# BACKGROUND

Syringe feeding means giving food and water with an oral syringe into the mouth of a pet that is unwilling or unable to eat on his or her own. It is a method of nutritional support used when a temporary illness or health problem compromises the appetite, and nutritional deficiency becomes possible. Syringe feeding can help provide minimal nutrition until a pet's normal appetite and energy return.

Tube feeding involves passing a small rubber stomach tube into the mouth and down to the stomach to deliver a liquid diet. This is used with newborn kittens and puppies that have lost access to their mother for normal nursing or are too small or weak to nurse on their own. Nursing naturally on a mother's milk provides exceptional health benefits, but if it is not possible (mother's milk is infected, or mother doesn't make enough milk), tube feeding is used for providing nutrition until a kitten or puppy will accept a bottle.

*Bottle feeding* means offering a size-appropriate bottle to deliver nutrition through suckling on the bottle's nipple. It is used until a kitten or puppy has the strength and coordination to eat and drink on his/her own.

## **GETTING STARTED**

#### Syringe Feeding Adult Pet During Illness

The amount of each feeding and number of feedings to be given each day depends on the size and age of the pet as well as the degree of illness or injury. Discuss these important facts with your veterinarian prior to starting. The syringes and food are available at most veterinary hospitals. The size of the pet and the volume of an individual meal will determine the size of the syringe: typically between 3- and 35-mL syringes for small cats to large dogs, respectively. In each case, a soft food will be needed. For more mature pets, this may be canned food. The canned foods that work best are a pâté style and do not contain chunks of meat or vegetables (which become stuck in the nozzle of the syringe). If a pâté-style food cannot be acquired, then a blender can be used to make the food a smoother consistency.

### Tube Feeding Kittens and Puppies

Here as well, the volume and frequency of each feeding depends on the size and age of the pet and the degree of illness or injury. Discuss these details with your veterinarian prior to starting. Your veterinarian can provide the tube and syringes needed. A kitten or puppy liquid formula will be needed. This is available both in powder and bottled/canned liquid forms. Powdered formulas are generally less expensive but have to be reconstituted with water. Carefully follow the instructions on the back of the container to reconstitute each meal just before feeding. A scale that weighs in grams is used for monitoring growth of the newborn and gauging how to increase the size of the meal (caloric intake).

### Bottle Feeding Newborns and Very Young (Not Yet Weaned) Puppies and Kittens

A guide to providing the appropriate meal size according to the weight of the kitten or puppy is generally provided on the back of the formula container. Bottles with rubber nipples are available commercially or can be obtained through most veterinary hospitals.

Neonatal formula, as well as food slurry, are better accepted at room temperature or slightly warm and should be warmed (for example, holding the bottle against your body) for 5 to 10 minutes before feeding.

## TROUBLESHOOTING BEFOREHAND

The risk of aspiration (inhaling the fluid/food into the lungs by accident) and subsequent pneumonia exists with each type of feeding method described; it is greatest with bottle feeding. The most common, devastating mistake is purposefully or accidentally squeezing the bottle during a feeding, usually to try to "speed things up." This is a potentially disastrous move because it can force formula straight into the lungs and cause choking, pneumonia, or suffocation. If a pet is wheezing or having trouble breathing at any time after bottle feeding, an immediate visit to the veterinary hospital is in order. The way to prevent this is to allow a pup or kitten to suckle from the bottle on his/her own. **Never squeeze the bottle.** 

Use care when attempting to syringe-feed a cat. Cats can easily develop food aversion, which is an acquired dislike for any food and is a step backwards, meaning a further decline in appetite. It can start when a cat refuses syringe feeding, and your response is force feeding. The result is often the cat's complete unwillingness to eat anything. If a cat is refusing all food for more than 1 day, call your veterinarian to determine a course of action. Simple tricks (slightly warming the food or giving appetite stimulants) may be tried.

Some causes of loss of appetite in pets can be easily treated. A pet may need medications to treat pain and/or nausea in order to start eating. If a pet is already taking medications, the dosages or the medications themselves may have to be adjusted or changed.

If a pet is vomiting after a feeding, it may not be appropriate to continue feedings at home. Discontinue feeding and promptly discuss this problem with your veterinarian.

# PROCEDURE FOR FEEDING

## Syringe Feeding

With syringe feeding, the goal is to introduce food into the pet's mouth such that he or she will swallow it spontaneously. To do this, aspirate the food slurry into the syringe by drawing back on the plunger of the syringe with the nozzle in the can or dish of mushy/slurried food. Then place the syringe tip at the corner of their mouth and express the food onto the tongue, 1 to 3 mL at a time, by depressing the plunger. Some dogs accept the food deposited into their cheek. Give small amounts at a time, and allow time to swallow. If the food is quite runny/high percentage liquid, you may want to give it in the cheek pouch, which is the side of the mouth on the outside surface of the teeth but past the corner of the lips. Placing the tip of the syringe past the corner of the mouth (but not through the teeth) will mean that liquids run behind the teeth and are swallowed, as proven when the dog/cat performs licking motions during the swallowing process. You should hold your dog/cat's chin up slightly during this process so the head is held horizontally (parallel with the floor) and not pointing down, where liquid can simply run out of the mouth. Be sure to avoid squirting anything too quickly, because it may catch a pet by surprise and not trigger a gag or cough; the result is aspiration pneumonia. Typically, a 20-mL syringe should take 3 to 5 minutes to be fed to a dog, for example, and a 6-mL syringe would take about the same amount of time for a cat. Sometimes just holding up a dish of pudding-consistency food to a pet's mouth will

encourage him/her to eat. As soon as pets eat on their own, allow them to do it until they have consumed what you calculated to be a meal's worth of food intake (avoid acute overeating when the appetite suddenly returns, which can cause overstretching of the stomach and nausea).

### **Tube Feeding**

With tube feeding, the goal is to pass the tube through the mouth and into the esophagus, which, in animals as in people, is the passage that carries food from the mouth down to the stomach. The major pitfall to avoid is accidentally passing the tube down the trachea instead and into the lungs. This must be avoided because administering food into the lungs could cause suffocation. To guide the tube properly down the esophagus, pass the tube as demonstrated by a veterinarian or veterinary technician. A useful guideline is to have the neck flexed (head/chin pointing down) when passing the tube, because this guides it more toward the esophagus. A mild cough or gag can be expected whether the tube is in the correct location or the wrong location. One simple test is to pinch a toe, causing the pup or kitten to squeal. If the pet can squeal, the tube cannot be in the trachea (it would block the vocal cords) and is appropriately in the esophagus. Further precaution can be taken by administering a very small amount of water down the tube first. If a pet coughs after you pass some water through the tube, the tube may have mistakenly gone into the trachea and should be removed. The distance to advance the tube is also helpful: on the exterior of the kitten or puppy, you can measure the distance from the tip of the nose to the last rib (feeling for it on the side of the chest). Then mark the same distance on the feeding tube, measuring from the tip. The feeding tube can then be passed as far as the mark on the tube; since the trachea ends far forward of the last rib, passage of the tube without resistance up to the mark you made on it indicates that the tip of the tube is well past the end of the trachea and must therefore be placed correctly in the esophagus. Having the tube tip just entering the stomach, which corresponds to the length to the last rib, is an excellent placement for administering the liquid meal. Each meal should be delivered slowly, over 2 to 3 minutes. When done, you should leave the syringe on the tube when withdrawing the tube from your pet's esophagus. This helps keep the last few drops of food within the tube from dripping or leaking on the way out. Finally, remove and

wash the tube and syringe and allow them to dry to prepare for the next meal.

## **Bottle Feeding**

With bottle feeding, the goal is to allow the pet to suckle from the nipple and swallow normally. When a pet is nursing normally, a meal takes a while (10 to 30 minutes is possible). It is easy to get discouraged by how long bottle feeding takes. Avoid the desire to cut the hole in the tip of the nipple to allow faster meals, as this can lead to aspiration/choking. Holding the pet upright or allowing them to rest on their stomach is appropriate for feeding. Resist the temptation to hold them on their backs like a human baby—this also can lead to aspiration. The number of bottle feedings per day depends on the age of the puppy/kitten and on the type of formula and can range from 3 to 8 a day (i.e., every 3 to 8 hours).

## **AFTERWARDS**

Syringe feeding is not meant to be a long-term solution for a pet that is not eating. It can be very difficult to deliver enough calories this way to maintain health. If a pet is refusing syringe feeding or requiring syringe feeding longer than anticipated, be sure to schedule a recheck examination with your veterinarian to discuss an appropriate treatment plan.

## **OTHER RELATED INFORMATION SHEET**

• How to Use and Care for an Indwelling Feeding Tube

Practice Stamp or Name & Address