

## Feeding Tube Options

*By, Carol Potter, M.D., Nationwide Children's Hospital, member CdLS Foundation Clinical Advisory Board.*

Many choices are available for feeding tubes. They can be divided by where they enter the body, nose, stomach or intestine. They can also be divided by where they end, the stomach or the intestine.

Nasal tubes are inserted into the nose and taped to the face. They are easy to place at home or in the office. They can be left in for prolonged periods of time. The main drawback is if not well taped to prevent a child's fingers from getting them, they can be pulled out. If they end in the stomach they can be used for both bolus and drip feeds. If they go through the stomach and into the intestine, they can only be used for drip feeds. Nasal tubes are an excellent starting option if you are unsure tube feeding will work.

Feeding tubes can also go through the abdominal wall and into either the stomach or intestine. There are a variety of styles and methods to place them. This will depend on the child's size, other medical issues and the expertise of the person placing the tube. They are sometimes placed by a surgeon as a surgical procedure or a gastroenterologist during an endoscopy. The initial tube may have a long tail which is later changed to a tube that is flat with the abdominal wall.

Tubes can go through the stomach wall and into the intestine if the child can't tolerate feeding into the stomach because of vomiting. This may not be possible for a baby because the size of the tube may distend the small intestine and cause problems.

Feeding schedules are adapted to the needs of the child. We often use continuous drip feedings at night. They are well tolerated, are less likely to cause intolerance, and the parents don't need to get up to start and stop the feeds multiple times during the night. This type of feed can be used during the day as well but the child is tethered to a feeding pump. Bolus feeds are given more quickly and more like a meal. This allows more freedom from the pump. Pureed diets can be given through larger tubes, but usually clog the nasal tubes.

Granulation tissue can form around feeding tubes. Some children are more prone to it than others. Tubes that are the wrong size are more likely to cause this complication. Both the diameter of the tube and the length of the tube are important and should be measured when there are problems. Tension on the tube can make granulation tissue more likely. We do not recommend a dressing or covering on the tube. When the tube is in use, the connection should be secured to the abdominal wall to prevent movement and pulling. If granulation

tissue occurs it can be treated with silver nitrate or topical steroids.

