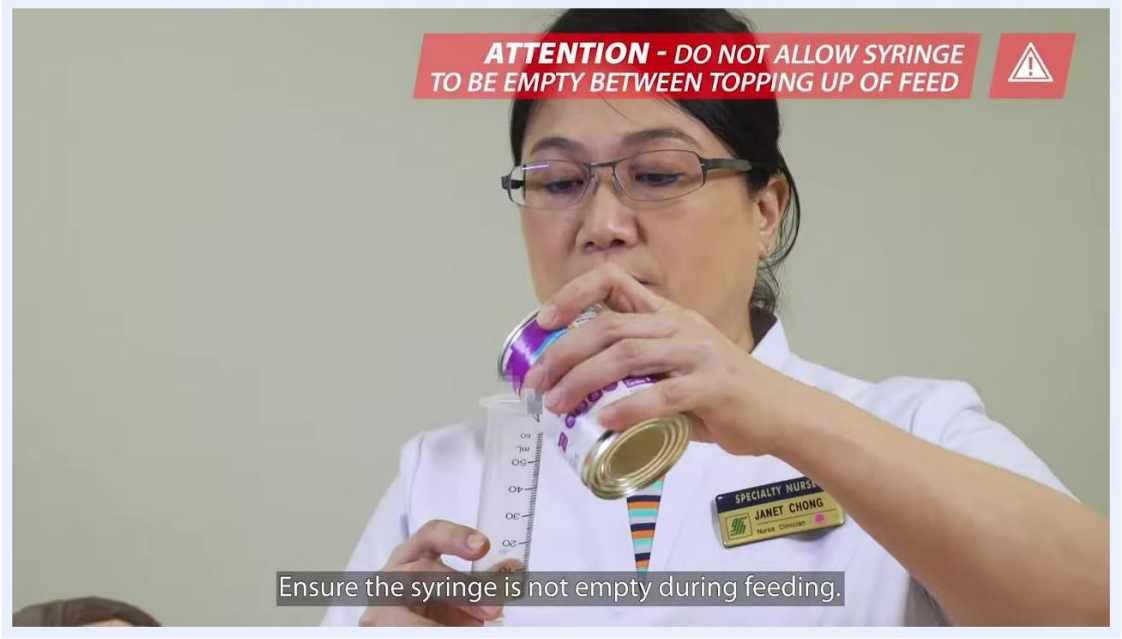
A nurse propping up a patient in bed to a 30-degree angle

Keep the syringe from running empty during feeding or while topping it up, to minimize stomach discomfort from excess air.

After feeding, flush the tube with 20 ml of water, or as prescribed, and close the feeding pot with a stopper.



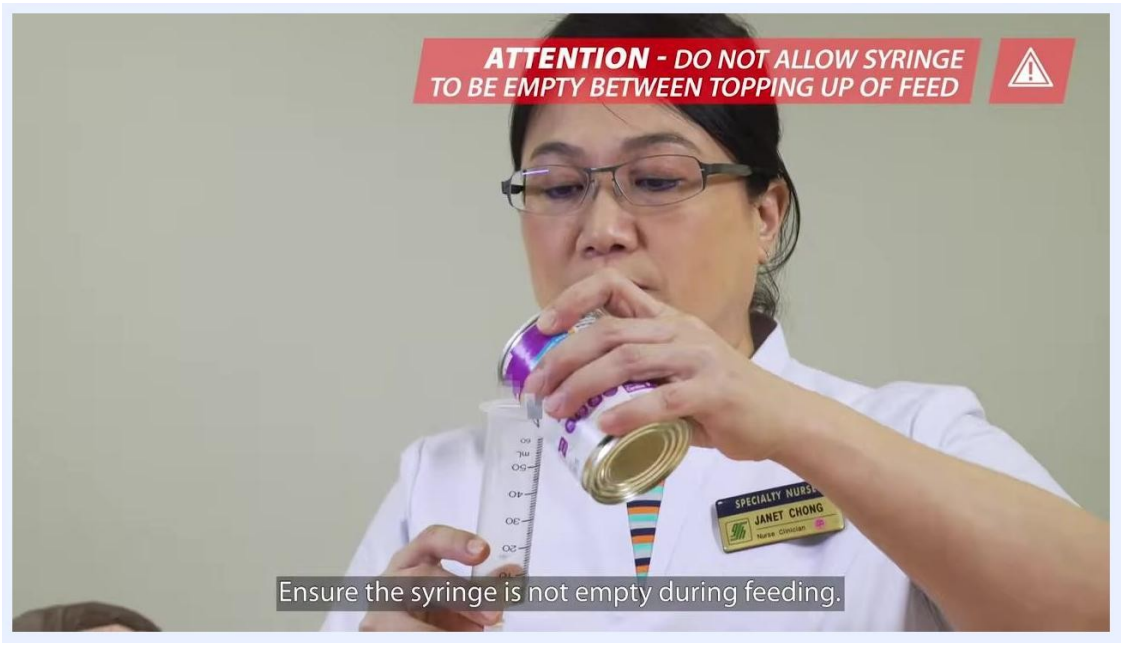
Oral nutrition supplement being poured from a can into a syringe connected to the feeding tube



A syringe flushing the feeding tube with water after a feed

Phase 3: Feed the medication

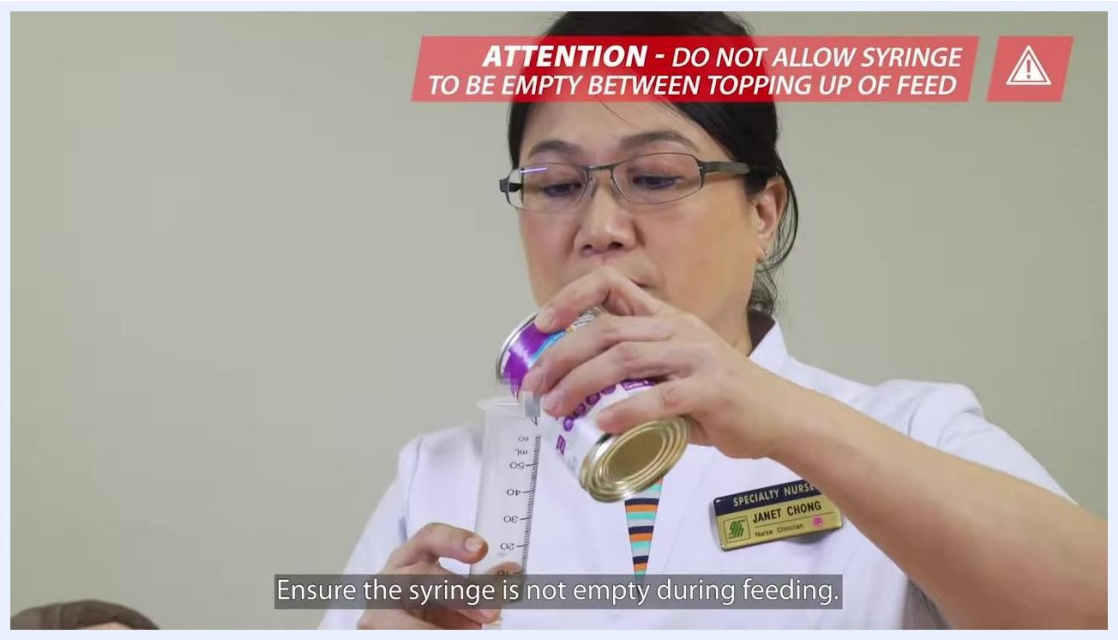
Confirm the correct medication is prepared. Crush tablets finely with a pill crusher, or dissolve them in lukewarm water. Some tablets and capsules should not be crushed — always check with a pharmacist or healthcare provider first.



A pill crusher with tablets and a blister pack of pills on a table, with a warning that some tablets and capsules should not be crushed

Connect the syringe, without the plunger, to the kinked feeding tube and flush with 20 ml of water, or as prescribed, before giving medication.

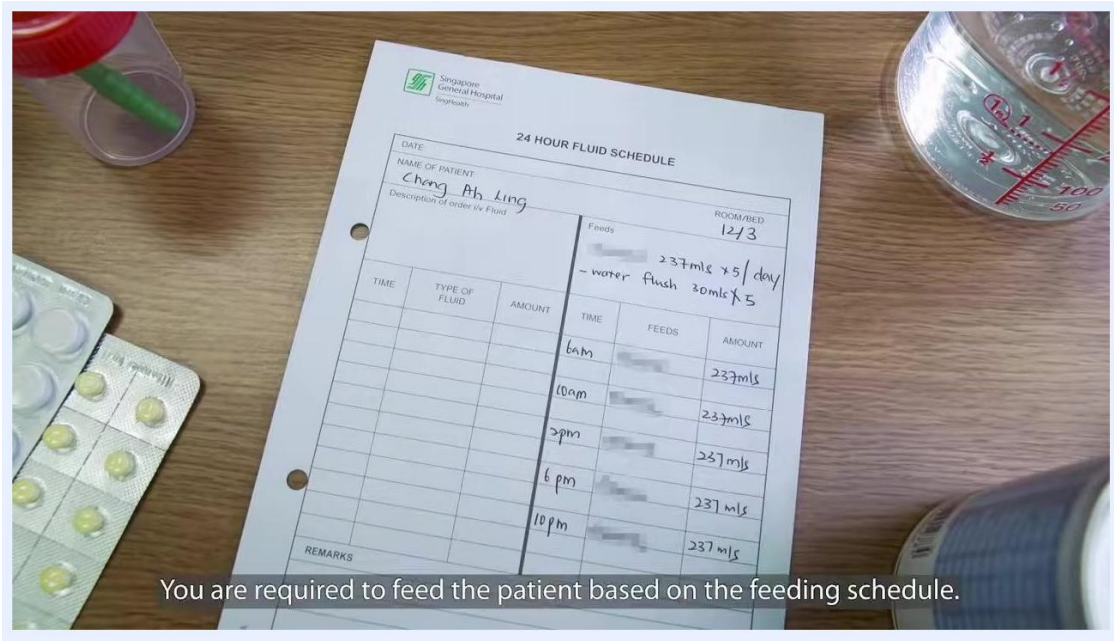
Pour the prepared medication into the syringe and allow it to flow by gravity into the feeding tube. After administering the medication, flush the tube again with 20 ml of water, or as prescribed.



Supplement being poured into a syringe with a warning not to let the syringe run empty between top-ups

Phase-based procedure summary

Phase	Key action
Preparation	Gather supplies, review feeding schedule, wash hands
Positioning	Prop patient to at least 30 degrees
Placement check	Verify tube coiling, external length, security, aspirate, and pH
Supplement feed	Flush, feed supplement without emptying syringe, flush again
Medication feed	Prepare, flush, administer medication, flush again
Post-feed	Keep patient seated for at least one hour



Close-up of a 24-hour feeding schedule with handwritten entries, medication blister packs, and a measuring jug

A syringe being prepared to flush the feeding tube with water before medication

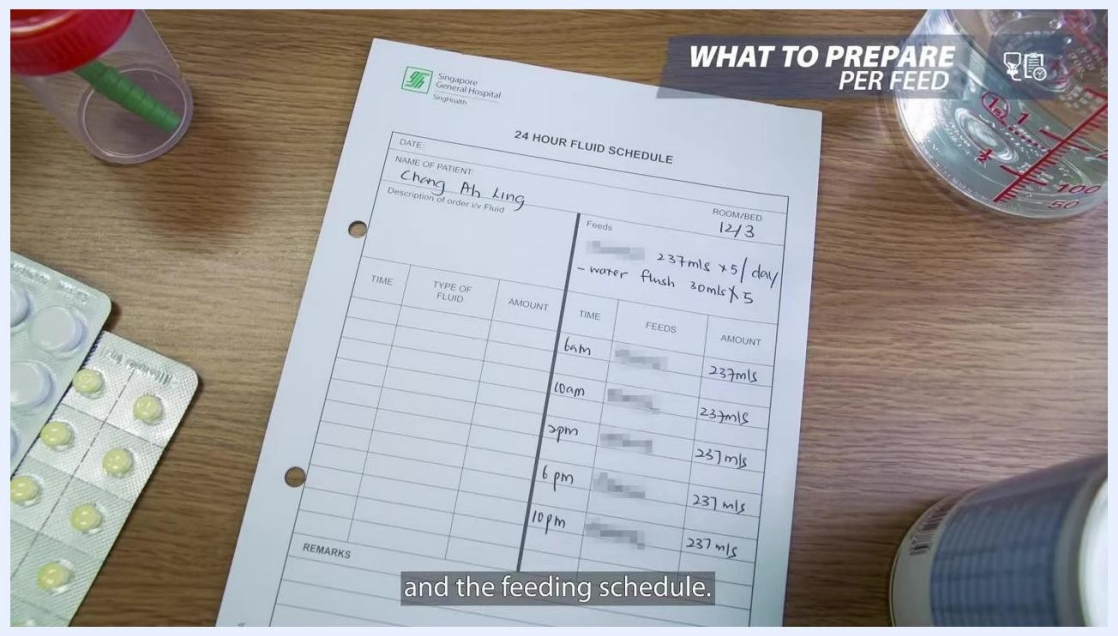
Water being poured from a measuring jug into the syringe connected to the feeding tube

Pain management

The source material for this procedure does not include a pain management protocol, medication dosing table, or pain score targets; this section would normally list any prescribed analgesia, dosing schedule, and escalation pathway for the patient.

Mobility milestones

The source material does not describe a mobility progression plan. It does specify two positioning requirements related to the feeding procedure: propping the patient up to at least a 30-degree angle before and during feeding, and keeping the patient seated for at least one hour after medication administration to prevent gastric reflux.



Close-up of the feeding schedule form with medication and a measuring jug

Complication monitoring

Observe the following precautions at all times:

- Do not mix medication with the oral nutrition supplement.
- Administer only feeds prescribed by your healthcare professional.

- Consult your Nutrition Nurse Specialist for alternative options if tube blockage occurs.

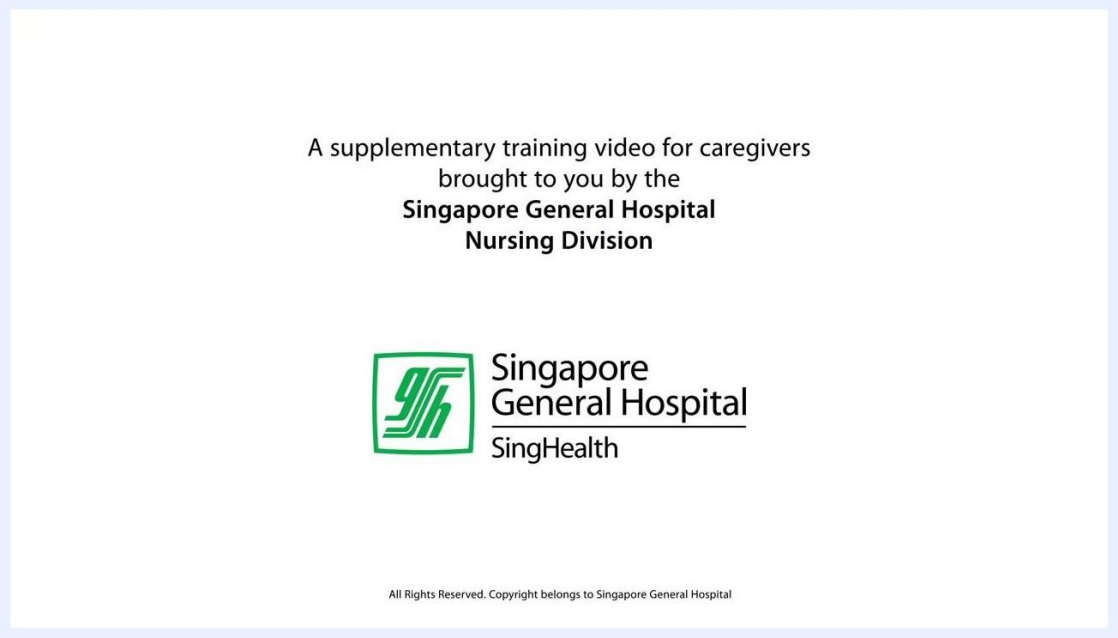
Precaution notice: do not mix medication with oral nutrition supplement

Precaution notice: administer only feeds prescribed by your healthcare professional, and consult the Nutrition Nurse Specialist for other options

If the tube becomes blocked, fill the syringe with water, insert the plunger, and apply gentle pressure to flush and unblock the tube.

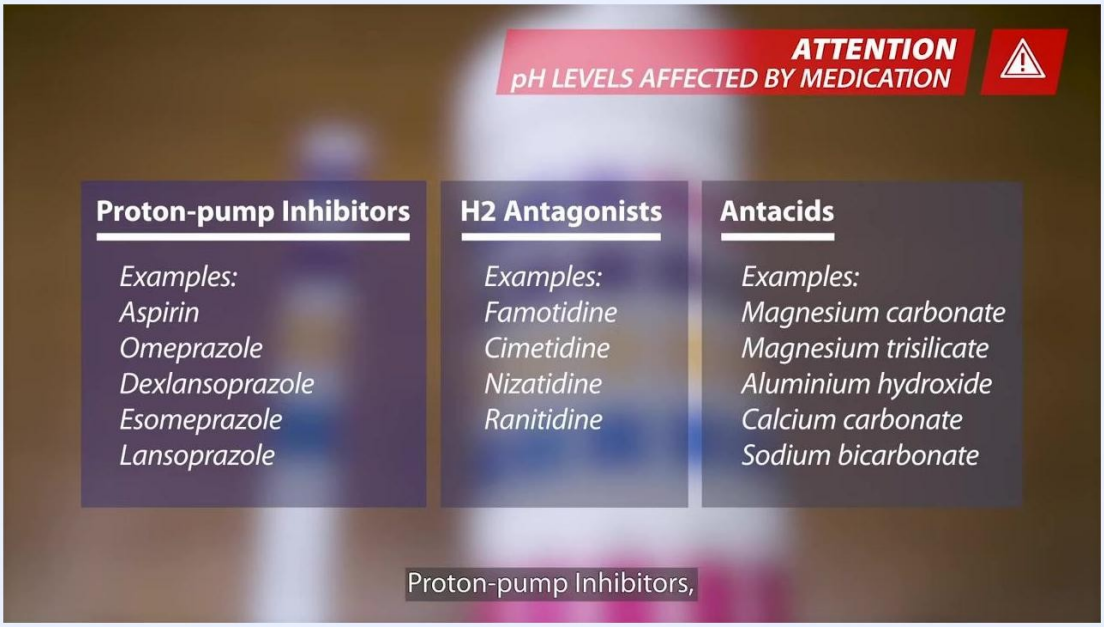
Seek immediate treatment or help if any of the following symptoms occur:

- Fever of 38°C and above
- Persistent diarrhoea
- Persistent constipation
- Persistent nausea/vomiting and inability to retain feeds
- Bloating
- Severe abdominal pain or cramping



Summary slide: feed diluted medication via syringe, flush with water after medication, observe precautions

If the feeding tube is accidentally removed, contact your healthcare provider during office hours. If any of the above symptoms occur outside office hours, go straight to Accident & Emergency.



A clock graphic with the instruction to wait 15 to 30 minutes before retrying

Discharge criteria

The source material does not define discharge criteria for NG tube feeding, as this guidance is intended for caregivers already feeding a patient at home following discharge; measurable discharge criteria would be set separately by the healthcare team before the patient leaves the hospital.

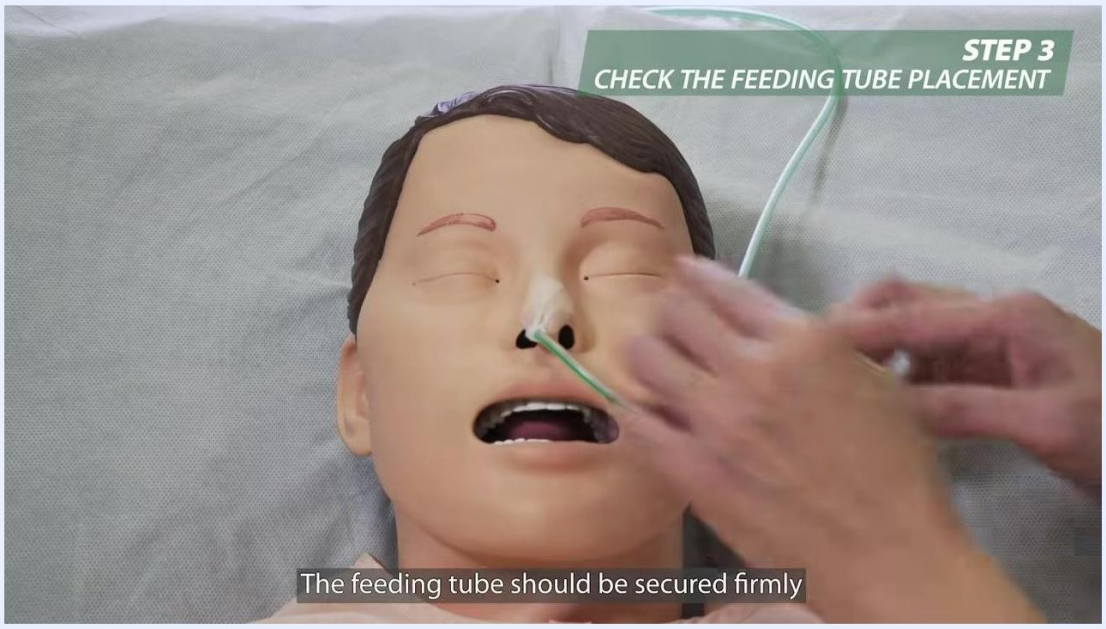
Close-up of water being poured into a syringe, showing the 20 ml mark

Patient education

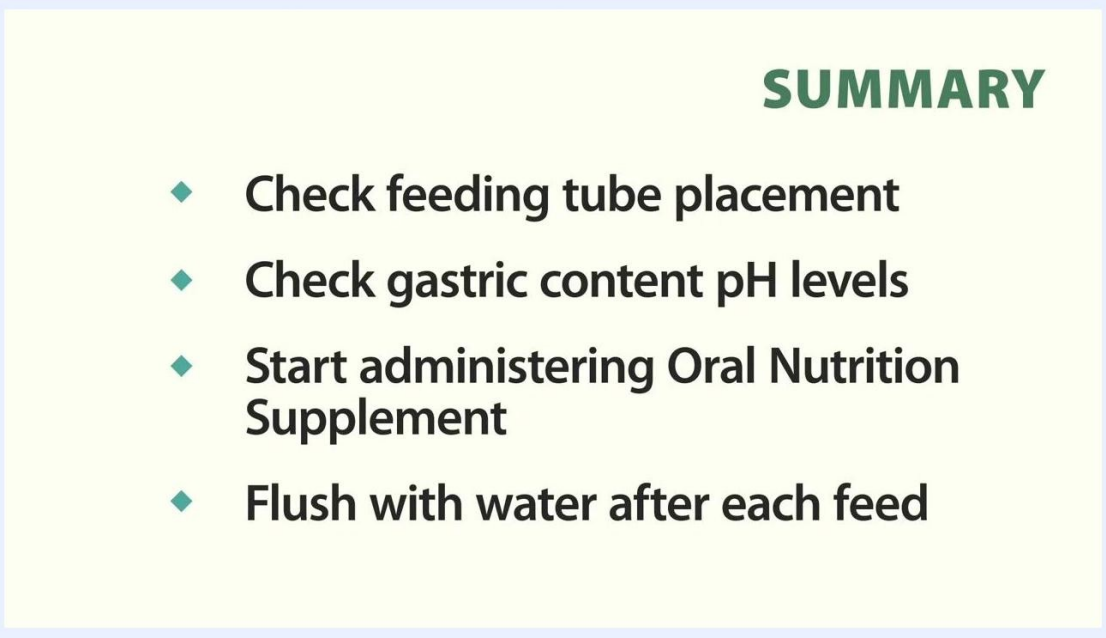
Before caregivers take over tube feeding, review these key steps together:

- Check feeding tube placement before every use.
- Check gastric content pH levels to confirm the tube is in the stomach.

- Start administering the oral nutrition supplement as prescribed.



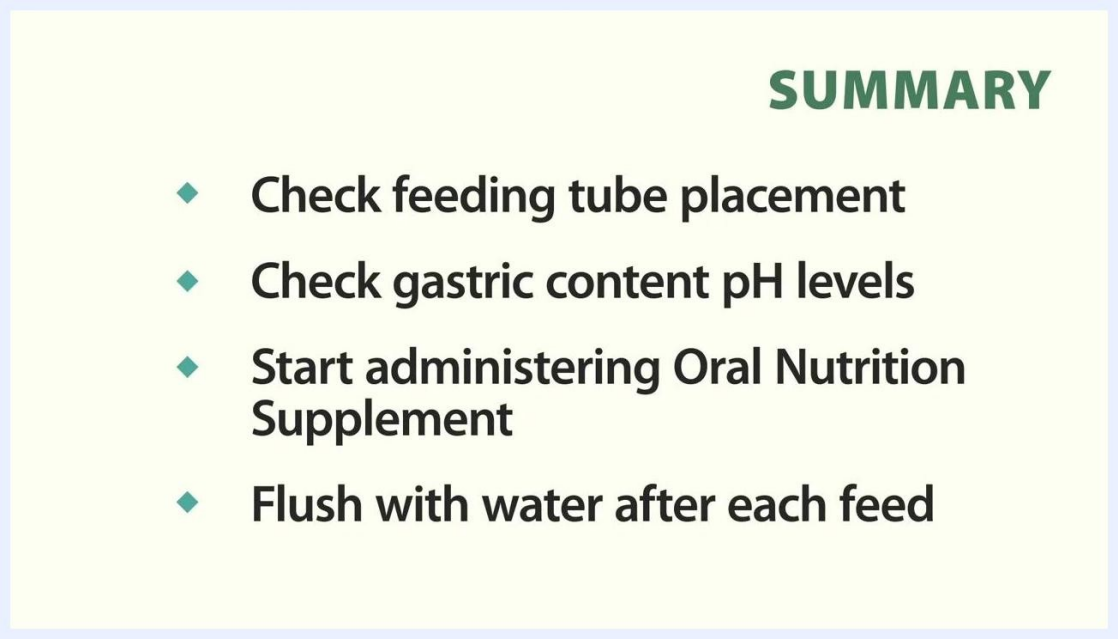
A nasogastric tube taped securely to the nose and cheek, with hands adjusting the tape



Summary slide adding: flush with water after each feed

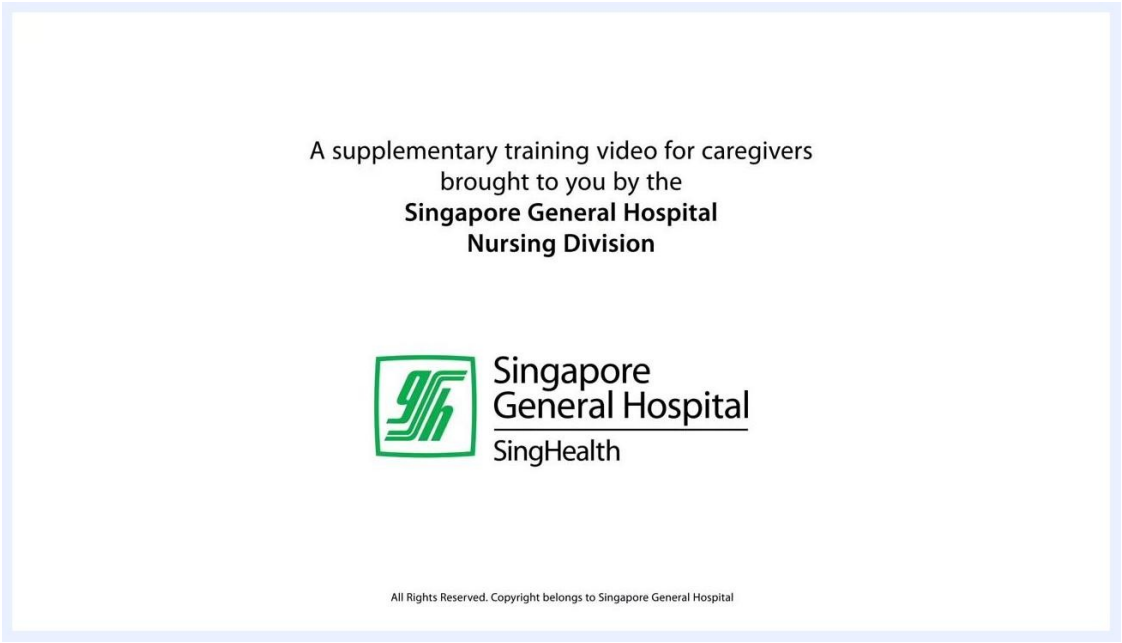
- Flush with water after each feed to maintain tube patency and prevent blockages.
- Feed diluted medication with a syringe into the tube as instructed.
- Flush with water after feeding medication to clear the tube.

- Observe all precautions outlined in this procedure.



Summary slide: check tube placement, check gastric pH, start administering the oral nutrition supplement

This guidance is based on a supplementary training resource for caregivers provided by the Singapore General Hospital Nursing Division. For further questions or support, contact your healthcare provider or the Nutrition Nurse Specialist.



End slide: "A supplementary training video for caregivers brought to you by the Singapore General Hospital Nursing Division" with hospital logo.

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