



Saskatchewan
Health Authority

Tube Feeding at Home

Percutaneous Feeding Tubes -
Adults

TRAINING PURPOSES ONLY



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Table of Contents

How to Get Feeding Supplies and Formula	3
Types of Feeding Tubes.....	4
Tube Feeding Schedule	5
Feeding Instructions:	
• Gravity Feeding Instructions	6
• Syringe Feeding Instructions.....	8
• Pump Feeding Information	9
Cleaning Instructions	10
Medications.....	11
Mouth Care	12
Care of Feeding Tube Site	12
Troubleshooting Common Problems.....	13
Routine replacement of your feeding tube	16
Important Phone Numbers.....	16
Feeding Tube Replacement Log and Weight Log	17
Notes.....	18

TRAINING PURPOSES ONLY

How To Get Feeding Supplies and Formula

Name of formula(s): _____

Amount of formula required per day: _____

Amount of formula required per month: _____

Number of feeding bags per month: _____

Number of syringes per month: _____

Number of Luer-lock syringes for balloon: _____

Where to Get Supplies:

- See the handout with locations closest to you.
- Pharmacy of your choice. Contact your pharmacist to determine if you can purchase formula and supplies from your local pharmacy. Remember that they may need to special order formula and supplies and will need advance notice of your needs.
- Other: _____



When you get home, store your formula at room temperature, out of direct sunlight.

- Transcribed information reviewed for accuracy and confirmed by healthcare provider

Types of Feeding Tubes

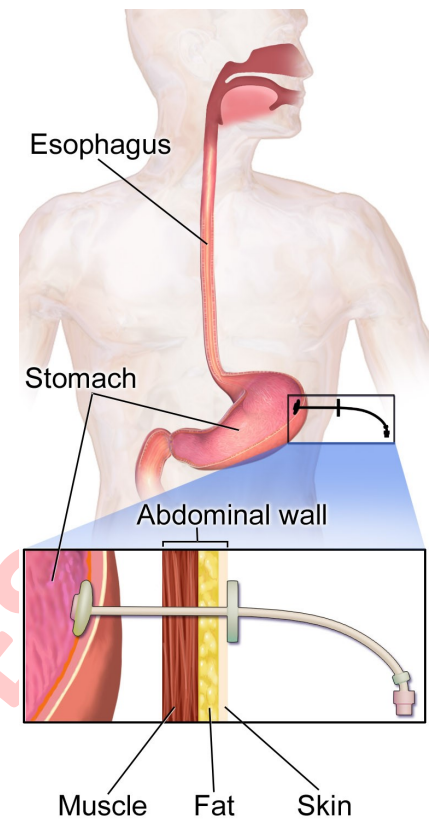
Gastrostomy Tube (G-Tube): a feeding tube that passes through the skin into the stomach.

Types of G-tubes include: Percutaneous Gastrostomy (PG), Percutaneous Endoscopic Gastrostomy (PEG), and surgically placed gastrostomy.

Jejunostomy Tube (J-Tube): a feeding tube that passes through the skin into the jejunum (the upper part of the small intestine).

Gastrojejunostomy Tube (G-J Tube): a feeding tube that passes through the skin into the stomach and then through the stomach into the jejunum (the upper part of the small intestine).

A Percutaneous Gastrojejunostomy (PGJ) is a type of G-J tube.



"Gastric Feeding Tube Adult" by BruceBlaus, CC BY-SA 4.0, via Wikimedia Commons.

Your feeding tube is a _____

The length of the external part of your tube is _____ cm.

Your feeding tube may have a balloon that sits in your stomach and helps hold your tube in the right place.

Yes, your tube has a balloon.

Your balloon volume is _____ mL.



- Your nurse will teach you how to check your balloon volume and how to inflate your balloon prior to discharge.

Transcribed information reviewed for accuracy and confirmed by healthcare provider

Tube Feeding Schedule

Tube feeding is a way for you to meet all, or some, of your nutrition needs. A formula given through a tube replaces or supplements your normal diet when you are unable to eat or drink enough.

Your Tube Feeding Schedule:

Formula	Amount	Time	Rate (if using pump)



NOTE: These are suggested times. Feel free to adjust the times of the feeds based on what works for you and home.

Protein Powder/Modular:

Mix _____ scoops OR _____ packs of _____ with _____ mL room temperature drinking water.

Administer solution through your feeding tube _____ times per day.

Water Flushes:

Total amount of additional water required for flushes per day: _____ mL.

Before starting each feed, flush with _____ mL of room temperature drinking water.

When each feed is finished, flush with _____ mL of room temperature drinking water.

OR

Every _____ hours, flush with _____ mL of room temperature drinking water.

Transcribed information reviewed for accuracy and confirmed by healthcare provider

Gravity Feeding Instructions

1. Gather **clean** equipment as listed below:

- Feeding set (feeding bag and attached tubing)
- Can(s) of formula
- Container for water
- Syringe (60 mL)



Roller clamp. SHA [Nutrition Services, Saskatoon] 2019.

2. Wash hands thoroughly with soap and warm water.

3. Check expiry date on the can of formula. If expired, do **not** use.

4. Wash the top of the formula can with a clean, damp cloth. Shake can well before opening.

5. Close the roller clamp on the gravity feeding bag tubing and pour the formula into the bag. Use room temperature formula as cold formula can cause cramping or diarrhea. Do **not** heat formula in the microwave. See photo of roller clamp above.

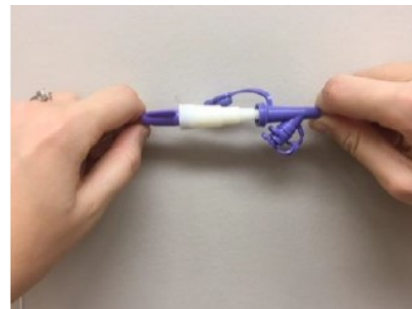
6. Hang the gravity feeding bag so it is above your head for gravity to work (on pole or hanger).

7. Let the formula run to the end of the gravity feeding bag tubing to get rid of all the air.

8. Flush your feeding tube with a minimum of 30 mL of room temperature water using the syringe. You may need a larger amount of water for your flush depending on your fluid needs. Your dietitian will assist you in knowing how much formula and water to provide.



Gravity feeding bag and tubing. SHA [Nutrition Services, Saskatoon] 2019.



9. Attach the gravity feeding bag to your feeding tube and slowly open the roller clamp to start the feed (**see page 5 for schedule/amounts**):

- Do not hang the formula for more than 8 hours if pouring straight from the clean can. If you mix any additional liquids or powders into your formula (per recommendations from your dietitian), do not hang the formula for more than 4 hours.
- Keep upright at a minimum of 30 to 45 degrees while the formula is running and stay upright for 60 minutes after your tube feed is finished. You may also walk during your tube feed.

Gravity Feeding Instructions (Continued)

10. Once your feed is done, disconnect the gravity feeding bag from your feeding tube.
11. Flush your feeding tube with a minimum of 30 mL of room temperature water using the syringe.
12. Clean the gravity feed bag (**see page 10**).
13. If only a portion of a can of formula is being used for your feed, the remaining formula can be stored for use at your next feed. In this case, cover the top of the can with plastic wrap / lid or pour the leftover formula into a clean container such as a glass jar. Write the date and time on the lid of the container and store in the refrigerator.



- Any leftover formula must be used within 24 hours; otherwise, it should be thrown away.
- Do **not** store formula in the freezer.



Gravity feeding bag on pole. SHA [Nutrition Services, Saskatoon] 2019.

Syringe Feeding Instructions

1. Follow steps **1 to 4** on page 6.
2. Flush your feeding tube with a minimum of 30 mL of room temperature water or the amount recommended by your dietitian using a clean flushing syringe.
3. Remove the plunger from the formula syringe and set it aside. You now have a hollow syringe.
4. Clamp, pinch or kink your feeding tube.
5. Open the feeding cap/port of your feeding tube and insert the narrow end of the syringe into the end of your feeding tube. Lower the syringe below the hips.
6. Pour the formula into the hollow syringe until $\frac{3}{4}$ full.
7. Raise the connected feeding tube and syringe to your waist.
8. Unclamp your feeding tube to let the formula flow through. If the formula is running too fast, lower the syringe or temporarily pinch/kink your feeding tube with your fingers to slow it down.
9. Refill the syringe until all formula is used. When finished, disconnect the syringe from the feeding tube.
10. Flush your feeding tube with a minimum of 30 mL of room temperature water using the syringe you used to flush your feeding tube in step 2.
11. Clean the formula syringe (**see page 10**).
12. If only a portion of a can of formula is being used at a feed, the remaining formula can be stored for use at the next feed. In this case, cover the top of the can with plastic wrap / lid or pour the leftover formula into a clean container such as a glass jar. Write the date and time on the lid of the container and store in the refrigerator.



- Any leftover formula must be used within 24 hours; otherwise, it should be thrown away.
- Do **not** store formula in the freezer.



Gravity feeding bag on pole. SHA [Nutrition Services, Saskatoon] 2019.

Pump Feeding Information

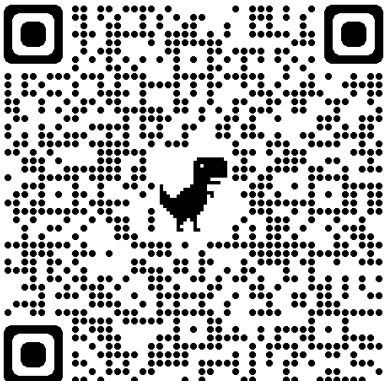
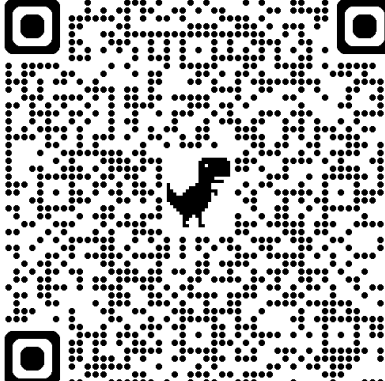
1. To Get a Pump:

- Local pump providers _____

- You may be able to purchase or rent a pump online.

2. If Using a Pump, Follow Distributor Instructions for Use.

- Do not hang the formula for more than 8 hours if pouring straight from the clean can. If you mix any additional liquids or powders into your formula (per recommendations from your dietitian), do not hang the formula for more than 4 hours.
- Keep upright at a minimum of 30 to 45 degrees while the formula is infusing. You may also walk during feeding.
- Flush with water every 4 hours during a continuous feed.

EnteraLite Infinity Pump Instruction Manual	Kangaroo Connect Pump Instruction Manual
	

Transcribed information reviewed for accuracy and confirmed by healthcare provider

Cleaning Instructions

Cleaning of Feeding Bags:

1. Rinse the feeding with cool water. Shake the bag back and forth several times to permit the water to reach all areas of the feeding bag.
2. Drain the water from the top of the bag. Repeat this several times until the water is clear and you are sure the formula has been rinsed out.
3. Between feeds, run cool water through the feeding bag tubing several times until the water comes out clear and you are sure the tubing is clean. Wash the feeding bag with soap and warm water after your last feed of the day.
4. Hang the feeding bag to dry in a clean place and cover it with a towel. If refrigerator space is available, the cleaned feeding bag can be refrigerated in between use to decrease chances of bacterial growth.



- It is recommended to use a new feeding bag each day. However, the same feeding bag can be used for up to 5 days if properly cleaned with soap and warm water daily.
- **Do not** use a dirty feeding bag.

Cleaning of Syringes:

1. Rinse the syringe with cool water after each use. **Once a day, wash with soap and warm water.** It may be necessary to soak the syringe for several minutes in order to remove the formula residue that builds up on the tip. Rinse thoroughly and allow to air dry on a clean surface.
2. Store syringes in a clean, dry space.
3. Syringes should be discarded as per manufacturer's instructions.

Cleaning ENFit™ Feeding Ports [Cardinal Health]



Medications

Buying Medication For Your Feeding Tube:

- Talk to your pharmacist or healthcare provider about all your medications (prescription, over-the-counter, supplements, and herbal supplements) to be sure they can be given through your feeding tube.
- Remind your pharmacist or healthcare provider about your feeding tube each time you need to take any new medications or supplements.
- Check with your pharmacist to see if your medication is available in a liquid form and if this form is suitable to take through a feeding tube.

Taking Medications Through Your Feeding Tube

(talk to your pharmacist for any medication-related questions):

1. Wash your hands thoroughly with soap and warm water.
2. Before you take your first medication, use a syringe to flush 30 mL of purified or sterile* water through your tube.
3. Prepare each medication, one at a time, just before putting it in your feeding tube.
 - a. **Capsules:** Open the capsule and place the contents in a cup. Dissolve completely in a minimum of 30 mL of warm, purified or sterile water.
 - b. **Tablets or pills:** Place the pill between 2 spoons or other devices to crush it very well. Place the contents in a cup. Dissolve completely in a minimum of 30 mL of warm, purified or sterile water.
 - c. **Liquid medication:** Place in a cup and mix with 30 mL of purified or sterile water.
4. **Never** mix any medications with any liquid other than purified or sterile water.
5. Between each medication, flush with 30 mL of purified or sterile water.
6. After you have taken the final medication, flush your feeding tube again with 30 mL of purified or sterile water.



*How to Sterilize Water:

- **DO NOT** use mineralized, carbonated or distilled water. Use tap water, well water approved for drinking, or bottled water. All water must be boiled.
- Fill a pot with water; place pot on stove; bring water to a rolling boil and let boil for 2 minutes.
- Pour boiled water from the pot into a sterile glass container. To sterilize the container, put it in a large pot and cover it with water. Bring water to a rolling boil and boil for two minutes. Remove the container from the water and let it air dry on a clean counter.
- Let the sterilized water cool in the sterile glass container for about 30 minutes.
- Cover the container with cling wrap or a sterile lid and store in the refrigerator.
- Sterilized water can be stored in the refrigerator for 48 hours.



Mouth Care

Good mouth care is always important, even if you are not eating by mouth.

- Brush your teeth at least 1 to 2 times each day.
- If you are unable to brush your teeth, rinse your mouth 1 to 2 times each day. Use 1 teaspoon (5 mL) of baking soda dissolved in 2 cups (250 mL) of warm water to rinse. Swish and spit out.
- If dry mouth occurs, be sure to use the full amount of water flushes each day, as recommended by the dietitian (**see page 5**). If you still have a dry mouth, use more water in your flushes after each feeding. Contact your dietitian for a review of your water needs.
- If dry mouth persists, talk to your pharmacist or healthcare provider about products that may help with dry mouth. For example, artificial saliva sprays.

Care of Feeding Tube Site

Cleaning Your Tube Site:

- Clean the skin around your feeding tube every day using a mild soap and warm water.
- Dry the feeding tube site well. A cotton swab may be used to help dry the feeding tube site.

Other Care For Your Tube Site:

- You will be instructed to rotate the feeding tube 360 degrees every day if you have a gastrostomy tube with an internal balloon or dome.
Exception: tubes that are inserted through the stomach into the jejunum or directly into the jejunum **must not** be rotated.
- If your feeding tube has a balloon, check the volume weekly or follow your doctor's recommendation. Compare the balloon's volume to its volume when you first received your feeding tube.
- A dressing is not needed unless there is fluid leaking around your feeding tube site.
- If the skin around the feeding tube site is red, paint it using a cotton ball dipped in a liquid antacid such as Gaviscon™ or Pepto-Bismol™. A zinc-based cream may also be used (**see page 15**).
- If you have any questions about care for your feeding tube site, ask your healthcare provider.

TROUBLESHOOTING COMMON PROBLEMS

Bloating...

What could this mean?

- Taking the formula too fast
- Air in the stomach

What can I do?

- Run your feeds slower.
- Remove all air from the tubing and syringes before taking your formula and medication.

Nausea and/or Vomiting...

What could this mean?

- Taking formula too fast
- May have a stomach flu
- Contaminated or expired formula

What can I do?

- Check the expiration date of the formula and ensure the formula was stored properly.
- If nauseous, run your feeds slower or pause the feed.
- If vomiting, stop the feed and flush the tube with a minimum of 30 mL water to clear the tube.
- Wait at least 2 hours before re-starting your feeds.
- When re-starting your feeds, run your feed slower. If this does not work, stop feed again.
- Take smaller feeds more often.
- Stay as upright as possible (a minimum of 30 degrees) during your feeds.
- Remain as upright as possible (a minimum of 30 degrees) for 60 minutes after your feed.
- If you can, walk after your feeds.
- If vomiting, flush your tube with additional water to avoid dehydration.
- If vomiting continues for longer than 1 day, contact your healthcare provider.

Cramping and/or Diarrhea...

What could this mean?

- Side effects of some medications
- Taking formula too fast
- Taking formula that is cold
- Contaminated or expired formula

What can I do?

- Ask your healthcare provider if any of your medications cause diarrhea.
- Run your feeds slower.
- Always use room temperature formula. If the formula was stored in the fridge, let it sit at room temperature for 1 hour before you use it.
- Store and prepare your formula with care, including proper hand washing before preparing the formula and handling the tube site.
- Always use clean equipment.
- Never mix your medication into your formula.
- Do not hang the formula for more than 8 hours if pouring straight from the clean can. If you mix any additional liquids or powders into your formula (per recommendations from your dietitian), do not hang the formula for more than 4 hours.
- When diarrhea is present, increase your water flushes to avoid dehydration.
- Ask your healthcare provider about the use of anti-diarrheal medications.

NOTE: Tube feeding formulas are in liquid form, which means there is very little bulk going through your digestive tract. As a result, bowel movements will likely be more liquid. A few loose bowel movements in a 24 hour period may be considered normal.

TROUBLESHOOTING COMMON PROBLEMS (Continued)

Constipation...

What could this mean?

- Not getting enough water or fibre
- Activity level has changed
- Side effects of some medications (especially pain medications)

What can I do?

- Increase your water flushes before and after feeds.
- Dilute prune juice with an equal amount of water. Flush this mixture through your feeding tube using a syringe. Remember to flush your feeding tube with a minimum of 30 mL of drinking water after taking the prune juice. Ask your dietitian about a fibre-containing formula if constipation does not go away.
- If able, increase activity and movement.
- Ask your healthcare provider if any of your medications can cause constipation.

Reflux or Heartburn...

What could this mean?

- The formula and/or the stomach acids are coming back into the esophagus

What can I do?

- Do not lay flat during the feed and for 60 minutes after a feed.
- If your reflux is bothering you and is consistent, contact your healthcare provider. They may give you a prescription to help decrease stomach acid.

Plugged Tube...

What could this mean?

- Inadequate flushing of the tube
- Formula might need to be changed – call your dietitian
- Medications are too thick

What can I do?

- Be sure to flush your tube before and after feeds and before, between, and after medications to prevent the tube from plugging.
- Medications may have to be diluted more before you give them. Your pharmacist can help with this problem.
- If your tube plugs, try gently flushing with a minimum of 30 mL of warm water. Do not force the water into your tube. Gently pull the plunger, drawing back into the syringe. Repeat this, gently flushing several times as needed until the tube is unplugged.
- If you have an enzyme prescription, you can follow the instructions and use this to help unplug the tube.
 - One example is a Cotazym™ enzyme prescription.
 - 1. For Cotazym™, open 1 capsule and mix it with 5 ml warm water.
 - 2. Crush 1 tablet of Sodium Bicarbonate (325mg). Mix the two together, keeping away from your eyes.
 - 3. Draw up in a syringe. Put into the feeding tube.
 - 4. Clamp the tube for 20 minutes (or preferably up to 2 hours), then flush with a minimum of 30 mL warm water if you are able to. You may have to move the syringe plunger back and forth a few times to move the medication through. This medication can be used up to 4 times a day to unplug the tube. If unsuccessful, your tube may need to be replaced.
- If you are unable to unplug the tube, contact your healthcare provider.

TROUBLESHOOTING COMMON PROBLEMS (Continued)

Skin and Feeding Tube Site Issues (Discharge, Drainage and Granulation Tissue)...

What could this mean?	What can I do?
<ul style="list-style-type: none"> • White or yellow discharge from the site is normal • Green or foul-smelling discharge and weepy or itchy skin around the tube site may indicate an infection • Pain and drainage can occur with granulation tissue • Excessive drainage could mean the tube is not fitting properly 	<ul style="list-style-type: none"> • If the discharge is white or yellow, no action is needed. You may want to place a thin dressing around the base of the tube to absorb the discharge. Change this dressing as often as needed to prevent skin irritation. • Help prevent infection by cleansing the area daily with warm water and mild soap or, more often if there is drainage. Use a zinc-based cream on the area if the skin is reddened. • Contact your healthcare provider to rule out an infection if you have drainage that is green or foul smelling and/or if the skin around the tube is red and warm to the touch. • Tissue may begin to grow around the tube. This is scar tissue, also known as hypergranulation tissue. See the Hypergranulation handout. • Hypergranulation tissue forms more often if the feeding tube is moving around. This tissue affects the fit of the tube. A dressing or cloth tape may be needed to prevent the tube from moving. • If there is a balloon on the device, check the water level regularly. Add water as needed to improve the fit of the tube.

Tube Comes Out...

What could this mean?	What can I do?
<ul style="list-style-type: none"> • The balloon may have lost water • The feeding tube insertion site could close - This problem must be dealt with immediately 	<ul style="list-style-type: none"> • Go to the Emergency Department at your closest hospital or Community Health Care Centre. Take the feeding tube with you.

Routine Replacement of Your Feeding Tube

Your feeding tube is a _____ and was placed by _____ at _____ on _____.

- Percutaneous Gastrostomy (PG) and Percutaneous Gastrojejunostomy (PGJ) feeding tubes are usually changed in the _____ every 3 to 6 months.

Please contact: _____

- Percutaneous Endoscopic Gastrostomy (PEG) feeding tubes are not changed on a routine schedule. Please call the physician who placed your feeding tube if the tube is cracked, damaged or leaking.

- Physician: _____ at _____ Phone: _____

- Surgical gastrostomy and jejunostomy tubes are not changed on a routine schedule.

Please call the physician who placed your feeding tube if the tube is cracked, damaged or leaking.

- Physician: _____ at _____ Phone: _____



- Note: Please call 1 week in advance to make arrangements for replacement.

Important Phone Numbers:

Professional	Phone Number
Dietitian:	

- Transcribed information reviewed for accuracy and confirmed by healthcare provider

Feeding Tube Replacement Log - Patient Notes

Date	Physician

Weight Log - Patient Notes

Date	Weight



- Be sure to weigh yourself weekly.
- Contact your dietitian if you have noticeable weight gain or loss, as this may indicate the need for a new tube feed prescription.

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Healthy People, Healthy Saskatchewan

The Saskatchewan Health Authority works in the spirit of truth and reconciliation, acknowledging Saskatchewan as the traditional territory of First Nations and Métis People.

PIER—Patient Information and Education Resource

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