How to Use and Care for an Indwelling Feeding Tube

BACKGROUND
When a pet becomes incapable of eating or refuses to eat for an extended length of time, an indwelling feeding tube may be placed by your veterinarian. An indwelling feeding tube is a tube that provides access into the gastrointestinal (GI) tract such that nutrition can be provided during a pet’s recovery. The three most common types of tubes are named for where they enter the GI tract:
- Esophagogastroduodenostomy tube (E-tube), a tube that enters the esophagus on the side of the neck
- Percutaneous endoscopically placed gastrostomy tube (PEG tube), a tube that enters the stomach
- Percutaneous endoscopically placed jejunostomy tube (PEJ tube), a tube that enters the jejunum (a part of the small intestine)

GETTING STARTED
The care and use of the three types of tubes listed above is similar, and it begins on the day your pet comes home from the hospital with the tube in place. Supplies needed for maintenance cleaning around the tubes site include sterile gauze, dilute antiseptic solution such as povidone iodine (Betadine), chlorhexidine, and basic bandaging materials. The veterinary hospital staff (veterinarian or technician) can demonstrate the bandaging techniques used at these sites and provide the required supplies.

The supplies needed for feeding include canned food and fresh water (both at room temperature), a blender, and feeding syringes. The type of food best suited for these tubes should be recommended by a veterinarian. In each case, it will be liquid or canned food mixed (slurried) with water, which may need to be pureed in a blender prior to feeding.

A feeding schedule is made on a case-by-case basis, depending on a dog or cat’s age, body size, and the medical reason for placing the tube. Meals may be smaller to start with but increase in volume and frequency as the pet tolerates them and as their caloric demands change.

TROUBLESHOOTING BEFOREHAND
It is important to avoid regular canned food because it generally has small chunks that can block the tube. If the blockage is severe, the tube becomes completely plugged and unusable and must be replaced.

Watch carefully for any signs of infection at the entrance sites of these tubes. Signs of infection include swelling, redness, foul odor, or moist discharge (especially yellow or green) at the entrance site of the tube, as well as lethargy, vomiting, or any decline in attitude or energy of the pet. The latter symptoms may overlap with signs of general illness already present, so trends are the most important (is energy/attitude improving or declining over a period of days?). With the appropriate care, infection can be avoided, but it is very important to report any of these signs to a veterinarian immediately to identify and treat an infection early if one occurs.

A pet may be receiving one or several medications while being treated with a feeding tube. Medications in liquid form can be easily administered down the tube, followed with water, and this is a great advantage of the tubes because oral dosing becomes unnecessary. Medications in tablet/pill form likewise can be crushed into a powder and mixed with the slurry of food given into the tube. It is extremely important to make sure that it is acceptable to crush the tablets by checking with your veterinarian first. Some medications have an enteric coating, and crushing exposes the medication to being destroyed before it is absorbed. Others are too risky to be handled by people or pets when crushed, such as chemotherapy.

Nausea and vomiting can be symptoms that accompany the medical problem for which the feeding tube was placed. If a pet is nauseated, he/she may need smaller meals, less frequent meals, food or water that is warm, an antiemetic, or further care for their medical problem in order to prevent vomiting of the food given through the tube. If nausea or vomiting is persistent (e.g., once or more a day), you should discuss this with your veterinarian.

If the tube seems to be plugged because food will not pass through it, try a small volume (5 mL; 1 teaspoon) of water instead. If this does not clear the obstruction, try 5 mL of a carbonated beverage like seltzer water or cola. If this does not clear the obstruction, call your veterinarian.

Blockage of the tube is best avoided by flushing the tube with 5 mL of tap water after every feeding and every medication dose as a final rinse to clear the inside of the tube.

Pets tolerate these tubes very well even for extended periods of time (weeks to years if needed). Part of caring for these tubes is protecting them from a pet’s natural desire to scratch. Applying a sock to a hind foot may be necessary if a pet is interested in scratching at the tube site, but in most cases, a mesh “undershirt” (for PEG, PEJ tube) or light neck wrap (for E-tube) is enough of a barrier.

PROCEDURE FOR USING AND MAINTAINING THE FEEDING TUBE
Cleaning the Tube Site
First, routine cleaning of the skin where the tube enters the body is important. Until the site has healed, checking and cleaning the site and changing the bandaging dressing are recommended daily. Once healed, cleaning and dressing changes will be less frequent, typically 2-3 times a week. For cleaning, it is preferable to use sterile gauze moistened with diluted povidone iodine (Betadine) solution (diluted with tap water to a light tea color) or chlorhexidine solution (light blue or pink, may be provided by your veterinary hospital) for lightly wiping or dabbing the tube entrance site. It is good to carefully remove dried discharge. It may be easier to clean and more comfortable for your pet to first hold a very clean, lukewarm, damp cloth to the area for several minutes to moisten and soften the dried discharge. In some models of tube, there are sutures (stitches) that hold the tube in place via a flange (crossbar or disk that braces the tube against the skin). If you see that these sutures have come out, or if the tube has moved in or out of the surgical site, schedule a visit with a veterinarian to have this checked as soon as possible. When the cleaning is completed, which usually takes a few minutes, replace the light bandage dressing.

Feeding
Regardless of the type of tube, the approach is similar. A plug or cap is in place at the end of the tube to prevent backflow when the tube is not in use. Remove this plug first. Then gently introduce approximately 5 mL of room-temperature tap water into the tube by syringe. Next, aspirate the desired volume of slurred food out of the can or dish, using one or more syringes. Connect the syringe to the feeding tube, and depress the plunger gradually. The amount of time for giving the food should be similar to the amount of

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time it normally takes your pet to eat a meal of that size and no faster. Approximate guidelines: for a small meal of 15 mL or less, 5-10 minutes; for larger meals of more than 15 mL, 10-20 minutes. Finally, after the meal has been given completely, finish by again giving 5 mL of water to flush the food through the tube. If at any time during this process your pet starts licking his/her lips (demonstrating nausea) or vomiting, stop feeding, and contact your veterinarian for further instructions.

**AFTERWARDS**

After flushing the tube with 5 mL of tap water, recap the tube (you can reuse the same cap) and tuck it into the undershirt, dressing, or light wrap out of the way of legs or paws that could scratch at it.

**FREQUENTLY ASKED QUESTIONS**

*My pet is eating on his/her own. When does this tube come out?*

PEG and PEJ tubes (on the side of the body) must stay in for 1 week for a seal to form between the skin and the stomach. Removal after the first week is entirely dependent on whether the causative problem (that was responsible for needing the feeding tube) is resolving and whether your pet’s appetite has returned. An E-tube may be removed at any time, depending here as well on appetite and return to improving health.

*How will I know if the tube is still in the right place?*

It is very difficult to know just from external appearances. If your dog or cat’s energy level is deteriorating, if a fever develops, or other signs suggest the tube may be out of place, a recheck should include an x-ray (radiograph), possibly with the administration of contrast (dye), to locate the exact position of the tube internally and be sure it is not in a dangerous place such as the peritoneum (lining of the abdominal cavity).