The Oley Foundation

TUBE FEEDING
TROUBLESHOOTING GUIDE

This guide is a tool to assist you, and should not replace your doctor's advice. We suggest you read the section related to your symptoms, and then discuss with your doctor whether you should follow the instructions on the guide. General tips that will be especially helpful for new tube feeders can be found on page 2. *Recommendations from the guide may not apply to everyone.*

TABLE OF CONTENTS

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Going Home with Tube Feedings

WHEN YOU FIRST GET YOUR TUBE:

- Ask for the packaging so you know the brand, type (G-tube, J-tube, G/J-tube) and size (the diameter is measured in units known as French sizes, or "Fr"; a low profile tube also has a stem length). Note: NG and NJ tubes (that go through a person's nose) are used for temporary, not prolonged tube feedings.
- Ask how your tube is held in place. (For example, does it have a balloon, a mushroom bumper, or other internal device, or does it rely on stitches?)
- If it is not a low-profile device (sometimes called a button), ask the nurse if he/she has tips on securing the dangling portion of the tube or see www.oley.org.
- Mark the feeding tube 1 inch from where it enters the body with a permanent marker. Check the tube before each feeding. If it has moved in or out more than 1 inch call your doctor.
- Before going home, you should be taught how to give liquid nutrition, water, and possibly medications, through the tube. If you are uncomfortable, ask your doctor, visiting nurse, or home care company for more training. (Go to www.oley.org for "How-to" instructions for feeding, flushing and/or giving medicines through a tube.) If you are diabetic or have a family history of diabetes, it is prudent for your clinician to verify your glucose tolerance when initiating tube feedings.
- Ask what you should do if the tube falls out. If you've been trained to replace your tube, ask for an extra replacement tube should the need arise.
- Showering/bathing with your tube. It is okay to get your tube/insertion site wet in the shower after the initial dressing is removed (usually 48 hours after the tube was inserted), or as per your doctor's instructions. Clean the site with warm water and a mild soap daily. (This can be done while showering.) Pat dry. Apply barrier cream and dressing as needed (see www.oley.org for skin care advice). It is normal to have some drainage around the tube. If the drainage is foul smelling, and/or there is a large amount of drainage—or the skin is red, warm or tender—consult your doctor.
- Cleaning and storing supplies. Wash equipment with hot, soapy water after each use. Rinse well, making sure all the soap is rinsed away. Allow to air dry. Do not use soap with pump bags or gravity bags because they cannot be fully rinsed. It is best if you have at least two of every item so you can alternate their use. Store clean feeding bags and tubing in a clean plastic bag or container. If desired, store in the refrigerator. Ask your clinician how many times the equipment can be washed and reused before it needs to be replaced.
- Don't forget your mouth! Even if you are not eating, you still need to brush your teeth, gums and tongue with a soft toothbrush—and gargle with mouthwash like Biotene®—twice each day (see www.oley.org for "Managing the Symptoms of Dry Mouth").
- Parents of infants/toddlers/young children—consult with your child's doctor about safe ways to stimulate your child's ability to suck, swallow and taste. This will help prepare for the day when your child will no longer need tube feedings (see www.oley.org for more information on feeding or weaning a tube-fed child).

GET CONNECTED TO INFORMATION AND OTHER TUBE FEEDERS:

- Get connected to the Oley Foundation for more information (www.oley.org). Oley has written materials as well as DVDs on a range of topics of interest to tube feeders, including how to feed, tips on skin care, and special products.
- Feeling depressed or overwhelmed? This is a common experience for people new to tube feeding. Oley can connect you with other patients and families on tube feeding through its volunteer network and online forum. Oley can also provide you a booklet on coping with tube feeding. If your needs are more extensive or immediate, ask your physician for a referral to a psychologist/counselor or go to the ER.
- Other things Oley can help with include:
  - — Travel tips
  - — Advice on swimming
  - — Coping with not eating
  - — Working with your child's school
  - — Making your own blenderized tube feedings
  - — Finding formula or supplies through the Equipment/Supply Exchange

LIVE BETTER

Keep in mind that there are many different types of tubes, formula, pumps, and other supplies available. There are also different ways of feeding (e.g. bolus feeding vs. gravity feeding vs. pump assisted feedings) and feeding schedules (e.g. overnight vs. during the day). Changing one or more of these variables can improve your quality of life. You are encouraged to speak with your physician, dietitian, home care company, or an Oley volunteer/staff member to learn more about your options.

Nausea and Vomiting

DESCRIPTION: **Abdominal distress, distention, feeling bloated, cramping**
Vomiting/dry heaves/retching, cold sweat

IMMEDIATE ACTION:

- Stop feeding.
- Following instructions from your doctor, drain the formula and/or food from your stomach by unclamping tube. If nothing comes out, flush the tube with water to make sure the tube is not blocked. Some tubes have valves (such as buttons) which make them difficult to drain. If the tube is blocked and/or you are unable to drain the stomach or vent out gas, call your doctor to discuss decompression tubes or devices.
- If you continue to vomit, call your doctor for advice on how to avoid becoming dehydrated (see "Fluid/Electrolyte Depletion" page 9).

Note: Early morning nausea and vomiting may happen when first starting tube feeds. It may take time for your body to adjust to the formula, feeding schedule and/or constipation.

CAUSES AND PREVENTION:

These symptoms can be caused by several things.

You do not tolerate the formula.

- The formula may be going in too fast.

  Begin feedings at a low rate, then increase the feeding rate and amount slowly. Ask your doctor what rates and amounts he/she recommends you work up to. If you become nauseous, decrease the rate until nausea subsides. Slowly increase the rate, over 2 to 4 hours, and then resume the amount to the previous level as tolerated. (If this doesn't work, talk to your doctor.)
- The formula may be too concentrated for you or you may not tolerate some of the ingredients in the formula.

  Ask your doctor if you should switch to a different formula. Note: before switching you should check whether your insurance will cover the new formula.
- The formula may have become contaminated (spoiled).

  Use good hand washing and clean technique when handling tube feeding formula and equipment. Wash equipment with hot, soapy water after each use. Rinse well, making sure all the soap is rinsed away. Allow to air dry. Do not use soap with pump bags or gravity bags because they cannot be fully rinsed. Change the pump bags every 24 hours to ensure the proper amount of formula is given.

  Use a new gravity bag or pump bag every 24 hours. Clean the bag with warm water after each feeding. After cleaning a used bag, allow to dry well, and put it in a clean re-closable baggie or plastic storage container. If desired, store it in the refrigerator. Do not store or wash equipment in the bathroom.

  Do not use formula past its expiration date. Do not use formula from cans that have dents or bulges. Put the date and time on cans when you open them. Cover them and store in the refrigerator. Discard an open can after 24 hours.

  Formula should not be given at room temperature after more than 12 hours. Only put the amount of formula in the bag that will be used in 12 hours. Once this is administered, rinse the bag and add remaining formula.

You or the tube are not positioned correctly for tube feeding.

- The tube may not be in the correct position.

  Check the tube to see if it has dislodged or moved (see "Tube Displacement" page 4).
- You are not in the correct position for tube feeding.

  Put head of the bed on 6" blocks for night tube feedings. Have head of bed elevated 30 to 45 degree angle, or sit up during feeds. Do not lie flat for at least 30 minutes to one hour after the feeding ends.

Your stomach and/or bowel isn't working normally.

- Your stomach may not be emptying well. Stomach contents may be flowing back into your esophagus (GERD or Gastroesophageal Reflux Disorder). You may have an ulcer.

  Ask your doctor if you have any of these conditions and if medication is needed. Take any medicines that your doctor prescribes.
- Your bowel may be obstructed. Something may be blocking the formula so it cannot pass through your bowels.

  Your doctor will need to examine you and possibly do some tests.
- You may be constipated (see "Constipation" page 7).

Other possible causes.

- Medication or other treatments such as chemotherapy/radiation may make you feel ill.

  Check with your doctor to see if these symptoms could be side effects of a medicine you are taking. Ask if there are other medicines that might have fewer side effects. Also ask if you can have a prescription for anti-nausea medicine. If your doctor prescribes it, take it at least 30 to 60 minutes before you begin tube feedings.
- You may feel uncomfortable or anxious about feeding by tube.

  Ask your doctor, nurse, dietitian, or home care company for more training. Visit www.oley.org for videos and brochures that cover how to tube feed.

  Try stress reduction or relaxation techniques. Try yoga or exercise before feeding. Ask your doctor about anti-anxiety medicine. Seek out support and encouragement from other tube feeders through the Oley Foundation at www.oley.org.
- You may be bothered by the sight or smell of food, or something else in your house.

  Remove (or move yourself away from) offensive sights or odor-causing objects while feeding. Examples are bedpans, commodes, cooking smells, etc.
- Coughing, post-nasal drip, upper respiratory infection, sore throat.

  See your doctor if you have a persistent cough, nasal drip, sinus infection or sore throat.
- The foods you are eating by mouth.

  Possibilities include foods with lactose or high amounts of sugar or fat. Review your diet with a dietitian. Ask for a list of foods you may tolerate better.

Diarrhea

DESCRIPTION: **Abdominal pain or cramping with frequent, loose, and/or watery stool**

IMMEDIATE ACTION:

- Decrease the volume or rate of tube feeding.
- Call your doctor if you experience a noticeable change in bowel movements for 24 or more hours. The doctor can tell you how to avoid losing too much fluid and electrolytes (see "Fluid or Electrolyte Imbalance" page 9).
- Call your doctor immediately if you:
  – see bright red blood in the stool.
  – have black stools.
  – are having severe abdominal pain.

CAUSES AND PREVENTION:

These symptoms can be caused by several things.

Side effects of medicines.

- If you are on antibiotics, you may experience diarrhea due to the antibiotics or possible bacterial overgrowth. Consult with your doctor. You may need a stool culture.
- Ask your pharmacist if any of your medicines have sorbitol, magnesium or phosphorus. If so, discuss proper dosage or an alternative with your doctor.
- Take the dose of medicine your doctor has prescribed. Tell your doctor if you are taking over-the-counter medicines, herbals or supplements.

You do not tolerate the formula.

- See "Nausea and Vomiting" page 3.
- Make sure formula is given at room temperature; cold formula can cause diarrhea.
- Ask your doctor if adding fiber to your diet, or taking a fiber-enhanced formula, can help your diarrhea.
- Ask your doctor if you need a pancreatic enzyme replacement, lactase enzyme, or a probiotic.

Bowels not functioning properly.

- Short bowel syndrome (your working small intestine is less than 100 cm).
  Ask your doctor if medication to slow your bowel (such as lomotil or tincture of opium), or medication to decrease stomach acid secretions (such as Pepcid® or Protonix®) may be helpful for you.
- Bacterial Overgrowth.
  Tell your doctor if you are on or have taken any antibiotics recently. Consult with your doctor. You may need a stool culture.
- Bowel inflammation.
  Ask your doctor how to control bowel inflammation.

Not tolerating food or drink taken by mouth.

- Review your diet with a dietitian. Ask if the food has anything that could cause diarrhea. Possibilities include foods with lactose or high amounts of sugar or fat.

Tube Displacement

DESCRIPTION: **Tube has come out of body or has moved out of place** (see measuring tips on page 2)
Choking, difficulty breathing. Nausea/vomiting, abdominal pain, diarrhea

IMMEDIATE ACTION:

- Discontinue feeding.
- If you have an NG or NJ tube, and the tube is curled in the back of your throat, pull it completely out.
- If you have a G, J, or G-J tube, do not remove the tube in your abdomen. Call your doctor.
- If you have a G, J, or G-J tube, and the tube has fallen out, call your doctor or go to the emergency room to have the tube replaced as soon as possible. Your stoma can close in 1 to 4 hours. Depending on the type of tube, you may be able to replace it yourself, but this needs to be discussed with your doctor ahead of time.

CAUSES AND PREVENTION:

These symptoms can be caused by several things.

The tube is not adequately secured.
Accidental or excessive pulling of the tube.
Your stomach may "see" your tube as a piece of food. It may act to pull the tube inside your stomach or intestine.

- Use a tube attachment device such as a tube holder (nasal or abdominal).
- Carefully secure the tube to your abdomen, nose, or cheek. Take a piece of tape about 7 inches long. Fold the ends (about 1½" worth on either end), back on themselves. Wrap the tape around the tube; the non-sticky ends should extend out about 1½ inches. Pin the ends to your clothing, making sure you allow for adequate movement.
- See www.oley.org for under-garments and other products/tips to help secure tubes, including tape suggestions for sensitive skin.

Frequent vomiting.

- See "Nausea and Vomiting" page 3.

Balloon deflates or bursts.

- Be sure the balloon under your skin is intact. You can check by using a syringe to draw out a few cc's of water. (Replace the water in the balloon after checking.) Also, the tube will be easy to pull out if the balloon has burst.
- If the balloon has burst, use tape to keep the tube in place. Call your doctor or go to the emergency room to get a new tube. Depending on the type of tube, you may be able to replace it yourself, but this needs to be discussed with your doctor ahead of time.

Tube Obstruction/Blockage

DESCRIPTION: **Inability to flush with water, infuse tube feeding or administer medication**
Bulging of tube when feeding or flushing

IMMEDIATE ACTION:

- Make sure the tube clamp is open.
- Do not force formula or medication into a clogged tube.
- Try to flush the tube with a syringe filled with warm water. Pull the plunger back on syringe. Try flushing again with warm water. If flushing doesn't work, call your doctor to discuss alternative options. Some options include Viokace® (Aptalis Pharma), a pancreatic enzyme that may be used to clear clogs caused by formula (see suggested protocol on right), or the Clog Zapper™ (Corpak MedSystems), a mixture designed to clear any type of clog. Viokace is available by prescription only, and must be administered by a clinician. It is recommended that the first time you try the Clog Zapper you do so under the supervision of a clinician.
- A mechanical device, TubeClear® (Actuated Medical, Inc.), is another option for clinician use only. It is available for adult G- and J- tubes, 10 to 18 Fr. and 8 to 14 inches long, and for adult NG- and NJ- tubes, 10 to 18 Fr. and 36 to 55 inches long.
- More information about tube clearing devices is available at www.oley.org.

Suggested Protocol to Administer Viokace® — For Clinician Use ONLY

- Wearing gloves and a mask, crush one Viokace tablet (10,440 USP units of lipase) and one 375 mg sodium bicarbonate tablet, and mix in 5 mL of water.
- Introduce the mixture into the clogged tube, clamp and let dwell for at least 30 minutes. (The mixture can be introduced with a syringe; or if the clog is further down the tube, it can be introduced with a small bore PVC tube inserted into the feeding tube.)
- Attempt to flush the tube with warm water.
- If clog is not cleared, remove the old Viokace mixture and repeat with a new batch.
- Use caution when clearing small bore tubes as tablet fragments may further complicate the clog.

CAUSES AND PREVENTION:

These symptoms can be caused by several things.

Medicine not given properly.

- Ask your pharmacist, doctor or nurse to review medications and how to give medications via a tube.
- Give each medicine by itself. Flush before and after it is administered.
- Do not mix any medicine with formula.
- Liquid medicines should be diluted with 30 mL water before administering. Note: The high osmolarity of liquid medications may cause cramping and/or diarrhea.
- Tablets should be thoroughly crushed, then dissolved in 30 mL water before administering.
- Capsules should be opened and their contents poured into a syringe. Add 30 mL water and allow a slurry to form (usually within 20 minutes) before administering.
- Time-release medicines should not be given via a feeding tube.
- Go to www.oley.org for more information on giving medications by tube, and for a list of medications that should not be crushed.

Tube not flushed properly.

- Flush tube well with warm water before and after putting formula, medication, or anything else in your tube. Ask your doctor how much fluid you should use.
- Flush tube every 4 to 6 hours if on continuous feedings.
- Flush tube at least once a day if not in use.

Putting soda through the tube.

- Do not put soda or other carbonated beverages in the tube. They can interact with formula, or medication, and cause clogging.

Putting in items that are too thick, sticky or large to pass through tube.

- Thoroughly blend powdered formula and non-formula foods before putting them through the tube. (See www.oley.org for information on making your own blenderized tube feedings.)
- A pump may be needed when using a formula that is thick or concentrated.

Tube clamp is closed.

- Make sure tube clamp is open when:
  - flushing
  - feeding
  - giving medicine

Infusion rate is too slow.

- Ask your doctor about increasing the rate.
- Flush the tube with water every 4 to 6 hours if you are on continuous feeds.

Site Irritation and/or Tube Leaking

DESCRIPTION:

Irritated skin or rash around tube
Burning pain
Foul odor or local infection
NG/NJ tube users may have developed sinus or ear infection
Granulation or extra tissue built up around the insertion site:
(It may appear shiny and pink, and bleed easily)
Visible leakage from tube or around tube
Multiple soaked dressings that require changing more than twice per day

IMMEDIATE ACTION:

- Stop feeding.
- If possible, clamp the tube between your body and the problem area.
- Wash skin with warm water and a mild soap, and pat dry. Apply a dry dressing as needed.
- Call the doctor or home care nurse.
- Apply zinc oxide or other barrier cream to protect skin as needed (see www.oley.org for more information on skin care).

CAUSES AND PREVENTION:

These symptoms can be caused by several things.

Poorly fitting tube.

– Tube diameter is too small for tube tract.
– Stem of button is too long.
– Internal bumper is too short, too loose, or too tight against the inside stomach wall.
– The external bolster (skin disc) is too tight or too loose.
– The balloon is overinflated or underinflated.
– The disc was not adjusted after weight loss or gain.
– NG/NJ tube may be too big or too loose.

- Check the tube to see if it has moved out of position (see measuring tip on page 2), or if there is an obvious source of leakage.
- Ask your doctor or nurse about the tube size, manufacturer and lot number.
- Ask your doctor or nurse to give you tips to keep the tube fitting snuggly to avoid skin infection.

Tube tugging at exit site.

– Excessive movement or tension at exit site causing enlargement of tube tract/ irritation/ulceration.
– "Buried bumper syndrome" when an internal or external bolster migrates into the tube tract/stoma.

- See suggestions for securing tube in "Tube Displacement" on page 4.

Improper skin care.

- How to care for skin around stoma:
  – Wash skin with warm water and a mild soap daily (can be done while showering). Pat dry. Apply barrier cream and dressing as needed (see www.oley.org for ideas).
  – If dressing is used, change when wet or soiled. Wash skin per instructions above before applying a new dressing.
  – It is normal to have some drainage around the tube. If the drainage is foul smelling, and/or there is a large amount—or the skin is red, warm, or tender—consult your doctor.
  – Consult a wound care nurse/stoma therapist or your doctor for advice on persistent skin care issues. Ask about silver nitrate if granulation tissue is a problem. See www.oley.org for additional suggestions for granulation tissue, barrier creams, dressings, and tape.

Broken tubing, cap, or anti-reflux valve.

- Ask your doctor if any part of the tubing should be replaced.
- Some tubes are all in one piece and can only be fixed by changing the entire tube.

Repeat clamping at same site, accidental cutting of the tube.

- Move clamp to a different site daily.
- Do not use scissors or sharp objects near tube.

Chemotherapy/Steroids.

- Leaking may occur due to chemotherapy. This will decrease with recovery from the effects of chemotherapy. See skin care suggestions above.

Aspiration

DESCRIPTION: **Vomiting, heartburn**
Coughing or choking with difficulty breathing
Chest pain
Possible fever, shortness of breath, pneumonia

IMMEDIATE ACTION:

- Stop feeding.
- Open clamp to drain stomach contents, if possible. Some tubes have valves (such as buttons) which make drainage difficult. If unable to drain button, call your doctor to discuss decompression tubes or devices.
- Call doctor immediately, and go to the emergency room.

CAUSES AND PREVENTION:

These symptoms can be caused by several things.

Diminished gag reflex, gastroesophageal reflux (also known as GERD, this is when stomach fluids back up into your lower esophagus), **swallowing disorder, silent aspiration, esophageal narrowing, decreased movement/motility of the esophagus and/or stomach, or laying flat while taking your feedings.**

- Put head of the bed on 6" blocks for night time feedings.
- Have head of bed elevated 30 to 45° angle, or sit up during feeds.
- Do not lay flat for at least 30 minutes to one hour post feeding.
- Do not feed if stomach feels full or distended, or if individual is vomiting.
- Take prescribed medication for GERD.
- Ask doctor about having a swallowing study done.

Delayed gastric (stomach) emptying.

- Take prescribed medication to help empty stomach (for dysmotility).
- Do not feed if stomach feels full or distended.
- Do not feed if individual is vomiting or constipated.

Tube has moved (migrated) out of place.

- Read suggestions in Tube Displacement section on page 4.

Constipation

DESCRIPTION: **Infrequent and/or hard stool** (Liquid stool may leak around impacted or stuck stool)
Bloating, gas, cramping or pain

IMMEDIATE ACTION:

- Increase fluid intake.
- Use stool softener, laxative, or enema as instructed by doctor.
- Call your doctor if symptoms persist.

CAUSES AND PREVENTION:

These symptoms can be caused by several things.

You may not be getting enough liquids or fiber.

- Ask your doctor how much liquid to take between feedings.
- Ask about taking a fiber-enhanced formula, or adding a fiber product to your daily regimen.

Side effect of medication.

- Ask your doctor if your medications can cause constipation.

Your bowels may be blocked/obstructed.

- Call your doctor if you think your bowel is blocked or obstructed. Signs include:
  - – you've had no bowel movement in 3 to 4 days.
  - – you are vomiting.
  - – you have abdominal swelling or severe cramping.

You are not active enough.

- Increase your activity as able. Walking is a good form of exercise. Check with your doctor before you start to make sure it is safe for you.

Your bowels may not work normally (dysmotility).

- Ask your doctor if you need to take medication for this condition. Tests may be necessary.

Gastrointestinal Bleeding (GI)

DESCRIPTION:

Bright red blood on outside of stool or around the rectum
Black, tarry stool or diarrhea
Black/brown blood in vomit (looks like coffee grounds)
Vomiting bright red blood
Bright red blood coming from and/or around tube

IMMEDIATE ACTION:

- Discuss all GI bleeding with your doctor.
- If large amount of blood is present, call your doctor immediately. You may need to call 911.

CAUSES AND PREVENTION:

These symptoms can be caused by several things.

Bright red blood on outside of stool or around the rectum is likely caused by irritated hemorrhoids, fissure or an anal tear.

- These conditions are commonly linked to excessive diarrhea or constipation. Reduce diarrhea (see "Diarrhea" page 4) or avoid constipation (see "Constipation" page 7). Discuss symptoms with your doctor.

Black, tarry stool or diarrhea; black/brown blood in vomit; or >1 Tablespoon bright red blood in vomit likely indicates upper GI bleeding.

- Ask your doctor about medicines that block acid production.

Frequent vomiting that may come with small amounts (less than 1 tablespoon) **bright red blood is likely caused by burst blood vessel in throat.**

- Reduce vomiting (see "Nausea/Vomiting" page 3). Discuss symptoms with your doctor.

Bright red blood coming from tube or around the tube may be caused by:

- Gastric (stomach) ulcer/irritation.
- Erosion of stomach lining from excessive tube movement.
- External granulation tissue.

- Ask your doctor if you should be examined.
- Secure the tube with a tube holder (see "Tube Displacement" page 4).
- Discuss granulation tissue with the wound care/stoma therapist nurse or doctor (see "Site Irritation" page 6).

Pump or Power Failure

DESCRIPTION:

Unable to start pump
Repeated alarms without obvious cause
Excess formula left in the bag after recommended feeding time is complete

IMMEDIATE ACTION:

- Check to see if pump is plugged into wall and that wall socket is functioning, or that battery is charged.
- Stop pump. Check the pump user manual "trouble shooting" section for possible cause. Call home care company for replacement.
- If pump will not work and replacement pump is not available, convert to gravity drip and administer at same or lower rate. If tube is located in the jejunum, gravity drip is not recommended. Stay hydrated until a replacement pump can be delivered.
- If there is excessive formula in bag, call home care provider for pump change.

CAUSES AND PREVENTION:

These symptoms can be caused by several things.

Power failure/low battery. Pump charger parts aren't fully connected. Pump not plugged into wall outlet.

- Check electrical outlet and/or replace battery.
- Notify local power company of durable medical equipment at home for emergency power outages.
- Keep pump plugged into electrical source whenever possible to conserve battery charge.

Pump malfunction.

- Follow manufacturer/home care company recommendation for routine service/ maintenance. Change pump bag every 24 hours.

RARE COMPLICATIONS
Fluid or Electrolyte Imbalances

DESCRIPTION:

Rapid weight loss or weight gain
Weakness
Shortness of breath
Fine tremors
Numbness
Palpitations
Taste changes
Loss of coordination
Thirst
Swelling
Shakiness
Muscle cramping
Tingling of hands or around mouth
Fatigue
Skin changes

IMMEDIATE ACTION:

- If you think you have taken too much fluid, or too little fluid, stop tube feedings and call your doctor immediately.
- If you are extremely short of breath, stop tube feedings and call your doctor immediately.
- Call your doctor if you are experiencing any of the signs and symptoms listed above. Describe any change in weight, fluid intake or urine/stool output. Your doctor may recommend taking more or less fluid through your feeding tube.

CAUSES AND PREVENTION:

These symptoms can be caused by several things.

Increased loss of fluid and/or electrolytes from vomiting, diarrhea, fistulae/ostomy output, urine output.

- See tips in the sections on Nausea/Vomiting and Diarrhea on pages 3 and 4.

Decreased urine output.

- Take all tube feeding formula and fluids as ordered by your doctor.
- Discuss with your doctor when you should take more or less fluid. You may be asked to keep a daily log of fluid intake, weight and urine/stool output in order to spot any significant changes.

Additional Resources

- **Oley Foundation, www.oley.org, (518) 262-5079/(800) 776-6539**

  Offers patients tube feeding tips, opportunities to meet other tube feeders/caregivers, equipment-supply exchange, information on traveling with tube feeding and more! Offers clinicians patient education and discharge materials.

- **A.S.P.E.N., www.nutritioncare.org, (301) 587-6315**

  Offers clinicians tube feeding standards, guidelines, patient education materials and hospital/long-term care facility safety programs.

Doctor's office #_____

Home care company #_____

Emergency Room #_____