# Gastrostomy or Jejunostomy Feeding by Gravity or Enteral Nutritional Pump

## Purpose
To provide a means of alimentation when the oral route is inaccessible. The nutritional pump is used to provide an accurate delivery rate of enteral feedings.

## Scope
Nursing

## Policy
1. All enteral feedings shall be administered via the Enteral Nutritional Pump, when possible.
2. To be performed by a licensed nurse who has been instructed, demonstrated competence, and approved to do this procedure.
3. Physician's order must specify fluid to be given, method, amount, concentration, and frequency of feedings.
4. Feedings should be administered at least 4 hours apart.
5. Check allergies to any food in the solution. Commonly included foods are milk, sugar, water, eggs and vegetable oil.
6. Client is automatically placed on I/O and weekly weights.
7. Client must be in semi-Fowler's position or be sitting in a chair to promote digestion and prevent esophageal reflux of feeding, unless contraindicated. If contraindicated client should be in lateral position with head of bed elevated 30 degrees.
8. If physician orders medications to be given through the tube; BE SURE TO FLUSH with 30-100 ml water before and after meds.
9. Obtain the correct amount of feeding solution. Check the expiration date on a commercially prepared formula or the preparation date and time if the solution has been prepared at RSH. Discard a solution that has passed the expiration date or RSH formula that is more than 24 hours old. Warm the solution in a basin of warm water or let it stand for a while until it reaches room temperature. Feedings are generally administered at room temperature, unless the order specifies otherwise.
10. Jejunostomy clients may experience dumping syndrome, which should be reported to physician. Signs may include nausea, vomiting, diarrhea, cramps, pallor, sweating, heart palpitation, increased pulse rate, and fainting after a feeding.

### Major Steps

1. Hang nutritional solution.
   - **Key Points**
     - Close flow regulator clamp on pump set.
     - Place solution in bag, attach pump set, and suspend solution to the right or left of pump.
     - Remove cover from tubing end and allow fluid to slowly enter sight chamber. Allow fluid to flow through tubing, expelling air, and then close clamp.
     - Label tubing with date, time, initials, and ‘for enteral feeding only’

2. If a tube is in place.
   - **Key Points**
     - Open the attached cap at the end of the tube.
     - Attach the large piston syringe to the tube and pinch tube closed.
     - Pour 15 to 30 ml of water into the syringe, open tube, and allow the water to flow into the tube.

   **Rationale:** This determines the patency of the tube. If water flows freely, the tube is patent; if it does not, notify physician.
POLICY AND/OR PROCEDURE continued

Subject: Gastrostomy or Jejunostomy Feeding by Gravity or Enteral Nutritional Pump

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3. Check placement of tube: a) every time a new bag is hung, b) after tubing has been disconnected, c) before flushing or giving medication per tube, d) before bolus feeding.

3a. Inject 5-10ml air rapidly via large syringe, while listening with stethoscope over gastric area. You should hear a roar noise.

3b. Initial Enteral Feeding Record to document verification of placement.

4. Check for residual every time a new bag is hung (every 24 hours, if continuous feeding), or before a bolus feeding is given.

4a. Aspirate stomach contents with large piston syringe and measure in graduated container. Do not withdraw more than 250 ml of stomach contents.

4b. If less than 250 ml of formula is withdrawn, gently infuse it back into the stomach via the tube.

4c. If 250 ml is withdrawn, replace only 150 ml. Stop feeding. Recheck in one hour. If residual is at least 250 ml the second time, notify physician.

4d. Document on the Enteral Feeding Record:
   1. Amount of residual
   2. Appearance of residual
   3. Client’s tolerance to procedure
   4. Assessment of peristomal skin. Any redness & broken skin areas should be recorded & reported to physician.

5. Keep nutrition pump plugged in, except during transport, to keep battery charged.

6. Set dose and rate on pump.

6a. Press set rate (ML/HR) button and use up or down arrow to adjust rate.

6b. Press set DOSE button and use up or down arrow to adjust.

6c. Press set VOL FED button to verify that volume is zero.

7. Start feeding.

7a. Remove cap from pump-set tubing and place in holder on pump for future use. Remove attached plug from enteral tube to open and attach to pump-set tubing.

7b. Open flow-regulator clamp on pump-set tubing and press RUN/STOP button on pump.

7c. Press run button

8. When feeding is complete

8a. Disconnect pump-set tubing from enteral tube, check placement, flush with 30-100 ml water, and place attached plug back in tube opening. Replace cap on pump-set tubing.

8b. Cap the end of enteral tube.

8c. Keep patient upright for 30 minutes after feeding to prevent leakage and enhance normal digestion.

8d. Set lock out function by pressing 9 & ↓ arrows simultaneously.

9. Clean solution container and tubing.

9a. Tubing and solution container are changed every 24 hours. Open or reconstituted solution must be stored in plastic forms no more than 24 hours (even in refrigerator).

9b. To avoid cross-contamination, keep all patient-specific items in the patient’s room. Rinse tubing and solution container in the patient’s bathroom. Do not take patient-specific items to the med room for cleaning.

10. To administer the feeding solution per gravity.

10a. Verify placement and check for residual (steps 2 & 3 above).

10b. Hold the syringe about 7 to 15 cm (3 to 6 in.) above the ostomy opening.

10c. Slowly pour the solution into the syringe, and allow it to flow through the tube by gravity.

10d. Just before all the formula has run through and the syringe is empty, add 30 ml of water.

10e. If the tube is sutured in place, hold it upright, remove and then place the syringe, attached plug in tube opening to prevent leakage. Cap the end of enteral tube.
11. Additional care of enteral tube site and patient.

11a. Provide privacy for the client during the procedure.
11b. Cleanse site daily with soap and water, and air dry.
11c. If any incrustations occur, cleanse site with one half (2) strength hydrogen peroxide for a period of 1 week only.
11d. Avoid using alcohol for cleansing site or tube, due to becoming dry and brittle.
11e. Notify physician if excessive pulling, redness, or drainage are noted at site.
11f. If client complains of discomfort or fullness during feeding, reposition client, pinch tubing closed, and wait a few minutes. If it persists, hold remainder of feeding and notify physician.
11g. Client should have enteral tube disconnected from pump set and closed with attached plug three times weekly and prn for shower or whirlpool.

12. Documentation

12a. On Enteral Feeding Record (to be kept in the treatment notebook)
   1) Verify tube patency & placement (see #2 & #4)
   2) Verify formula & concentration (strength) every shift or with each feeding.
   3) Time & amount of feeding if bolus.
   4) Amount of fluid used to flush tube.
   5) Volume & appearance of residual before each feeding.
   6) Tolerance of feeding every shift (if continuous) or with each bolus feeding.
   7) Presence of bowel sounds, distention before each feeding or every shift if continuous feeding.
   8) Condition of peristomal skin before each feeding or every shift if continuous feeding.
   9) Number and character of bowel movements since last feeding or every shift if continuous feeding.
  10) Any deviation from normal assessment findings must be documented in progress notes.

12b. In progress notes:
   1) Any problems with the feeding or problems with patient tolerance of the feeding.
   2) If Bowel sounds not found, document in the progress notes that the physician was notified.
   3) If abdominal distention is noted on assessment, that the physician was notified.
   4) Any abnormalities with the assessment of peristomal skin condition.

12c. Record feeding & flush volumes on I & O.
12b. Record weekly weights on S.F.#37756.

13. When appropriate, instruct the client in how to care for the stoma, enteral tube, and how to administer a feeding.

13a. Chart all patient teaching on Patient/Family Education Record SF#49551.


14a. Call the physician on duty to report the incident.
14b. Arrangements need to be made with the GI specialist for replacement of tube.
14c. Assess patient for diaphoresis, abdominal distention, drainage from site, vitals, etc.
14d. Cleanse site with soap & water and cover with dry sterile dressing.

15. When client returns to unit after enteral tube placement

15. Assess client for color, diaphoresis, abdominal distention, and vital signs initially, and at least every shift for 24 hours, or per physician’s orders.

16. Care and storage of equipment

16a. Wash syringe after each use by flushing thoroughly with tepid water.
16b. Store clean syringe in container, such as irrigation basin labeled with client’s name, room number, and date changed.
16c. Replace syringe and storage container every 24 hours and prn.
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<td>16d.</td>
<td>Pump should be cleaned with disinfectant weekly, prn, and after full course of treatment is completed.</td>
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<tr>
<td>16e.</td>
<td>Label pump set and bag with date and time hung and change every 24 hours.</td>
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<td>16f.</td>
<td>If there are problems with pump, contact Supervisor or Central Supply.</td>
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