# Gastric Gavage Feeding

## Purpose
To provide direction for insertion of nasogastric tube and gastric gavage feeding.

## Policy Statement
Enteral feeding is defined as providing nutrients distal to the oral cavity. A gastric tube is a tube inserted via the nose or mouth to the stomach. Gastric tubes may be inserted intermittently or be left as an indwelling tube for feeds.

## Applicability
All Covenant Health Neonatal Nursery staff.

## Equipment
- Warmed, mother’s milk or formula
- Enteral feeding syringe (Anti-IV)
- Enteral feed extension tubing (Anti-IV) if using a syringe pump
- Appropriate feeding tube

Specific equipment and feeding method are based on the infant’s size, feeding tolerance, volume of feed and type of feed.

## Procedure
### INSERTION OF GASTRIC TUBE

<table>
<thead>
<tr>
<th>ACTION</th>
<th>RATIONALE</th>
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<tbody>
<tr>
<td>1. Perform hand hygiene and gather equipment.</td>
<td>A clean technique is used.</td>
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<tr>
<td>2. Determine if sucrose can be given to baby for pain relief before procedure. Obtain appropriate dose if baby is able to receive.</td>
<td>Sucrose can help alleviate pain and distress associated with procedures.</td>
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<tr>
<td>3. Identify patient using two identifiers.</td>
<td>Ensures correct patient.</td>
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<tr>
<td>4. Elevate the head of the bed and position baby on back</td>
<td>Elevation of head of bed 30° may help prevent regurgitation of feed.</td>
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<tr>
<td>5. Assess the need to bundle/restrain infant based on infant’s tone and activity.</td>
<td>Active infants are more likely to dislodge the feeding tube.</td>
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<tr>
<td>6. Measure the feeding tube from the bridge of nose, to the tip of the ear and then midway between the umbilicus and Xyphoid.</td>
<td>Accurate measurement ensures proper tube placement of the gastric tube.</td>
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</tbody>
</table>
6. Support infant’s head with your fingers pressed against the infant’s cheek to open the mouth with the chin upward and in a straight line with the rest of the body. Proper positioning will allow easy placement of tube.

7. Lubricate the feeding tube with water. Oral tubes are inserted over the tongue into the back of the throat and down into the stomach to the pre-measured length. Nasal tubes are gently passed into the nostril down the nasopharynx through the esophagus and into the stomach. Lubricating with water makes passage of the tube easier.

8. Insertion of tube may cause apnea, bradycardia or desaturation. Vagal stimulation induces bradycardia. Tactile stimulation should be given to raise the heart rate before proceeding.

9. For indwelling gavage tubes, secure the tube with tape. Duoderm and transparent dressing are preferred. The tube should be securely taped to prevent tube movement over time.

10. Check to ensure that the tip of the tube is in the infant’s stomach by one of the following methods:
   A. Visualize the reflux of gastric contents up the tubing or gently aspirate the tube to obtain gastric contents.
   B. Listen over the stomach and inject air into the gastric tube.
   C. Listen for soundless crying, cyanosis and the presence of respiratory distress.

   The infant could aspirate if the tube is in the back of the throat, the esophagus, or in the lungs. These signs may indicate the tube is in the trachea. Remove the tube immediately if these are present.
11. Attach syringe to feeding tube.

12. Chart the length of tubing extending beyond the naris, type and size of feeding tube inserted, route of insertion, method used to confirm placement of feeding tube and results of assessment of tube placement and action taken. See the enteral Feeding P&P for the frequency of tube changes.

### BOLUS FEEDINGS WITH TUBE REMOVAL

<table>
<thead>
<tr>
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<tr>
<td>1. Follow the steps for “Insertion of Gastric Tube”.</td>
<td>Ensuring correct human milk is being given to correct infant (Prevention of Misappropriation of Human Milk policy and Human Milk Handling policy)</td>
</tr>
<tr>
<td>2. Perform verification of match between human milk and infant identification band including two Health Services Providers or one Health Service Provider and family/guardian involved in bedside verification</td>
<td>Holding tube and restraining the infant will ensure tube is not displaced.</td>
</tr>
<tr>
<td>3. Hold feeding tube in place and pour the desired amount of milk into the syringe.</td>
<td>Allowing feed to infuse too quickly may result in the infant regurgitating.</td>
</tr>
<tr>
<td>4. Start flow by pressing on syringe top with palm of hand. Allow milk to flow with gravity. Regulate the speed by lowering or raising the level of the syringe or by pinching the tubing (# 8 tubes).</td>
<td></td>
</tr>
<tr>
<td>5. Observe and evaluate the infant for signs of feeding tolerance or aspiration. If concerns present, stop feeding and notify charge nurse.</td>
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<tr>
<td>6. When milk has run in, clamp tube and withdraw tubing in one smooth motion.</td>
<td>Quick and proper withdrawal of tubing may prevent gagging and regurgitation.</td>
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<tr>
<td>7. Burp infant and position with head of bed elevated slightly.</td>
<td>Burping removes excess air and may aid in reducing regurgitation following feed. GER may be reduced when the head of the bed is elevated to 30°.</td>
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<tr>
<td>8. Document feeding and infant’s tolerance to feed.</td>
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### INTERMITTENT FEEDINGS WITH INDWELLING TUBE

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1. Check the placement of the indwelling gastric tube prior to each feeding or medication administration. Evaluate for placement by methods described in "Insertion of Gastric Tube".

2. Perform verification of match between human milk and infant identification band including two Health Services Providers or one Health Service Provider and family/guardian involved in bedside verification. Ensuring correct human milk is being given to correct infant (Prevention of Misappropriation of Human Milk policy and Human Milk Handling policy).

3. Attach syringe to feeding tube. Fill syringe and tubing with milk using aseptic technique and body fluid precautions for expressed mother’s milk.

4. Place the syringe on a pump and program designated time for infusion. Allowing the feed to infuse too quickly may result in the infant regurgitating.

5. Observe and evaluate the infant for signs of feeding tolerance or aspiration. If concerns present, stop feeding and notify charge nurse.

6. When the milk is finished, rinse the gavage tube with sterile water and close the gavage tube top. Milk should not be allowed to “stand” in tubing as it is a good media for bacterial growth.

7. Burp infant and position in line with developmental care and Safe Sleep guidelines. Burping removes excess air and may reduce regurgitation.

8. Document feeding and infant’s tolerance to feed.

CONTINUOUS FEEDINGS WITH INDWELLING TUBE

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<tr>
<td>1. Check the placement of the indwelling gastric tube each shift. Evaluate for placement by methods described in &quot;Insertion of Gastric Tube&quot;.</td>
<td>Placement should be documented every shift.</td>
</tr>
<tr>
<td>2. Perform verification of match between human milk and infant identification band including two Health Services Providers or one Health Service Provider and family/guardian involved in bedside verification.</td>
<td>Ensuring correct human milk is being given to correct infant (Prevention of Misappropriation of Human Milk policy and Human Milk Handling policy).</td>
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3. Fill syringe and tubing with milk using aseptic technique and body fluid precautions for expressed mother’s milk. See feeding policy for maximum volume of milk in syringe. Milk can not be left at room temperature for extended times due to the risk of contamination and interactions.

4. Position the feed pump so that the end of the syringe is tipped upwards and tip is lower than the baby if using mother’s milk. Mother’s milk separates over time and the fat rises. Syringe tip elevation helps to administer more of the fat in the milk.

5. Position infant in line with developmental care and Safe Sleep guidelines.

6. Burp the infant q2h and prn. Burping infants removes excess air and may help reduce regurgitation.

7. Observe and evaluate the infant for signs of feeding tolerance or aspiration. If concerns present, stop feeding and report concerns to the charge nurse.

8. Every shift, check the length of tubing extending beyond tape to ensure that it has not pulled out.

9. Document hourly feed volume and infant’s tolerance to feed.

**MONITORING DURING FEEDS**
Throughout the feed, observe the infant for tolerance of the feed by monitoring:
- Respiration
- Color and heart rate
- Gag and/or regurgitation
- Abdominal distension

Increased respiration, duskeness and bradycardia may indicate aspiration. Bradycardia may also occur due to vagal stimulation. Gagging or regurgitation may result in aspiration as well. Abdominal distention my result if the infant is fed too quickly, or too large of a volume.

If the infant begins to gag or regurgitate, stop the feeding and observe infant’s color, heart rate, and other signs of further regurgitation. If color and heart rate are adequate with no further regurgitation, resume feeding. If infant has cyanosis, bradycardia or continues to regurgitate, withdraw feeding tube. Notify the nurse in charge.

**Related Documents**
Adapted with permission from Stollery Children’s Policy and Procedure Manual:

**RELATED POLICIES AND PROCEDURES**
Enteral Feeding
IPC Guidelines for Handling of Expressed Breast Milk
Mothers Milk Safe Handling and Administration
Human Milk
Human Milk Misappropriation
Sucrose Administration

Corporate policy, Identification of Patient Resident or Client Using Two Identifiers VII-B-25

References


Revisions
Gavage Feeding, March 2002
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Gastric Gavage Feeding

Date Approved
October 2015

Policy Group
GI/GU

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Signing

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