



Types of feeding support:

Nasogastric tubes (NG-tubes), Gastrostomy tubes (G-tubes), and Jejunostomy tubes (J-tubes)

The previous chapter described why preterm infants with BPD have difficulties starting and learning oral feeds. This section will focus on three types of artificial feeding support devices used in the NICU:

- i. **Nasogastric tube (NG tube)** – The NG tube is placed without surgery, enters the nose, and ends in the stomach. Babies usually have this tube placed soon after birth.
- ii. **Gastrostomy tube (G-tube or GT)** – The G-tube requires abdominal surgery and is placed in the abdomen, directly into the stomach.



- iii. **Jejunostomy tube (J-tube)** – The J-tube requires abdominal surgery and is placed in the mid-section of the small intestine

For some infants, tube feedings may be needed near the mother's original pregnancy due date, after the due date, or even after going home. This usually happens when infants have not been able to drink enough milk by mouth to consistently gain weight. Even with an NG or G-tube, a baby can still breast feed, drink from a bottle, or both. That way, a baby can still practice feeding and improve their skills over time. This of course depends on the level of breathing support the baby is needing, and whether it is safe to start/continue practicing how to drink by mouth.

Type of feeding tube	Advantages	Disadvantages	Important points
Nasogastric tube (NG tube)	<ul style="list-style-type: none"> • Does not require surgery to be placed 	<ul style="list-style-type: none"> • Can get dislodged, be pulled out, or be moved • Each time this happens, the tube needs to be replaced 	<ul style="list-style-type: none"> • We teach ~50 families each year how to do this • When this tube is in place, feedings are administered with a feeding pump, a syringe, or bag of breast milk or formula -- and usually every 3 to 4 hours



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Type of feeding tube	Advantages	Disadvantages	Important points
Gastrostomy tube (G-tube)	<ul style="list-style-type: none"> G-tubes are more stable and durable than NG tubes Usually placed laparoscopically, or with minimally invasive surgery Can easily be covered by clothing No device is on baby's face, or partially blocking their nose/mouth During a viral illness when breathing is harder, a GT can be used to give medications, food, and hydrating liquids 	<ul style="list-style-type: none"> Developing granulation tissue around the G-tube site, which may look pink or bumpy (common when healing; manageable with applying steroid creams on the skin) Infection (uncommon) Leaking (uncommon) Bleeding (very rare) Becoming dislodged and requiring another surgery to replace it (extremely rare) G-tubes must be "up-sized" as your baby grows (but can be done at your surgeon's office and is not invasive) 	<ul style="list-style-type: none"> Pain is managed after surgery with Tylenol <ul style="list-style-type: none"> Sometimes stronger pain medicines are needed for a few days Infants can usually start feeding through a new G-tube within 12 hours after the surgery, and gradually increase volumes. Some infants may get their full feedings through the G-tube as early as 2-3 days after the surgery; others may need more time to recover and tolerate feeds G-tube surgery can often be combined with other surgeries and procedures – this helps minimize use of anesthesia Parents can learn how to replace a G-tube at home, and when to seek medical attention Babies can have G-tubes for a few months, for a few years, or even indefinitely <ul style="list-style-type: none"> It depends on how they can safely eat/drink by mouth, and grow well When placing a G-tube, we are not able to predict how long a baby might need it <ul style="list-style-type: none"> When no longer needed, it can be safely removed by your surgeons Some infants may benefit from another surgery at the time of G-tube placement (called Nissen or fundoplication)
Jejunostomy tube (J-tube)	<ul style="list-style-type: none"> May be helpful for babies who cannot tolerate feedings into the stomach Can help decrease aspiration (food/fluid going into the lungs) 	<ul style="list-style-type: none"> Feedings can only be given continuously Needs to be placed through a G-tube (another surgery) 	<ul style="list-style-type: none"> G-tubes are almost always placed first. Your surgical and medical teams will discuss the possibility of a J-tube if needed. Most babies can eventually transition back to a G-tube feed