

Living with Your Feeding Tube

Contributing Organizations



Living with your Feeding Tube

Table of Contents

1. Introduction
2. Assistive Devices Program (ADP) Funding
3. Delivery of Supplies
4. Knowing your Feeding Tube
5. Your Feeding Pump
6. Other Options Without using a Pump
7. Let's Begin:
 - Skin Care
 - Mouth Care
 - Checking Your Weight
 - Hand Washing
 - Caring for Your Feeding Tube: Care of the site, the adaptor/extension
 - Medication Administration
 - Additional Supplies
8. How to flush your feeding tube
9. Cleaning Your Equipment and Supplies
10. How to wash your feeding set bags
11. How to administer your feed
12. Frequently Asked Questions: Trouble Shooting and Complications;
 - Trouble Shooting Guide
 - Appendix A- Joey Pump operation guide
 - Appendix B- Handwashing Guide
 - Web Resources
13. Definitions and Acronyms

1. Introduction – Nurse to Complete at First Visit

Your healthcare provider has advised that you require nutrition to be provided by a feeding tube. This brochure is to provide information about the tube you may have, the type of formula you will use, and how it needs to be administered.

- Type of Tube _____
- Date of Insertion _____
- Name of Physician of who placed the tube? _____
- Plan for the Tube Replacement _____
- Type of Adaptor Required _____
- Name of Feeding Formula _____
- Amount Needed Daily _____ ml
- Current Feeding Rate is _____ for _____ hours.
- Goal Feeding Rate is _____ for _____ hours.
- Flushing Requirements _____

Special Instructions for Advancing Feeding Rates:

OR Community RD to progress according to tolerance and BPG

- Open System
- Closed System
- Gravity
- Pump

Oral Intake Restrictions/Requirements:

2. Assistive Devices Program (ADP) Funding

An application to the government Assistive Devices Program is needed to receive a grant to help with the purchase of your feeding pump and future supplies. The approval process can take 2-3 months, so it is important that the paperwork is completed and mailed in as early as possible. Most often this paper work is completed by the hospital dietician and it needs to be signed by the doctor. However, if this was not possible, the dietician can help you complete this at home and then get it signed by your doctor.

As of Sept 2016, eligible persons can receive:

A grant for the pump up to \$549.00 (portable) or up to \$355 (stationary)

A quarterly payment to put towards your supplies – currently \$1500 per year (or \$375 every 3 months)

If you receive social assistance benefits under Ontario Works (OW), Ontario Disability Support Program (ODSP), or Assistance to Children with Severe Disabilities (ACSD) you may be eligible to receive additional funding.

ADP pays you directly and once received, you will need to purchase a pump and be responsible for the purchase of your supplies.

<http://www.health.gov.on.ca/en/public/programs/adp/publications/enteral.aspx>

3. Delivery of Supplies

As part of your discharge planning, your initial supplies and pump (extension sets, IV pole, feeding sets and syringes) will be ordered through Yurek Specialties as required for your set-up. LHIN will rent this pump for a 2 month period.

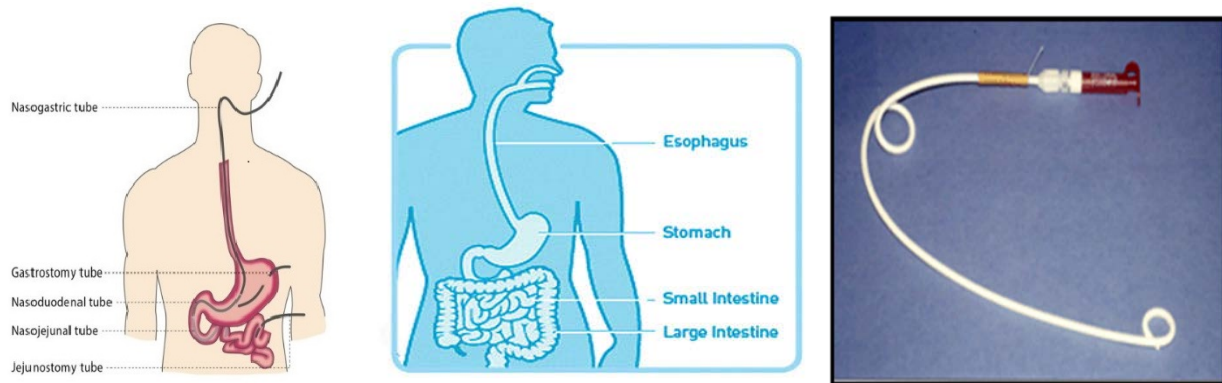
While your community nurse is involved in your care she will order weekly supplies, which will be delivered to a convenient depot for you to collect. After 2 months you will be required to order and pay for supplies using your ADP funding from the vendor of your choice.

You can go to any home health care pharmacy to purchase pumps and supplies for your tube feed. If you have extended benefits you are encouraged to check to see if pump and supplies could be covered.

Your tube feeding formula/solution will be ordered by your dietitian or doctor through your pharmacy of choice. This may be covered by your extended benefits or drug coverage.

4. Knowing your Feeding Tube

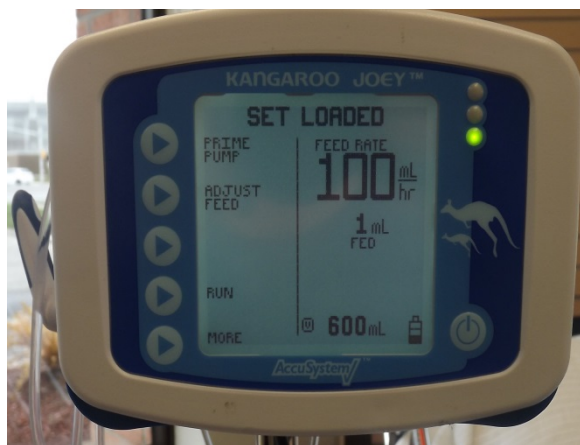
There are various tubes that can be used for feeding – your health care team will have decided the best and safest way for you: Into your stomach or directly into your small bowel.



5. Your Feeding Pump

The Feeding pump provided by the LHIN is the Kangaroo Joey— there are other options available when you purchase your own pump. Your dietitian will determine whether a stationary or portable pump is suitable for your requirements.

Kangaroo Joey pump (portable)



Pump Feeding Sets

Your tubing will either be a spike set (closed system) to fit a bottle or bag of formula that you have received from your pharmacy or a bag (open system) which you will pour cans/cartons of formula into.

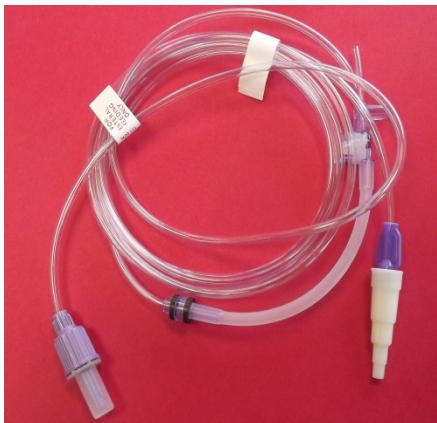
Open system (4104 Joey)

This is the system you would use if you pour your formula into the open bag and bag can be cleaned and reused. (see section 10)



Closed system (4009 Joey)

The system you would use, for the ready to hang formula from your pharmacy



Your nurse will order 7 of the spike sets (closed system) or 3 of the bag sets (open system) per week

6. Other Options Without using a Pump

Bolus - Formula can be given with a syringe into your feeding tube

Gravity – formula can be given via a bag without a pump using a roller clamp to control the flow

It is recommended to use a pump if you have a j-Tube

7. Let's Begin:

Skin Care

Although there are a number of different types of feeding tubes, skin care around the tube site is essentially the same. Your doctor will order the correct care and management for your tube site after the tube is put in and it is important that you follow these instructions.

Usually the care is the area around the tube is cleansed with Normal Saline and a dry dressing applied around the site.

After a few weeks a dressing is no longer required and the Feeding tubeite should be left open to the air and kept clean and dry. Clean the skin with soap and water using a face cloth; rinse the soap off and dry with a soft cloth. Start at the tube exit site and work outward toward the surrounding skin, holding the tube as you clean. The disc or bumper that lies close to the skin should be lifted gently to allow for complete cleansing.

If your skin is dry, you may use a water based moisturizer-your pharmacist may direct/assist you with this. If you are having radiation therapy, check with a member of your radiation team before using any skin product.

You should look at the area around the tube site each time it is cleaned. The skin should appear clean, not red, there should be little or no discharge and there should be no odour. A small amount of clear yellow discharge is normal in the first few weeks the tube is put in. Most patients are able to tub bath or shower normally after a few weeks- check with your doctor or nurse.

Problems to watch for;

- Excessive bleeding, redness-(greater than 1-2cm) around the tube.
- Tenderness, discomfort or pain around the tube
- Discharge (leakage) around the tube
- Swollen skin
- Any cracks or any area of the tube that is leaking.

Mouth Care

Even though you're not eating, it's important to take care of your mouth. Clean your teeth with toothpaste, and if your mouth feels dry, do mouth care more often.

Your health care practitioner may recommend a suction toothbrush if swallowing secretions is a concern. Moist mouth swabs may be used and you may use petroleum jelly to keep your lips moist. However, if you are having **radiation therapy or oxygen therapy**, do not use petroleum jelly. Talk to your nurse or radiation team. You may rinse your mouth with alcohol

free mouthwash or a mouthwash as advised by your health care professional. You can also rinse your mouth with:

- A solution of ½ teaspoon baking soda in 1 cup water **OR** a solution of 5mls of baking soda in 250mls of water
- ½ teaspoon salt in 1 cup of warm water **OR** 2.5mls salt in 250mls of warm water

Checking your Weight

You should be weighing yourself to check for weight gain or weight loss, this is checked to make sure you are receiving enough calories.

Remember: Since all scales are different, use the same scale each time to weigh yourself. Since your weight may change through the day, weigh yourself at the same time each day. Weigh yourself every 3-4 days when you first begin your tube feeding- unless you have been given other instructions. This may be decreased to once a week- once you have achieved your goal

Handwashing

Prior to any care and treatment for tube feeding, washing your hands is important. Here is a guide to proper handwashing procedure.

Caring for Your Feeding Tube: Care of the Site, the adaptor/extension; Medication Administration

Most tubes have a securement device placed on them to hold them in place and to prevent any tugging /pulling on the tube. If your tube does not have a securement device; your nurse will mark the tube and show you how to tape it in place. Record the length of your tube and check for this mark every day.

Do not let the end of the tubing hang loose. When you are not using your tube for feeding, make sure that it is closed with a clamp or cap and that it is secured to the abdomen.

Care of your tubing feed adaptor: You may need to replace the feeding adaptor at some time. The type of adaptor depends on the type of feeding tube you have. You may need to make a request at the hospital where your tube was placed or your home health provider.

Medication Administration

If you use your G or G-J tube for medications, you need to be careful when you do this so your tube does not become blocked.

Remember: Any medication you take must be in a liquid form. If your medication does not come in a liquid form, ask the pharmacist if the medication may be crushed and mixed with water. Each medication must be given separately. Check to see if the medication needs to be administered on an empty stomach.

- Do not put medication in the feeding bag
- Do not mix any medications with your formula.
- Do not mix medications with each other

If you experience diarrhea report this to your nurse or doctor because it could be related to some liquid medications

To crush and mix a medication with water:

You can crush each medication carefully using 2 clean spoons or a mortar and pestle. You may want to purchase a pill crusher at your pharmacy. Add an equal amount of warm water to the amount of medication **OR** add 15- 30MLS of warm water for each crushed pill. Mix and allow to dissolve.

Each medication must be crushed, mixed and given separately. You need to flush your tube after each medication with the amount of warm water that your health care professional recommends. Your pharmacist can assist in the selection of medication format as well.

Additional Supplies

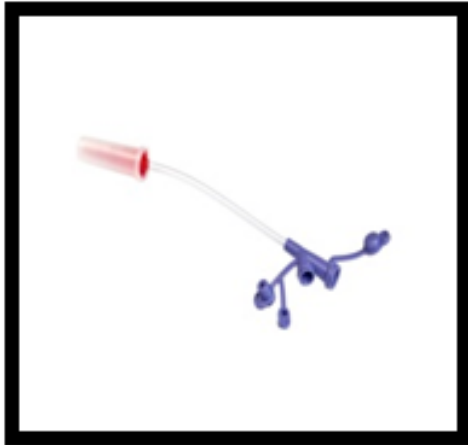
Cook adapter E0263 (FTA-MLLA-R)



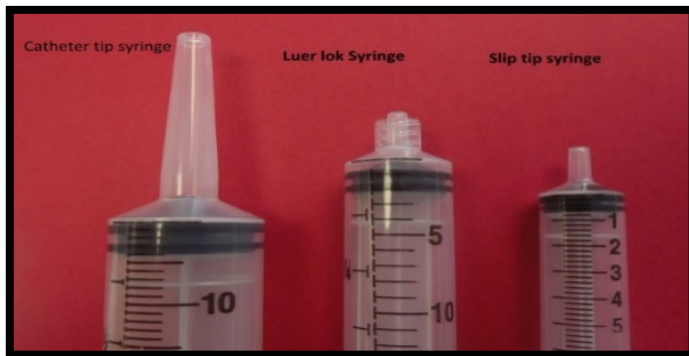
**Cook Red on Red Adapter (FTA-LMLLA-R) (Alternate adapter for a few GJ tubes)
Nurse must submit a Special Authorization request if needed**



Kangaroo Y extension: 9302 (8884705008)



Syringes



8. How to flush your feeding tube

Feeding tubes should be flushed with water before and after formula. This is to ensure that your tube remains open. Also additional flushing may be recommended by your healthcare practitioner to ensure you are getting enough fluids.

Always wash your hands before handling your feeding tube and equipment. Your health care practitioner (dietitian or doctor) will advise how much water to give and the type of water: tap, sterile, cool boiled or bottled.

- Put required amount of water in syringe
- Squeeze tube if no clamp and open the cap.
- Attach syringe and release clamp

- Slowly press plunger on syringe until empty
- Close clamp or pinch tube
- Remove syringe and close cap
- Wash syringe with soap and water and allow to air dry – the syringe is reused
- A new syringe should be used each week

9. Cleaning Your Equipment and Supplies

Liquid Formula is to be stored in a cool, dry place, unopened, it does not require refrigeration. Check the expiry date on the formula and do not use after this date. Open tetra pack/cans of formula must be covered with plastic wrap and refrigerated; if it is not used within 24 hours it must be thrown away. 8 hours after starting your feeding discard any formula left in the bag.

For parents of young children on tube feedings you need to consult a dietician to be sure the amount of time is correct for your child. If you are using a closed system follow the manufacturer's recommendations, the formula and tubing may be good for up to 48 hours.

For closed or open systems: do not use any formula that has thickened, has lumps or has separated. Rinse the feeding bag and the tubing with warm water after each use. Wash all of your equipment with warm water and dish soap. A bottle brush may be used to clean inside of the feeding bags. Rinse the feeding bag with warm water. Mix $\frac{1}{2}$ (125 mls) cup of vinegar with one cup of water (250 mls), **a solution of 1/2 or 1/4 strength of vinegar and water may be used**, pour this mixture into the feeding bag and shake it well. Empty the bag and rinse well with clean water. Let the water run through the tubing until clear. Allow the set to air dry in a clean place. Once dry, store the equipment in a clean covered box/bowl or wrapped in a clean towel.

Do not wash equipment in the dishwasher

The container and the tubing should be changed daily for closed systems and changed 2-3 days if it is an open system. Never refill a tube feeding bag unless it has been well cleaned.

Remember: Cleanliness can prevent many problems and is very important before and after preparation of the formula.

- Preparation Area: Clean counter tops with soap and water.
- Hands: Wash your hands well with soap and water, rinse thoroughly with warm water and dry with a clean towel.
- Cans of Formula: Shake well before opening; check the expiration date on the formula; and wipe off the lids of the cans with a clean cloth before using them.

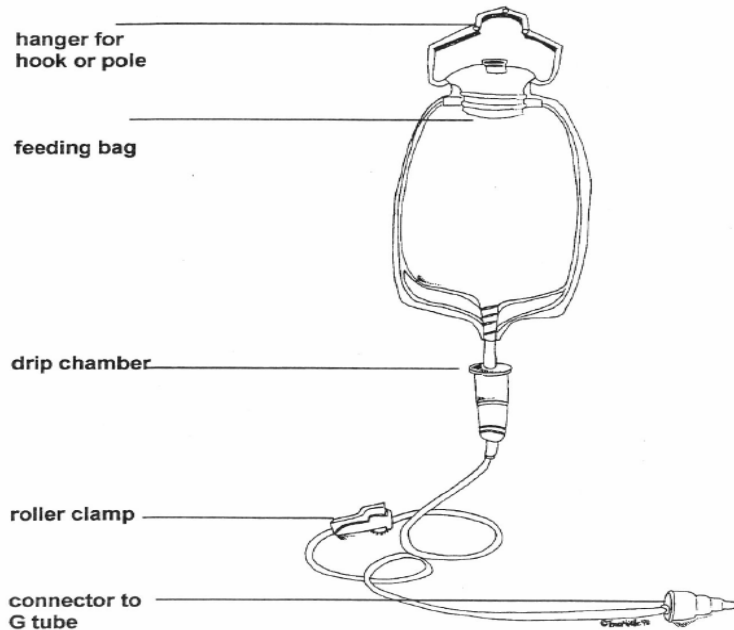
10. How to wash your Joey feeding set bags

- A. Disconnect feeding set from patient before rinsing. The feeding set must remain loaded during the rinsing procedure
- B. **CAUTION:** if set is removed from the pump, it may damage the set and prevent use and can affect the system accuracy.
- C. Empty contents of feed bag
- D. Fill the feed bag with water to approximately half of the total capacity. Close the bag and shake for 5 to 10 seconds.
- E. Empty the feed bag and repeat the last step until the bag contains clean water
- F. Power the pump on. Select “Keep Settings” to continue with previous setting or “Clear Settings” to start with programming new pump settings.
- G. Press the “Prime Pump” button to enter the “Prime Pump” screen.
- H. Press and hold the “Hold to Prime” button until only clean water flows through the tubing. Once the rotor starts this takes between 1 and 2 minutes.
- I. Empty bag of water. Prime to remove any remaining water out of feeding set.

11. How to administer your feed

A Picture of the Equipment

This is a picture of the equipment. Your equipment may look a bit different, but all equipment has the same features.



Your dietitian will discuss with you which is the best way for you to receive your formula

- a) using a feeding pump
- b) using a bag and gravity (for intermittent feeding)
- c) using a syringe and gravity (for bolus feeding)
- d) using a syringe (bolus feeding)

a) Using a Pump

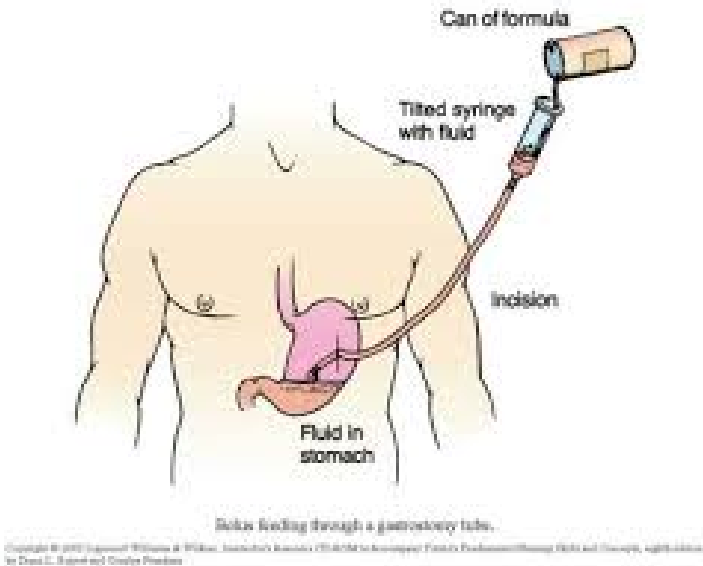
- Reference Appendix A

b) Using a formula bag and no pump (Gravity) for intermittent feeding



- Wash your hands well with soap and water
 - Gather your supplies – Syringe, Feeding Delivery Set, I.V. Pole, formula at room temperature, warm tap water for flushing
 - Close roller clamp on feeding delivery set by pushing it to the bottom.
 - Check the expiry date on the formula. Allow ½ hour for refrigerated formula to sit at room temperature before using.
 - Wipe the top of the formula with a clean cloth and shake it to mix it.
 - Pour your formula into the bag, only pour in as much formula as will be used in 8 hours-unless you have been given other instructions by the dietitian.
 - Hang your formula on your IV pole, so that the feeding bag is higher than your head.
 - Hold the tip of the feeding delivery set over a container. Open roller clamp gently and allow formula to run to end of tube; **do not fill the drip chamber** more than ½ full – close roller clamp.
 - Flush your tube as you have been shown (see Section 9)
-
- Ensure you are positioned in a sitting position or at least at a 30 degree angle; or resting at 45 degrees
 - Connect the tip of the feeding delivery set to the connector on your G tube.
 - Open the roller clamp gently to allow your formula to move through at the speed shown to you by your dietitian
 - Once the feeding delivery set is empty, close roller clamp
 - Disconnect the feeding delivery set from your G Tube and cap the feeding delivery set.
 - Flush your G Tube with water as you have been shown (see Section 9)
 - Wash the feeding delivery set and store equipment. (see Section 10)
 - **Do not lie down for at least 1 hr after the feeding is finished.** This allows for the formula to empty from your stomach.

c) Using a syringe and gravity for bolus feeding



- Gather your supplies : formula, 60ml syringe without syringe plunger, water
- Wash your hands
- Wipe top of formula container and shake
- Flush your tube as you have been shown (see Section 9)
- Remove the plunger from the syringe and attach syringe to your G Tube
- Slowly pour your formula into the syringe and allow to flow into your G Tube
- Once all formula required has been given, remove the syringe
- Flush your G Tube with water (see section 9)

d) Using a syringe for bolus feeding

- Gather your supplies : formula, clean cup/container, 60ml syringe, water
- Wash your hands
- Wipe top of formula container and shake
- Pour the required amount of formula into cup/container
- Flush your tube as you have been shown (see Section 9)
- Fill syringe with formula, and attach to your feeding tube
- Slowly press plunger to push formula through at a comfortable rate
- Continue until you have given required amount of formula
- Flush your G Tube with water (see section 9)
- http://www.uhn.ca/PatientsFamilies/Health_Information/Health_Topics/Documents/G-Tube_Feeding_by_Syringe.pdf

11. Frequently Asked Questions: Trouble Shooting and Complications;

Trouble Shooting Guide

TROUBLESHOOTING AND COMPLICATIONS

<u>PROBLEM</u>	<u>POSSIBLE CAUSES</u>	<u>CONSIDERATION/ACTION</u>
NAUSEA/ VOMITING/ REFLUX	<ul style="list-style-type: none"> • feed rate too fast • medication side effects • delayed gastric emptying • constipation 	<ul style="list-style-type: none"> • slow or stop feed until you feel more comfortable – discuss with your dietitian if occurs regularly • sit/lie as upright as possible – at least 30 degree angle – and continue for 30-60 minutes after completion • ensure you have regular bowel movements and speak to your doctor if you suspect constipation
DIARRHEA	<ul style="list-style-type: none"> • feed rate too fast • medication side effects • contamination of formula 	<ul style="list-style-type: none"> • start at a slow rate and increase gradually – discuss with your dietitian if this continues • DO NOT use formula that has been open for longer than 24 hours (in fridge) and always refrigerate open formula cartons/cans • Wash your hands and equipment as you have been shown • Replace feeding set and equipment as directed by your health care professional
CONSTIPATION	<ul style="list-style-type: none"> • Dehydration • Lack of fibre • Medication side effects • Insufficient activity 	<ul style="list-style-type: none"> • Always give prescribed amount of water • If your formula doesn't have added fibre, your dietitian can review • Discuss your medication with your pharmacist or physician to see if your medication is causing a problem • Be as active as possible • Consult your doctor if no bowel movement for 5 days
GAS/ BLOATING	<ul style="list-style-type: none"> • Formula may be too fast 	<ul style="list-style-type: none"> • Reduce the feeding rate and see if it settles

	<ul style="list-style-type: none"> • Too much formula • Incorrect positioning • Formula too cold • Formula intolerance 	<ul style="list-style-type: none"> • Check that the feeding rate and amount of formula is correct • Always feed when in upright position or at least 30 degree angle – both during feeding and for 30 – 60 minutes after • Always use formula at room temperature • If it continues discuss with your dietitian for review
<p>BLOCKED TUBE – may still flush but with difficulty</p>	<ul style="list-style-type: none"> • Insufficient or delayed flushing of G Tube • medication 	<ul style="list-style-type: none"> • always flush your tube with prescribed amount of water before and after anything else is put through the tube • ensure that your medication is properly crushed – use liquid form whenever this is available – DO NOT mix medication and always give a small amount of water in between medication • try to unblock your tube using your syringe and warm water and “push-pull” technique to try and break up or dislodge the blockage • It may take time to clear the blockage – DO NOT try and force water through the tube • A pancreatic enzyme may be prescribed to use at home for “high risk” tubes – your health care professional will show you how to use this • If your tube can not be unblocked it will need to be replaced
<p>DRY/SORE MOUTH</p>	<ul style="list-style-type: none"> • Oral care • Medication • treatment 	<ul style="list-style-type: none"> • oral care is very important when not eating by mouth • take sufficient fluids to prevent dehydration • some medication can make your mouth dry • check with your doctor for something to help with this • continue with oral care and try to keep your mouth moist • Radiation treatment to the mouth/throat can cause this – follow the advice from the team managing your radiotherapy regarding care of the radiation site and mouth care

SKIN IRRITATION / LEAKAGE	<ul style="list-style-type: none"> leakage infection over-granulation 	<ul style="list-style-type: none"> if your tube is leaking check that it has not dislodged or moved in any way use a barrier cream or spray sparingly on the skin around the tube to prevent burning of the skin clean the site at least once daily with soap and water and ensure that it is dried well afterwards if the site is very red and hot to touch it may be infected and you will need to see your doctor any areas of extra skin growth may also cause bleeding and discomfort at the site – ask your nurse for advice
DISPLACED OR PULLED OUT TUBE	<ul style="list-style-type: none"> Tube pulled accidentally and markings on tube show movement of tube is longer than usual Tube has been pulled out completely 	<ul style="list-style-type: none"> If your tube has been pulled and appears to be displaced, DO NOT use the tube and get medical assistance. If your tube is a GJ or J tube it will need to be replaced in hospital If your tube is a balloon tube you may have been shown how to replace the tube at home – if not, go to hospital as soon as possible to have a new one inserted The stoma will start to close within a few hours, so prompt action to replace the tube is necessary

Appendix A

JOEY Pump **INSTRUCTIONS**

- Attach bottle to spike set (or hang feed bag if already attached)
- Put feed set into pump – be careful not to overstretch
- Turn pump on
- Select **KEEP SETTINGS** or **CLEAR SETTINGS** – general unchanged daily use, select **KEEP SETTINGS**
- If required, press **ADJUST FEED** button – **FEED RATE** – set feed rate using the arrows on the side – **ENTER**
- If whole bag/bottle not being used, press **FEED VTBD** – set volume to be delivered in total – this does not need to be set if you are giving the whole bottle/bag
- Press **DONE**
- **PRIME PUMP** - select **AUTO PRIME** or **HOLD TO PRIME** – auto prime will stop just before end of tubing
- Attach to **flushed** feeding tube

➤ Press **RUN**

Brand new fully charged battery will last 18hrs @ 125ml p/h. The alarm will remind to recharge when it has approx. 15 minutes left. It takes approx. 6 hours to fully charge the battery

For best performance and to minimise any problems – keep the pump as clean as possible. Use warm soapy cloth to remove any spilt feed as soon as possible.

Troubleshooting Joey Pump

<u>ERROR</u>	<u>CAUSE</u>	<u>REMEDY</u>
Hold error	Pump on hold for more than 10 Minutes	Press <u>CONT</u> if hold still required or to start pump (then press <u>RUN</u>), press button to power down,
Flow error	OCC pump-patient	Check any clamps – check G tube clear and flushes – retry – if continues to show error, change feeding set
Feed error	OCC bag-pump	Check for empty bag – any kinks in line – if continues, replace feeding set
Pump set dislodged	Pump set not loaded properly	Press <u>POWER DOWN</u> and check set – reload. Restart pump
Battery low	Battery charge too low	Plug into AC outlet to provide power to pump and to recharge battery (approx. 15 mins depending on rate)
Rotor error	Pump set not on rotor correctly or something obstructing rotor movement	Check tubing is correctly loaded around rotor – no damage or tears – rotor moving freely – reload tubing – replace feeding set
System error	General error caused by various factors	Power down pump – switch back on to see if error has cleared. If not cleared – note error number and contact Yurek for a replacement pump

Appendix B

Handwashing

To wash hands properly, rub all parts of the hands and wrists with soap and water or an alcohol-based hand rub. Wash hands for at least 15 seconds or more. Pay special attention to fingertips, between fingers, backs of hands and base of the thumbs.

- Keep nails short
- Remove watches, rings and bracelets
- Do not use artificial nails
- Avoid chipped nail varnish
- Wash wrists and forearms if they are likely to have been contaminated
- Make sure that sleeves are rolled up and do not get wet during washing

If you have any questions regarding cuts, sores, allergies or pre-existing skin conditions, call Telehealth Ontario at 1-866-797-0000, TTY 1-866-797-0007.

Handwashing with soap and water



Cleaning with alcohol-based hand rub



• Web Resources

American Society for Parenteral and Enteral Nutrition-ASPEN- <https://www.nutritioncare.org>

The Oley Foundation- www.oley.org.

12. Definitions and Acronym's

- **Aspiration** Occurs when the feeding accidentally enters the lungs/ windpipe instead of the stomach- this may lead to pneumonia.
- **A.D.P** Assistive Devices Program- a program offered by the government to provide you with a grant- to assist you with the purchase of supplies/ feeding pump.
- **B.P.G.** Best Practice Guidelines
- **Bolus** Refers to a relatively large amount of feed given over a short period of time
- **LHIN Local Health Integration Network**- the organization which authorizes and organizes the care that is required in the community
- **Enteral** Refers to the intestinal tract and relates to feedings which are not taken by mouth, but go directly into the stomach or intestine.
- **Constipation** Difficulty in passing small hard stool.
- **Dehydration** Not taking enough water via your feeding tube or by mouth.
- **Digestive System** This includes your mouth, throat, stomach and intestines.
- **Enteral Pump** It is a machine that provides an amount of tube feeding formula in a set or specified time.
- **Feeding Tube** A tube that delivers the formula to your stomach/intestine.
- **Flushing** Syringing water through the feeding tube to prevent dehydration and clogging of the tube.
- **Gastrostomy** Refers to a surgically created opening into the stomach (a gastrostomy tube provides for a direct route for feeding into the stomach)
- **Jejunostomy** A surgical procedure whereby the feeding tube enters the stomach and is threaded into the second portion of the small bowel (jejunum). This tube is placed in interventional radiology.
- **Percutaneous** Means the tube is inserted through the skin without a surgical incision only the gastrostomy opening.

- **P.E.G. Tube Percutaneous Endoscopic Gastrostomy** A tube placed in surgery – held in place by bolsters.
- **Peritoneum**
The lining of the abdominal cavity.
- **Priming** Refers to flushing the feeding set with formula to remove all the air in the tubing set.
- **R.D.** Registered Dietitian
- **Roller Clamp** This is part of the gravity feeding set- the device on the set used to control/ adjust the rate of the feeding.