

TUBE FEEDING

My veterinarian is suggesting that my pet be fed by a feeding tube. What exactly does this mean?

Tube feeding is an alternative way of providing nutrition to a pet that is suffering from failure to eat (anorexia) or has an anatomical or surgical condition that prevents it from eating normally. Tube feeding generally refers to one of several techniques: naso-esophageal tube (tube secured into the nose), esophagostomy tube (tube into the esophagus, worn like a collar), gastrostomy tube (tube in the stomach) and jejunostomy tube (tube in the intestine – in the hospital only).

Why is tube feeding necessary?

For a number of reasons, many pet owners are reluctant to consider the option of a temporary or permanent feeding tube and often decide too late to have one placed. Once unheard of, feeding tubes are being used more often as pet owners learn the ease of use and see their pets become healthier, regain strength, and enjoy life again. Comments such as "The feeding tube gave me back my lively dog," and "If I'd known, I'd have done this sooner" are frequently heard. A feeding tube is relatively easy to use yet there is often fear and reluctance about using one.



Proper nutrition is a critical factor in accomplishing a successful recovery from any disease. Since the physiology of cats is different than dogs and people, the consequences of not eating properly are much more significant in cats. In fact, cats that do not eat for as little as forty-eight hours can develop a potentially life-threatening form of liver malfunction known as *hepatic lipidosis* or *fatty liver syndrome*. Additionally, pets that are not eating are much more likely to have an impaired ability to fight infection and heal properly. These factors combine to make maintaining adequate nutrition paramount in cats that are ill or undergoing surgery. There are some instances that without a feeding tube, some pets are not likely to survive. Fatty Liver Syndrome and pancreatic are the most common conditions affecting cats that need feeding tubes, and megaesophagus is the most common reason for a feeding tube in dogs.

What can I do to encourage my pet to eat?

Many pets will experience reduced appetite or anorexia from the mildest illness. Sometimes simply changing the type of food or the time or location of feeding will trigger anorexia. If your pet is eating less than normal, here are some simple steps to try and encourage a normal appetite:

Slightly warm the food prior to feeding. It is important that the food is heated only slightly, to a much lower temperature than the 'hot' food that we eat – just warm to the touch.

Offer frequent, small meals of odorous, highly palatable food. Most cats will prefer foods that are high in protein and fat. These meals are fine for cats, but be careful of feeding too much fat to dogs – it can cause stomach upset or even pancreatitis, which can be severe. Your veterinarian will recommend a personalized feeding plan for your pet, depending upon its needs.

Gently hand feeding or placing the food on the pet's tongue can sometimes encourage them to eat. Ensure that the feeding area feels is quiet, warm and comfortable. In pets that are refusing to eat, force-feeding can sometimes be counterproductive. It can be unpleasant for the pet and you, and there is even a small risk of the pet inhaling food and developing aspiration pneumonia. Force-feeding will often increase aversion to food and may actually prolong the time before eating will resume voluntarily.

If a pet has refused food for more than three days, you should consult your veterinarian immediately. In some pets, appetite stimulating drugs such as Cyproheptadine or mirtazapine may be effective.

What will happen if I am unable to get my pet to eat?

After three days or more of not eating, the cat's body begins to enter a dangerous period. If nutrition is not quickly provided, the body will resort to mobilizing and metabolizing stored energy from the liver and other vital tissues. In this situation, serious and potentially irreversible damage may occur. If the cat fails to respond to conservative treatments, a feeding tube may be required.

Failure to eat often indicates serious disease in dogs, but it is not likely to be as dangerous to the dog until it continues for a very long time.

What is a Naso-esophageal Tube?

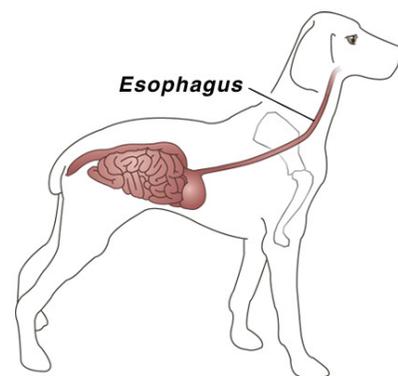


This type of tube is simple to insert and is the most common form of tube feeding in cats. Naso-esophageal tubes can usually be placed with minimal sedation. The sensitive lining to the nose is usually anaesthetized with local anesthetic drops and a narrow, flexible tube is inserted into the nostril and fed over the back of the soft palate down into the esophagus until it reaches about the level of the 9th rib. The tube is then attached to your pet's head by stitches or surgical glue.

It is generally necessary to fit a protective collar to prevent the pet from interfering with the tube. Because of the small diameter of the feeding tube, only extremely liquefied food, water and some medications can be given, and the tube is prone to becoming clogged. Naso-esophageal tubes rarely stay in for more than a few days, so are not used if long term feeding is required. They are not used if the pet is vomiting, if there is severe facial trauma, if the esophagus is not functioning normally, or if the pet is unconscious.

What is an Esophagostomy Tube?

This type of tube is slightly larger than a naso-esophageal tube, and enters the esophagus through a small incision in the neck. Pets must be anesthetized to place this type of feeding tube. The larger diameter of this feeding tube allows thicker food to be fed and there are fewer clogs or other potential complications. Feeding by esophagostomy tube takes considerably less time compared to naso-esophageal tube feeding. Most pets have a wrap placed around their neck like a collar, where the tube is inserted and the tube is capped when not in use. Esophagostomy tubes can generally be kept in place for weeks to months.



What is a Gastrostomy Tube?



A gastrostomy tube is a large diameter tube that is surgically placed directly into the stomach through the skin and body wall. The end of the tube exits the skin just above the stomach on the side or flank of the cat or dog. Short term general anesthesia is required to place a gastrostomy tube. An abdominal wrap or protective stocking is often worn by the pet while the tube remains in place. A gastrostomy tube is used when long term assisted feeding is required. Gastrostomy tubes allow for quick feedings and may be left in place for months to years.

If a permanent feeding tube is necessary, a temporary tube can eventually be replaced with a low profile G-button once permanent stoma is formed from the stomach to the skin (see photo at the right). The permanent low profile buttons do not have a long tube attached like the temporary tubes, and are more comfortable for the patient, and less likely to be removed or damaged.



Is it hard to feed a pet through a feeding tube?

Feeding a pet through a feeding tube is easier and less complicated than you might think. Most people quickly get the hang of preparing food and connecting the syringe to the feeding tube. Caring for the tube placement site is also easy and requires little effort. See the separate handout for specific instructions on feeding your pet for more details.

What type of food do you feed through a feeding tube?

Your veterinarian will prescribe a personalized feeding plan for your pet. Most commonly, you will use commercially available canned pureed food that may need a small amount of water added to flow through the smaller feeding tubes. If your pet has special nutritional needs, a recipe will be provided for preparing blenderized food. The amount that needs to be fed and the number of meals will depend on the size of your pet, whether they need to gain (or lose) weight and the disease or problems being treated.

What are the complications of tube feeding?

Generally, there are few complications with tube feeding once the pet is stable. The most common complications include infection at the site of tube insertion into the skin, inadvertent removal of the tube by the pet or owner, and clogging of the tube. The risk of food leaking out of or around a gastrostomy tube into the abdomen is very rare once a *stoma* or adhesion between the body wall and stomach has formed. This usually forms within one to two weeks. In general, complications and difficulties with feeding tubes are relatively uncommon. Your veterinarian will instruct you on how to specifically resolve any complications or problems that arise.

Are there situations where tube feeding is not possible?

In rare circumstances, such as cats with uncontrollable vomiting or unconsciousness, tube feeding is not possible. In these cases it may be necessary to consider intravenous feeding. Unfortunately, intravenous feeding of dogs and cats is complicated, difficult and expensive. It is only recommended when no other feeding methods are available, and is usually administered only in veterinary hospitals that have 24-hour nursing care to oversee IV feeding, called “parenteral nutrition.”

References:

Ernest Ward, DVM – Lifelearn

Kathy Morris-Stilwell – Veterinary Information Network

Wendy Blount, DVM – Practical Vet Med Seminars