

**UNIVERSITY OF MICHIGAN  
HOSPITALS AND HEALTH CENTERS  
HomeMed**

**HOME ENTERAL NUTRITION  
MANUAL**

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Prepared for: \_\_\_\_\_

Date: \_\_\_\_\_

**Resource People and Phone Numbers**



Please contact the following people for your concerns:

<b>Question About:</b>	<b>Person To Call:</b>	<b>Phone Number:</b>
Supplies/Deliveries	HomeMed Pharmacy Tech _____ x _____	800-862-2731 Monday-Friday 8:00AM- 5:00PM
Pump or Feeding Tube	HomeMed Dietitian: _____ x _____ or _____ x _____	800-862-2731 Monday-Friday 8:30AM- 4:30PM
Nutrition or Formula	_____	_____
Visiting Nurse	_____	_____

If you have urgent questions **after hours, on weekends or holidays** please call HomeMed at **800-862-2731** and you will be contacted by one of our nurses or pharmacists.

## INTRODUCTION

This manual will provide you with information on how to take care of your tube feedings at home. You and your family members will learn the correct way to manage your tube feedings, so you receive enough nutrition and know how to prevent problems.

Members of the health care team will teach you how to manage your tube feedings to make sure you are at ease with it.

A nutritionist has chosen a formula to provide enough calories, protein and fluid based upon your nutritional needs.

Your **HomeMed Nutritionist** will order the formula and the tube feeding supplies (bags, syringes, pump) you will need at home.

Your **Practice Management Coordinator** (discharge planner) will contact a home nursing agency to arrange for a nurse to come to your home if needed.

- ◆ HomeMed business hours are Monday - Friday 8:00 AM – 5:30 PM.
- ◆ A nurse or pharmacist can be reached 24 hours a day by contacting:

**1-800-UMCARE1 (1-800-862-2731)**

- ◆ The patient information folder received with your supplies contains the following information:
  - HomeMed Overview
  - Patient Rights and Responsibilities
  - Advanced Directives
  - Home Safety
  - Infection Control
  - Emergency/Disaster/Weather, Power-loss Preparedness
  - Inventory of Supplies

Please review this information and keep it available for use as a reference.

- ◆ Call HomeMed as soon as possible if:
  - You have any questions or experience any problems concerning your medication, equipment or supplies
  - Your therapy, medication or supply needs change
  - You are admitted to the hospital
  - You do not have enough supplies to last until your next delivery
  - You are unclear about any of your instructions
- ◆ To insure you have an uninterrupted supply of products for your therapy, notify HomeMed at least 3 days prior to any anticipated needs. The office may be contacted during normal business hours.
- ◆ Due to regulations and standards related to the dispensing of medications and supplies, HomeMed is unable to accept any products for return or credit. However, if you receive any supplies in error please contact HomeMed.



## Home Care Services

HomeMed ▪ MedEQUIP ▪ Wheelchair Seating Service

HomeMed will set up a standard order of supplies you will need to give your tube feedings at home. A Pharmacy Technician will take care of your account. The pharmacy technician will call you before each scheduled delivery to see if there are any changes to your order. You can talk to one of our Registered Dietitians at any time. You will get a shipment every 2 weeks for the first 2 months and then your deliveries will change to once every 4 weeks.



**\*\*Insurance providers require us to make contact with you prior to shipping your order.**

**If we are unable to contact you, your order will be placed on hold. Please contact HomeMed as soon as possible in order to avoid delays in therapy.**

You may call our office 24 hours a day / 7 days a week at 1-800-862-2731. Our office receptionist answers calls from 8am to 7pm Monday through Friday. After 7pm on weekdays, weekends and holidays, you may leave a voicemail message regarding your supply needs.



Deliveries can take 3 – 5 business days, so be sure to order your supplies before you will need them. Rush deliveries may result in shipping charges to you.

HomeMed  
**1-800-862-2731**

Please tell your team technician if you are admitted to the hospital. HomeMed will place the service on hold and restart your order after discharge.

# PICK TICKET

This is a sample of what you will get in each of your deliveries from HomeMed.  
It tells you what is being delivered and when your next delivery is due.

PATIENT ORDER  
 Pat . . : HOM33333      734/222-2222      Ther: TEN      Ordered :x/xx/xx      Pickup Time: x/x/xx  
 Name: DOE, JOHN      Locn: HMED      Exp Ship:x/xx/xx      Pickup Date:      x/x/xx  
 Addr : 4545 JANE DOE LANE      Exp Dliv:x/xx/xx      Pickup Locn:      x/x/xx  
 ROSEVILLE      MI 48106      Sts : 0      **Nxt Dliv:x/xx/xx**      Home Invnty: x/xx/xx  
 HSR. . : LANCE P      RSpC: 9      Shipping Info. : NDA  
 Order : 100200300444      Delivery Agent:  
 #Days: xx      Date Shipped : \_\_\_\_\_

Delivery Directions: 11143333; PURPLE TEAM

Item Code	Description	Quantity	Stock
C15	00251401 example	28	_____
O03	00262607 example	72	_____
Q02	00252402 example	4	_____
R02	00350101 example	8	_____
R03	00350301 example	8	_____
X45	00830202 example	1	_____

This date tells you when your next delivery is due.

This is the number of days worth of supplies you are being sent.

Here is where each of the items you need for this delivery will be listed. The number to the right of the description tells you how many you need for this delivery.

Here we will hand write the quantity of that item that was actually sent.

\*\*\*\*\*

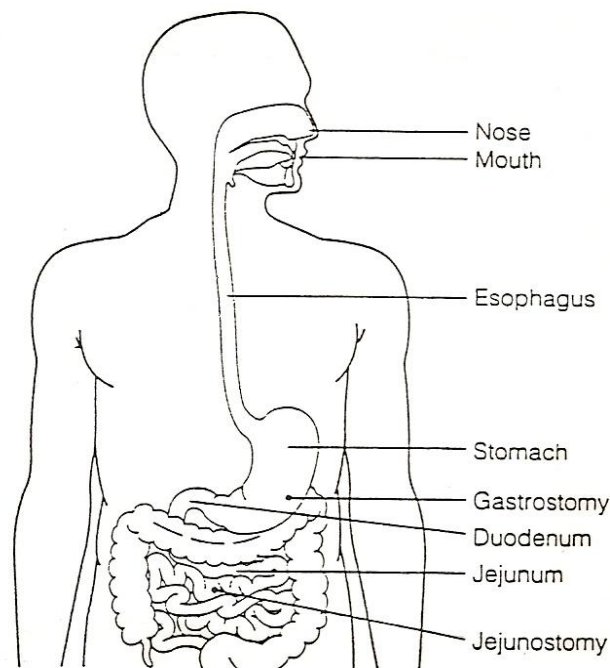
PICKED BY	DATE DATE	CHECKED BY	DATE	PACKED BY
_____	_____	_____	_____	_____
DELIVERED BY	DATE DATE	RECEIVED BY	DATE	CONFIRMED BY
_____	_____	_____	_____	_____

# TUBE FEEDING PLACEMENT

Your feeding tube is called a:

- nasogastric*
- nasoduodenal/jejunal*
- gastrostomy/PEG*
- jejunostomy*
- gastrojejunostomy*
- TEP*
- Other*

The tip of your feeding tube is in your \_\_\_\_\_.



**Important Note:** If you have more than one catheter (example: feeding tube and I.V.), always double check to make sure that you are infusing your formula into the feeding tube and not into the I.V. line.

## CHECKING THE PLACEMENT OF YOUR FEEDING TUBE

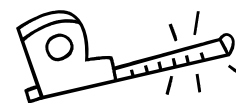
Checking the proper placement of your feeding tube should be done before each feeding and before putting any liquids down the tube. If, for any reason, your feeding tube has fallen out, call your doctor or be seen in your local emergency room immediately. A surgically placed tube **must be replaced within 2-3 hours** or the opening to your stomach or small intestine may close.

There are two simple methods used to check the placement of your tube.

**1. You may use a permanent ink to make a mark on the tube where it enters the body.** Watch to make sure the mark stays at that same point. You do not want the tube to go further inside or outside of the body more than 1 inch. If there is any question about the tube being in its correct place, call your doctor before using the tube. If your tube has numbered markings on it, note the one that is the closest to your skin.



**2. Measure** the number of inches from the point where the tube enters the body to the end of the tube where you connect the feeding. Use a non-stretchable tape measure. Compare measurements over time. If there is more than a 1 inch difference, call your doctor before using your tube.



## **BEFORE GIVING YOUR TUBE FEEDING**

### **Formula Preparation:**

- Use room temperature formula or bring cold formula to room temperature before using it by placing the can in a bowl of hot water.
- Wash your hands with soap and water.
- Rinse off the top of the formula can.
- Shake can well for 30 seconds.
- See the sample schedule provided in the front pocket of this manual to decide how much formula to pour into the feeding bag at once.

### **Formula Storage:**

- Your canned formula may be stored at room temperature as long as it has not been opened.
- Do not store formula near heating vents or other sources of heat.
- Do not store formula where it may freeze.
- Cover and refrigerate all unused, open cans or prepared formula.
- Throw away open cans or prepared formula that has been in the refrigerator longer than 24 hours.

## **TUBE FEEDING BAG, SYRINGE AND EXTENSION USAGE:**



### **Feeding bags:**

- Use a new feeding bag **everyday** (if you give more than one feeding in a day, use the same bag all day).
- Rinse out bag with warm water after each feeding and store in a sealed container in the refrigerator. Do **not** rinse out with soap or vinegar.
- Never throw away your last feeding bag in case you do not receive your new shipment before your next scheduled feeding.
- Add **only** formula and/or water to the bag.

### **Syringes:**

- Syringes can be reused for **3-4 days**. After each use, clean your syringe by pulling the plunger out of the barrel, rinse with warm water and allow to air dry.



### **Extension pieces:**

- Feeding tube extension pieces should be changed once per week or as directed by your nutritionist.

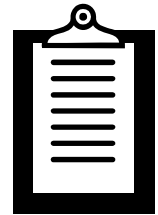
## **NUTRITIONAL GOAL: FORMULA AND WATER NEEDS**

\_\_\_\_\_ is the formula(s) you will be using. You will need to use \_\_\_\_\_cc's or \_\_\_\_\_ cans per day.

You will need to use at least an extra \_\_\_\_\_cc's or \_\_\_\_\_ cups (\_\_\_\_\_ oz) of water each day to prevent dehydration. If fluids cannot be taken by mouth, then fluid needs must be met with water through the feeding tube.

### **Tube Feeding Schedule Administration:**

A sample feeding schedule is being provided to you and will be placed in the front pocket of this folder.



### **Flushing The Feeding Tube:**

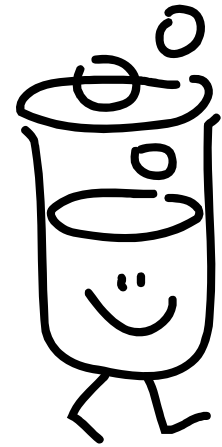
Flushing the feeding tube is done by filling a syringe with water and pushing it through the feeding tube. The reason this is important to do is to:

- Keep the feeding tube from getting clogged
- Provide you with water so you don't get dehydrated  
(see page 13)

It is recommended that you flush your feeding tube with water before and after you put formula or medications through your feeding tube. If you run your feedings on a pump, you should flush your tube every 4-8 hours.

# Hydration

As part of your nutrition goal, you will be given a water intake goal for the day. Your formula alone may not give you enough water to keep you from getting dehydrated. This water goal is the amount of water you need to take each day in **ADDITION** to your formula. If you are able to drink the water, you would only need to flush the feeding tube to keep it from clogging. If you are not able to drink, you will need to put all of the additional water through your feeding tube.



# Dehydration

If your body is not getting enough water each day or you are losing fluid through vomiting, diarrhea or G-tube drainage, you may get dehydrated. Dehydration can be life-threatening if not recognized. Some signs to watch for include:

- decrease in urination or very dark colored urine
- dry mouth
- muscle cramps
- feeling faint
- lethargy/weakness

If you suspect you are dehydrated, call your doctor immediately for medical advice.

# ADMINISTERING TUBE FEEDING USING THE PUMP METHOD

## Gather the following supplies:

Feeding pump and feeding bag

Formula

Room temperature water

Syringe

## Setting up:

1. Wash your hands with soap and water.
2. If you have gastrostomy or a nasogastric tube, administer tube feedings while sitting upright with your head and chest raised higher than your stomach. Remain upright for 30 minutes to one hour after feedings are complete.
3. Check placement of your tube (see page 9).
4. Prepare your formula by rinsing off the top of the cans and shaking the cans well for 30 seconds.
5. Flush your feeding tube with water using the syringe.

**You will be provided with a feeding pump for home. Refer to the pump handout located in the front pocket of this folder to complete the following steps:** filling the feeding bag, priming, setting the rate/dose and getting the pump started.

## After the Feeding:

1. Turn the pump off and detach the feeding bag from your feeding tube.
2. Flush your feeding tube with water and cap the end.
  - If the feeding is **not** complete, take the tubing out of the pump and rinse the bag out with tap water. Refill your feeding bag according to your feeding schedule and restart the feedings.

**If you are having problems with the pump alarming, see your pump handout located in the front pocket of this folder.**

# ADMINISTERING THE TUBE FEEDING BY GRAVITY DRIP METHOD

## Gather the following supplies:

Tube feeding bag

Formula

Room temperature water

Syringe

Pole or hook

## Setting up:

1. Wash your hands with soap and water.
2. Sit upright or have your head and chest higher than your stomach. Remain in this position during and 30-60 minutes after feeding.
3. Check placement of your tube (see pages 9).
4. Prepare your formula by washing off the top of the can and shaking the can well.
5. Be sure the roller clamp on the tube feeding bag is closed (down).
6. Pour prescribed amount of formula into the feeding bag (**see sample feeding schedule**).
7. Place the feeding bag on a pole or hook so that it is above your head by at least 1 foot.
8. To prime the tubing, squeeze and release the drip chamber until the formula fills to the line etched in the chamber. Open the roller clamp to allow the formula to flow to the end of the tubing. Close the clamp.
9. Use a syringe to flush the feeding tube with water.
10. Insert the end of the feeding bag into the feeding tube, unroll the roller clamp and allow formula to flow until the feeding bag is empty.
11. Pour the prescribed amount of water into the feeding bag and allow it to flow in (this step may be done 1-2 hours after the feeding if you are too full).
12. Use a syringe to flush the feeding tube with water.
13. Rinse out the tube feeding bag with water and store in the refrigerator until the next feeding (refer to page 11).

## **ADMINISTERING THE TUBE FEEDING BY SYRINGE-PUSH METHOD**

**This type of administration should only be used with a gastrostomy or nasogastric tube and only after feedings are well established. Consult your clinician before using this method.**

### **Gather the following supplies:**

Formula

Room temperature water

60cc syringe

### **Setting up:**

1. Wash your hands with soap and water.
2. Sit upright or have your head and chest higher than your stomach.  
Remain in this position during and 30-60 minutes after feeding.
3. Check placement of your tube (see page 9).
4. Prepare formula by rinsing off the top of the can, shaking can well and pouring it into a cup or bowl.
5. Using a 60cc syringe, flush the feeding tube with water and remove the syringe from the feeding tube.
6. Draw the syringe full of formula.
7. Place the tip of the syringe into the feeding tube.
8. Slowly push the formula into the feeding tube over several minutes.  
Repeat until the entire volume of formula is administered.
9. Flush with the prescribed amount of water (at least 60 cc).
10. Cap or clamp the feeding tube.

# **ADMINISTERING THE TUBE FEEDING BY SYRINGE-GRAVITY METHOD**

## **Gather the following supplies:**

Formula

Room temperature water

Syringe

## **Setting up:**

1. Wash your hands with soap and water.
2. Sit upright or have your head and chest higher than your stomach.  
Remain in this position during and 30-60 minutes after feeding.
3. Check placement of your tube (see page 9).
4. Prepare formula by rinsing off the top of the can and shaking can well.
5. Flush the feeding tube with water using your syringe. Remove the syringe from the feeding tube.
6. Remove the plunger from the syringe.
7. Place the tip of the syringe into the feeding tube.
8. Pour formula into the syringe barrel and allow it to flow in slowly.  
Continue refilling the syringe until your prescribed amount is given.
9. Pour in the prescribed amount of water and allow it to flow in slowly.
10. Remove the syringe. Cap or clamp the feeding tube.

# TAKING MEDICATIONS

If you need to take medications through your feeding tube:

- Check with your doctor or local pharmacist to see if your current medications interact with your tube feedings. You may also call HomeMed if you have any concerns.
- Ask your doctor to prescribe your medications in a **liquid** form.
- If any of your medications are not in a liquid form, ask your pharmacist or doctor if the pills can be crushed or the capsules opened. **Do not crush pills or open capsules without your pharmacist's or doctor's consent.** This could be harmful.
- Do not take any medication (prescription or over-the-counter) without your doctor's consent.
- **Do not mix medications** with your tube feeding formula or with each other.
- **Do not place medications in the feeding bag.**
- **If more than one medication is needed, always flush the feeding tube with water between each medication.**

## Supplies Needed:

Medications

Syringe

Pill crusher, if needed

A small cup for crushed meds

A cup with warm water



## Procedure:

1. Wash hands with soap and water before starting.
2. Using the syringe, flush your feeding tube with at least 10-20 cc of water.
3. Prepare your medications as follows:
  - Liquid:* draw the prescribed amount into the syringe.
  - Pills:* crush pills into a fine powder. Then mix the contents with 15-20 cc of warm water and draw the medication into a syringe.
3. Inject one medication into your feeding tube.
4. Flush the feeding tube with 10-20 cc of water after each medication (each medication should be given separately).
5. After all the medications are given, flush the feeding tube with water. [**Do not flush with soda or cranberry juice.**]
6. Re-clamp the feeding tube. Rinse and store supplies.



## **CARE OF SKIN AROUND G and J TUBES**

- A gauze dressing will be placed around the tube at the time it is inserted. Remove dressing 24-48 hours after surgery. Inspect skin for redness, tenderness, swelling, drainage or gastric leakage. Replace with new dressing as needed. Most tubes do not require a dressing. Keep skin clean, dry and free of drainage. If dressing is used, be sure it is changed immediately when wet or soiled.
- Clean the skin around the tube daily with mild soap and water using a washcloth or gauze. If your tube has a crossbar or disc that lies against your skin, you will need to clean underneath it. Rinse with water and dry thoroughly.
- Gentle movement of tube is not harmful.
- It is important to keep your skin around the tube clean and dry.
- Some drainage around the tube site is normal. If the drainage looks like pus or the skin is red, swollen or very painful, call your doctor.
- You may shower 24 hours after tube placement. Do not take tub baths or swim for one week.
- You may secure the tube underneath clothing with adhesive tape or with “stretch netting” to conceal it and prevent unnecessary motion of the tube.
- If your tube is accidentally pulled out, call your doctor immediately or go to your local emergency room. The tube must be replaced within 2-3 hours or the opening leading to your stomach or small intestines may close.

## CARE OF THE TUBE AND NOSE

Care of the nose around the tube should be done everyday. Wash your hands with soap and water before starting.

### Supplies Needed:

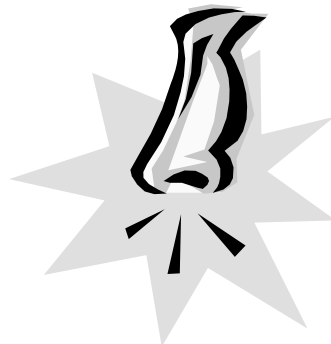
Damp washcloth or gauze

Tape

Permanent marker

### Procedure:

1. Use a permanent ink marker to place a dot on the feeding tube above the lip area to note tube position.
2. Remove the old piece of tape using one hand while holding the tube in place with the other.
3. Clean area around the nose making sure you clean well where the tube enters the nose.
4. Use a mirror or have someone else check the site where the tube enters the nose. Be sure redness or an open sore is not present.
5. Place the new tape lengthwise down the nose and wrap the rest of the tape around the tube. Place another piece of tape across the top of the nose to fully secure the first piece of tape. Do not tape the tube tightly against the front of the nostril. (Do not split the tape to wrap around the tube. This can cause too much pressure to the front of the nostril.)
6. To secure the tube or for your own comfort, you may loop the tube around your ear and tape it to the side of your face. You may also place a piece of tape around the tube and use a safety pin to secure the tape to your clothing. Never put a pin through the tube itself.

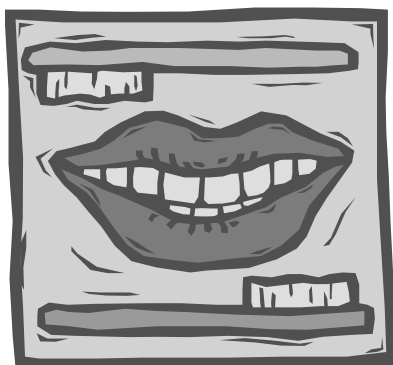


## MOUTH CARE

If you are unable to eat or drink anything by mouth, you may experience some mouth dryness, bad taste or bad breath.

To prevent this:

- Brush your gums and teeth twice a day with a soft bristled brush.
- Avoid licking your lips. This could cause further drying and chapping of lips. Use a balm for dry lips.
- Rinse your mouth with an alcohol-free mouthwash or use a mild salt and/or baking soda solution to rinse your mouth 3-5 times a day. Listed below are three ways you can prepare a salt and/or soda solution. If you have had surgery or radiation treatment to your head and/or neck, please contact your doctor prior to starting mouth care.
  - Add one (1) teaspoon of salt to two (2) cups of warm water.
  - Add one (1) teaspoon of baking soda to two (2) cups of warm water.
  - Add one (1) teaspoon of salt and one (1) teaspoon of baking soda to four (4) cups of warm water.



# SUPPORT ORGANIZATION

## If Tube or IV Feedings Are Part of Your Life, The Oley Foundation Is Here to Help You!

*Since 1983, the Oley Foundation has provided FREE information and support to consumers dependent on home parenteral and enteral nutrition (homePEN). We encourage you to learn more about the Oley Foundation by contacting them today.*

### Who Should Be Interested

All consumers (patients) who receive home nutrition support and their caregivers. This includes:

- **enteral nutrition** (HEN) where formula is delivered by tube into the stomach or intestinal tract; AND
- **parenteral nutrition** (HPN) where solutions are infused directly into the bloodstream (intravenously)

Consumers have lived fully productive lives on these therapies for more than 25 years.

Diagnoses that can lead to dependence upon homePEN are highly varied and include:

- Cancer forms that limit nutrient absorption or impair the ability to eat
- Radiation enteritis
- Crohn's disease
- Pseudo-obstruction and other Motility Disorders (gastroparesis, gastrectomy)
- Congenital bowel disease
- Ischemic bowel disease
- Intestinal tract injuries or traumas that impair the ability to eat
- AIDS
- Cerebral vascular accident (stroke)
- Chronic adhesive obstructions
- Cystic fibrosis

**Call Toll-Free (800) 776-OLEY**

— or —

**Visit [www.oley.org](http://www.oley.org)**



### How the Oley Foundation Can Help

Oley is a national, independent, 501(c)(3) non-profit organization that provides information and support for consumers of homePEN, their caregivers and clinicians.

**All Oley services and educational materials are FREE for consumers and their caregivers.**

Oley programs:

- **LifelineLetter**: a bi-monthly newsletter with articles about medical advances and personal experiences, written for homePEN consumers,
- **Regional Coordinator Network**: a national grassroots network of 70 volunteers — all homePEN consumers or caregivers — who run support groups and provide outreach and education at the local level
- **National and Regional Conferences**: opportunities for homePEN consumers, clinicians, providers and industry representatives to share support and information
- **Information Clearinghouse**: a resource designed to answer questions about homePEN through a toll-free hotline, world wide web page and video tape library
- **Toll-Free Consumer Network**: a networking tool that provides free access to different experienced homePEN consumers around the country, each month

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Albany, NY 12208-3478

(800) 776-OLEY • (518) 262-5079 • FAX (518) 262-5528  
[www.oley.org](http://www.oley.org) • [BishopJ@mail.amc.edu](mailto:BishopJ@mail.amc.edu)

## PROBLEM SOLVING

These problems may happen while you are on tube feeding. Keep in mind some of the problems may have other causes and may not be related to your tube feeding. **If problems persist, contact your doctor, nutritionist or nurse.**

Problem	Possible Cause	Actions/Solutions
Diarrhea and/or cramping	Side effect of your medication	Discuss medications with your doctor or pharmacist.
	Formula is too cold	Make sure your formula is at room temperature before using.
	Feeding is being given too quickly	Decrease the rate of your feeding 10-20cc per hour if using a pump. Slow down your gravity feeding so that it is given over a longer period of time.
	Not enough fiber intake	May require gradual addition of formula with dietary fiber. Check with your nutritionist.
	Tube out of position	Contact your doctor. You may need an x-ray to check the position of the tube.
continues on next page		

<b>Problem</b>	<b>Possible Cause</b>	<b>Actions/Solutions</b>
<b>Diarrhea/ cramping (cont.)</b>	Bacteria in the formula	Make sure you wash your hands and use clean supplies when handling your formula. Rinse and replace feeding bags as instructed. Make sure you do not let the formula hang too long in the bag. Check the expiration date on the formula package. Make sure all open bottles, cans, or mixed feedings are refrigerated and thrown away after 24 hours.
	Incorrect cleaning of tube feeding supplies	Clean supplies only with warm water. Do not use soap.
<b>Nausea</b>	Side effect of your medication	Discuss medications with your doctor or pharmacist.
	Stomach emptying too slowly	Discuss decreased usage of fiber-containing formulas with your nutritionist. Ask your doctor about a medication to relieve symptoms.
	Formula is being given too quickly	Decrease the rate of your feeding 10-20cc per hour if using a pump. Slow down gravity feeding so that it is given over a longer period of time.

<b>Problem</b>	<b>Possible Cause</b>	<b>Actions/Solutions</b>
<b>Gas, or feeling of fullness (bloating)</b>	Formula is being given too quickly	If using a pump, decrease rate of your feeding so that it is given over a longer period of time, or stop feeding for 2 hours. Slow down gravity feeding so that it is given over a longer period of time.
	Stomach emptying too slowly	Call your nutritionist or ask your doctor about a medication to relieve symptoms. May be caused by too much fiber (see below).
	Lack of exercise	If you can, increase your exercise. Relax and breathe slowly. Try sitting up or raise the head of your bed during feedings.
	Too much fiber	Decrease usage of fiber-containing formula or supplements. Call your nutritionist.
<b>Constipation</b> (call your doctor if you have not had a bowel movement in 3 days)  continues on next page	Not enough fluid intake	Increase your water intake as directed by your nutritionist or doctor.
	Not enough exercise	If you can, increase your exercise.

<b>Problem</b>	<b>Possible Cause</b>	<b>Actions/Solutions</b>
<b>Constipation</b> (cont.)	Not enough fiber intake	May require gradual addition of formula with dietary fiber. Check with your nutritionist.
	Possible blockage of the bowel	Call your doctor.
	Side effect of your medication	Discuss medications with your doctor or pharmacist.
<b>Inability to get prescribed amount of formula in</b>	Away from home, very busy home schedule, or intolerance	To prevent dehydration, increase water intake by 8 ounces for each can of formula you are unable to infuse. Call your nutritionist to discuss an alternate feeding schedule.
<b>Dehydration</b>  NOTE: Symptoms are weakness, thirst, light headedness, dry skin, less urine output, or dark colored urine (see page 13).	Prolonged fever	Call your doctor.
	Persistent diarrhea	Call your doctor.
	Not enough fluid intake	Make sure you are taking the amount of water as informed by your nutritionist. Then increase your water intake by 8 ounces per day.
<b>Thirst</b>	Not enough fluid intake	Increase amount of water given with your formula. Call your nutritionist with questions.

<b>Problem</b>	<b>Possible Cause</b>	<b>Actions/Solutions</b>
<b>Fever</b>	Possible aspiration	Call your home care nurse or doctor.
	Possible infection	Call your home care nurse or doctor.
<b>Choking, coughing, gagging</b>	Nasogastric feeding tube out of place	STOP the feeding. Contact your doctor or home care nurse.
	Possible aspiration	Call your doctor or home care nurse.
<b>Feeding tube clog</b>  NOTE: Do NOT try to clear blockage by inserting an object. This could result in damage to the tube or injury to the stomach lining. Do NOT use cranberry juice, meat tenderizer, or carbonated beverages to unplug tube. Acidic products cause the protein in the feeding formula to form more clogs.	Inadequate flushing of tube before and after administering feedings and/or medications	Attempt to flush tube with a 10 or 20cc syringe of warm water. If unsuccessful, fill half of syringe with water and connect it to the feeding tube. Move syringe plunger back and forth several times until tube clears. Avoid excessive force when flushing tube. If not successful, call your nutritionist, home care nurse or doctor or see below.  Obtain declogging kit from HomeMed and follow directions on kit. Call your clinician if you need assistance.

<b>Problem</b>	<b>Possible Cause</b>	<b>Actions/Solutions</b>
<b>Leakage around the tube</b>	Improper positioning	Sit at least 45 ° upright during feeding and for 1 hour after feeding.
	Too rapid feeding rate	Slow down the pump rate by 10-20 cc per hour or give gravity feedings over a longer period of time.
	Blocked tube	See section on “ <i>Feeding tube clog</i> ” above.
	Tube out of position	Measure length of tube or look for mark. If tube is longer or the mark has moved farther out, stop feeding and contact your doctor. The tube may need to be replaced.
<b>Skin redness or irritation around tube site:</b> NOTE: Keep skin clean, dry and free of drainage. Most tubes do not require a dressing. If dressing is used, be sure it is changed immediately when wet or soiled. Use a waterproof ointment such as zinc oxide around site to protect skin from gastric leakage. If problems continue, contact your nurse or physician. See “ <i>Leakage around the tube</i> ” above.	Minor infection	If slightly red, apply antibacterial (Bacitracin) ointment twice a day. Notify your doctor if not improved in one to two days.
	Allergic reaction to antibacterial ointment/soap	Try water alone for cleansing or switch to a different soap or ointment.
	Allergic reaction to tube material	Possible latex allergy. Call doctor immediately.
	Tube movement outward	See section on “ <i>Leakage around the tube</i> ” above.

<b>Problem</b>	<b>Possible Cause</b>	<b>Actions/Solutions</b>
<b>Sudden weight loss of 1-2 pounds per day</b>	Not enough fluid intake	Increase amount of water you take with your formula. Call your doctor if weight loss persists.
<b>Sudden weight gain of 1-2 pounds per day</b>	Retaining fluid	Call your doctor if rapid weight gain persists.
<b>Accidental removal of gastrostomy or jejunostomy tube.</b>		Clean the site and cover with a clean gauze. Call your doctor immediately or go to the emergency room. The tube must be replaced within 2-3 hours or the opening leading to your stomach may close.
<b>Continuous or unusual discomfort.</b>	Throat irritation from nasogastric feeding tube.	Call your doctor or nurse.

## SPECIAL CONSIDERATIONS FOR SMALL BOWEL OR INTESTINAL FEEDINGS

Putting well water through a feeding tube in your small intestines may cause problems. Well water may contain certain bacteria. The bacteria can cause an infection in your intestine. If your home has well water, there are two ways you can help prevent this.

1. **Use bottled water** for any liquid going into your feeding tube. (This includes formula, medications, extra water and flushing.) This could become costly.

**OR**

2. **Boil the well water for ten minutes.** Then let the water cool for one hour, making sure the pot is covered during this time. **Boil the water again for another ten minutes.** Cool and pour it into a container that has a lid. (Example: large glass jars, containers with cap.) Be sure the container and lid has been washed and rinsed well. The water can be stored at room temperature for three to five days as long as the container is kept closed between uses and feeding supplies are not put directly into the clean water (example: pour water into a cup then fill syringe from the cup).



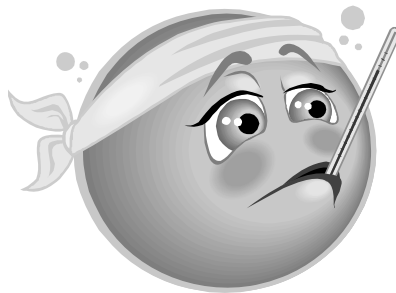
## SICK DAYS

On the days that you are not feeling well, you still need to be kept well nourished.

- Take your normal feedings and water if able.
- Hold the feeding if you have nausea or vomiting.
- Take small amounts of water as often as you can to replace the amount of formula normally given.

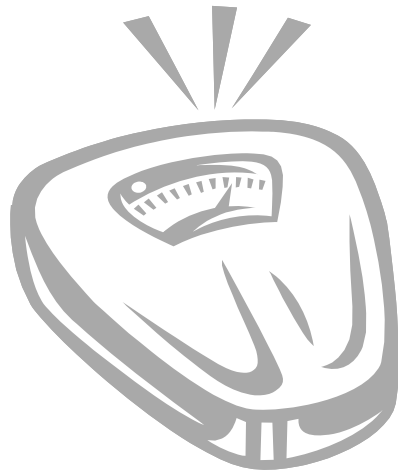
### When to Call Your Physician

- Signs and symptoms of infection:
  - chills or temperature over 100.5
  - redness, swelling, increased pain, or foul smelling drainage around the tube.
- Feeding tube falls out (see page 30).
- Abdominal bloating, nausea, cramps, vomiting or diarrhea for more than 24 hours.
- Unable to do feedings of formula and/or water for longer than 24 hours.
- Increasing size of the hole into your stomach.
- The cross piece where the feeding tube exits the body is making a sore at the skin.
- Change in overall health: significant weight change, weakness, less urine.
- Any new, unexplained symptoms



## KEEP RECORD OF NUTRITION AND WEIGHT

- Complete the daily diary on page 34. This diary provides your doctor and nutritionist with useful data.
- Record your weight at least 3 times a week. Weights should be taken at the same time of day while wearing the same weight of clothing. For concerns, see weight changes listed in the problem solving section on page 30.
- If you are unable to get out of bed, ask your doctor to weigh you during office visits.



# DAILY DIARY

**GOAL WEIGHT:** \_\_\_\_\_

	SUN	MON	TUES	WED	THURS	FRI	SAT
DATE							
WEIGHT							
FORMULA TAKEN: (Record time & amount taken at each feeding.)	Time/amount	Time/amount	Time/amount	Time/amount	Time/amount	Time/amount	Time/amount
<b>TOTAL</b>							
WATER TAKEN: (cups or cc's)	Time/amount	Time/amount	Time/amount	Time/amount	Time/amount	Time/amount	Time/amount
<b>TOTAL</b>							
OTHER FLUIDS TAKEN	Time/amount	Time/amount	Time/amount	Time/amount	Time/amount	Time/amount	Time/amount
STOOLS*							
OTHER Nausea/ Vomiting							

\*List number of stools and consistency (hard, soft, watery, etc.)

## **DEFINITIONS**

**ASPIRATION:** When saliva or formula is inhaled into your lungs.

**BACTERIA:** A microorganism which multiplies and can only be seen by a microscope. Some bacteria can cause diseases and infections.

**CONSTIPATION:** Having no bowel movement in two days or having hard, painful stool.

**DEHYDRATION:** Results from inadequate water intake. Symptoms include thirst, rapid weight loss, weakness, less urine and dark colored urine.

**DIARRHEA:** Six or more watery bowel movements per day.

**ENTERAL:** Feeding of the appropriate formula using a tube that goes into the stomach or small intestine.

**FEEDING TUBE:** A small tube made of soft plastic that is positioned in the digestive system. Liquid nutrition is given through this tube.

**FLUSHING:** The process of pushing water through the feeding tube using a syringe. Flushing is used to prevent the tube from clogging and to prevent dehydration.

**FORMULA:** Liquid nutrition designed to provide your body with daily calorie, protein, vitamin and mineral requirements.

**GASTROSTOMY TUBE:** A feeding tube that passes through the skin, with the tip of the tube placed in the stomach.

**GASTROJEJUNOSTOMY:** A feeding tube that passes through the skin, into the stomach, with the end of the tube in the part of the small intestine called the jejunum.

**GRAVITY DRIP METHOD:** A method of feeding in which a tube feeding bag is used to hold the formula and a roller clamp controls the flow of formula. No pump is used.

**JEJUNOSTOMY TUBE:** A feeding tube that passes through the skin, with the tip of the tube placed in the small intestine.

**NASOGASTRIC TUBE:** A feeding tube that passes through the nose, with the tip of the tube placed in the stomach.

**NASOJEJUNAL TUBE:** A feeding tube that passes through the nose, with the tip of the tube ending in the part of the small intestine called the jejunum.

**NAUSEA/NAUSEATED:** Stomach distress with an urge to vomit.

**PEG TUBE:** Percutaneous Endoscopic Gastrostomy tube. A procedure for placing a feeding tube into the stomach using local anesthesia. Not a surgical procedure.

**PRIME:** The process of allowing the formula to flow from the feeding bag to the very end of the tubing prior to connecting the bag to the feeding tube. This pushes the air out of the feeding bag tubing prior to starting the feeding.

**PUMP METHOD:** A method of feeding in which a feeding bag and an electrical pump are used to deliver a set amount of formula each hour.

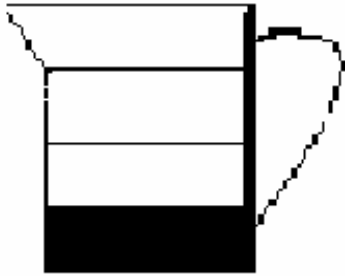
**STOMA:** An artificial permanent opening from the skin's surface going into the body.

**TEP TUBE:** Tracheoesophageal Puncture tube. A feeding tube that passes from a neck stoma, through the esophagus, to the stomach.

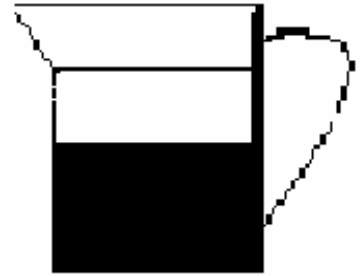
**TUBE FEEDING:** The process of administering formula through a small feeding tube.

# Fluid Measurements and Equivalents

**mL is milliliter**  
**cc is cubic centimeter**  
**mL and cc are the same amount**  
**1 mL = 1 cc**  
**30 mL = 1 ounce**  
**240 mL = 8 ounces**  
**8 ounces = 1 cup**



$\frac{1}{4}$  cup = 60 cc = 2 oz



$\frac{1}{2}$  cup = 120 cc = 4 oz



$\frac{3}{4}$  cup = 180 cc = 6 oz



1 cup = 240 cc = 8 oz