PURPOSE:
To prevent constipation and achieve control of bowel evacuation on a regular basis.

CONSIDERATIONS:
1. Before bowel training begins, the bowel must be cleaned. Stool consistency must be normalized and a method of maintaining regular movements must be established.
2. Encourage patient to participate and cooperate in the program.
3. Patients at high risk and in need of a bowel program are those with weakness, inactivity, decreased food and fluid intake, sensory and motor dysfunction.
4. Encourage maximum mobility and physical activity within the limits of the patient’s ability.
5. Encourage adequate fluid intake (30 mL/kg body weight per day) each day unless contraindicated.
6. A well-balanced diet taken at regular times each day will facilitate success with a bowel program.
7. For the success of a bowel program, it is important to establish a regular evacuation time each day.
8. Laxatives or enemas used on a routine basis leads to loss of natural, normal bowel habit and can inhibit the success of a bowel program.
9. Suppositories should be stored in refrigerator to prevent softening and possible decreased effectiveness of the medication. If a suppository becomes softened and difficult to insert hold the wrapped suppository under cold water to harden the suppository again.
10. Narcotics and antidepressants have strong anticholinergic properties resulting in constipation.
11. A daily bowel movement is not necessary but time between bowel movements should not exceed three days.
12. Teach patient to respond quickly when urge is felt to stool.

EQUIPMENT:
Suppositories (optional)
Water-soluble lubricant
Gloves
Protective pads (optional)
Enema equipment (optional)
Bedpan or bedside commode (optional)
Mini-enema (optional)

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Ascertain when last bowel movement occurred.
   a. If none within 3 days, perform a digital rectal exam. Only perform with physician order.
   b. If firm stool is felt on digital exam, give gentle soapsuds enema or enema of choice ordered by physician.
4. As appropriate, request physician order for a daily stool softener.
5. Instruct patient/caregiver in appropriate dietary measures to reduce incidence of constipation/fecal impaction including increased fluid, high bulk diet, or increased activity, as tolerated.
6. When regular use of suppository for bowel evacuation is required:
   a. Have patient lie down on the left side in the Sim's position.
   b. Insert suppository into rectum as far as finger will reach directing tapered end of the suppository toward the side of the rectum to aid absorption.
   c. Wait 45 minutes.
   d. Position patient on the bedpan, commode or assist them to the bathroom.
   e. Repeat this procedure at same time every day or every other day as ordered by the physician.
7. Discard soiled supplies in appropriate containers.
8. Establish bowel supplies in appropriate containers.

AFTER CARE:
1. Document in patient's record:
   a. Bowel program established and results.
   b. Pertinent information.
   c. Instructions given to patient/caregiver.
2. Instruct patient/caregiver in perianal hygiene.
PURPOSE:
To protect the intestinal tissue from drying and to contain the mucus excreted.

CONSIDERATIONS:
1. A mucous fistula is an opening on the abdomen that leads to the resting portion of the intestine. A normal function of the intestine is to secrete mucus.
2. Consult the enterostomal therapist or physician if odor is heavy or drainage requires more than one dressing per day.

EQUIPMENT:
- Gloves
- Non-sterile dressing; i.e., gauze, tissues, paper towels, sanitary pad, small piece of cloth
- Petroleum jelly (optional)
- Paper tape
- Basin of warm water and soft, clean cloths
- Impervious bag

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Remove old dressing.
4. Cleanse mucous fistula and surrounding skin with warm water; pat dry. This can be done when patient showers.
5. Apply small amount of petroleum jelly to fistula, if necessary, to prevent dryness.
6. Place non-sterile dressing against the mucous fistula and secure edges with paper tape.
7. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Document in patient's record:
   a. Procedure and observations.
   b. Patient's response to procedure.
   c. Instructions given to patient/caregiver.
**PURPOSE:**
To collect effluent and protect skin from effluent and adhesives.

**CONSIDERATIONS:**
1. There are a variety of products that are used for colostomies and ileostomies. There are one- and two-piece or non-adherent appliances. Manufacturer’s directions should be followed when applying these devices. This procedure considers the following basic types:
   a. One-piece, pre-cut pouch with attached skin barrier (wafer).
   b. One-piece, cut-to-fit pouch with attached skin barrier (wafer).
   c. Two-piece set including skin barrier (wafer) and snap-on pouch.
2. The other factor when choosing an appliance is the appearance of stoma and its location. There are flat skin barrier (wafers) and convex skin barriers (wafers). Convex is usually used with flat stomas or stomas located in creases. For hard-to-fit stomas, permanent face-plates with reusable pouches, convex inserts or other customized equipment may be recommended.
3. Effluent from an ileostomy is highly enzymatic and damaging to the skin and is more difficult to contain since it is semi-liquid. Use of extended wear skin barriers (wafers) such as Durahesive, Flextend, Extended Wear are generally used for ileostomies, depending on manufacturer.
4. Special considerations for using a two-piece appliance set:
   a. The barrier (wafer) should be changed every 3 to 7 days or when leakage occurs.
   b. The pouches can be cleansed and reused.
   c. Flatus is released by pulling up on the tab of the pouch and replacing the seal.
5. Pin holes are never to be made in a pouch for release of flatus since it creates constant odor. Flatus can be released by emptying the pouch.
6. Whenever the appliance is removed, the stoma and peristomal skin should be inspected for breakdown, discoloration, epithelial overgrowth, rash, etc.
7. Stoma size changes for up to 3 months after surgery. The pattern should be measured for proper fit each time the appliance is changed.
8. The size of the wafer opening must be slightly larger (approximately 1/8 inch) than the stoma. An opening too small can lacerate the stoma and cause leakage under the skin barrier (wafer). An opening too large exposes the skin and causes leakage.
9. The pouch should always be emptied when it is 1/3 full.

**EQUIPMENT:**
- Gloves
- Small impervious bag
- Ostomy appliance - one or two pieces
- Adhesive remover pads (optional)
- Skin barrier gel (optional)
- Skin barrier film wipes (optional)
- Stoma paste/barrier rings and/or strips (optional)
- Mild soap without moisturizers (optional)
- Warm water
- Washcloth/towel
- Scissors
- Pouch clamp (if applicable)
- Appliance belt (optional)
- Toilet tissue
- Disposable apron (optional)

**PROCEDURE:**
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Position patient in comfortable position, generally lying or standing.
4. Gently remove existing appliance using push/pull method and adhesive removers as indicated. Remove and save clip, if applicable. Discard disposable pouch in impervious bag.
5. Wipe drainage from stoma and skin with toilet tissue. Cleanse skin with warm water. Avoid using soap or skin wipes with moisturizers as moisturizers may interfere with obtaining a good seal on the barrier. Dry peristomal skin; shave, if necessary.
6. Using a pattern or measuring guide, measure stoma.
7. Draw pattern on paper backing of skin barrier, approximately 1/8 inch larger than stoma.
9. Apply skin barrier gel or film, if needed, and let dry. Skin protectant and/or barrier wipes are not usually recommended by many manufacturers, as it may interfere with adhesion.
10. If stoma paste is used to create a better seal, apply around stoma or directly to skin barrier wafer at the cut edge. There are now skin barrier rings/strips that may replace the use of paste. [Note: These products are to act as a barrier to protect skin and/or a “caulking” to decrease leakage. It does not help the wafer to stick to skin. If it is spread around on skin or wafer, it will interfere with adhesion to the skin.]
11. Apply wafer and gently press over entire area, especially around stoma. Hold in place for 1 minute.
12. If using two-piece appliance, snap pouch onto wafer rim like Tupperware. Start at the bottom and apply pressure around the entire rim. Test by tugging in all.
directions. Many new appliances have a different connection of pouch and wafer, follow specific manufactures' instructions.

13. Place clamp on end of drainable pouch: Many new appliances have “Velcro-like” closing, follow specific manufactures’ instructions.

14. Secure pouch with belt if necessary. Encourage patient to stay in one position for about 10 to 15 minutes, with his/her hand over the newly placed wafer to improve adherence.

15. Discard soiled supplies in appropriate containers.

AFTER CARE:

1. Document in patient's record:
   a. Procedure and observations.
   b. Patient's response to procedure.
   c. Appearance of peristomal skin.
   d. Instructions given to patient/caregiver.
   e. Communication with physician, when necessary.
PURPOSE:
To cleanse and empty the sigmoid colon of gas, mucus and feces. To stimulate peristalsis. To help establish regular evacuation of the bowel.

CONSIDERATIONS:
1. Irrigation is not appropriate for ileostomies, ascending or transverse colostomies.

EQUIPMENT:
Gloves
Colostomy irrigation set (sleeve, belt, clamp, bag, cone, tubing) or irrigation sleeve to fit two-piece appliance
Water-soluble lubricant
Bedpan or other large receptacle
Lukewarm water
Fresh colostomy pouch or security pad (small dressing)
Soft washcloth or paper towel
Plastic-lined underpads
Impervious plastic bag
Wash basin
Bath blanket
Disposable apron

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Protect the bed with plastic-backed under-pads.
4. Remove or turn down top bedding and cover patient with bath blanket.
5. Place 500-1000 mL of lukewarm water into irrigating bag with clamp. Open clamp to let water flow through, expelling any air in system, then re-clamp.
6. Hang irrigating bag on hook approximately 12-18 inches above level of stoma.
7. Remove pouch and if necessary, clean exposed area with a damp paper towel or washcloth.
8. Apply irrigating sleeve over stoma and attach belt. Tighten belt so that it fits snugly. If patient uses a two-piece ostomy appliance, the appropriate irrigation sleeve can be attached to the existing flange.
9. Position patient on side where stoma is placed or on their back.
10. Place the bottom of sleeve into bedpan at patient's side.
11. Lubricate cone.
12. Insert gloved, lubricated finger into stoma to determine angle at which cone can be inserted safely. Release the clamp slightly so the cone can be inserted into the stoma while there is a small flow of water.
13. Insert cone. To ensure that there is no escape of water, press cone firmly against stoma. When a cone is used, it can be inserted as far as possible without causing any discomfort.
14. The initial irrigation should be 250-500 mL warm water. Patient may experience a vagal response if water volume is too large. For ongoing irrigations, instill 500-1000 mL over a period of 10 minutes. Be sure that the cone or dam is held firmly against stoma to prevent water from escaping.
15. If patient complains of cramps or discomfort, shut flow off and resume flow when cramps have ceased. Check water temperature and rate of flow.
16. When all water is in, remove tubing. If using sleeve with opening in top, fold sleeve over and clamp.
17. Massage abdomen in circular motion toward stoma and let drain. Encourage patient to take slow deep breaths, move abdominal musculature in and out, and move about in bed, if possible. Stool may return for up to one hour.
18. Remove sleeve, wash peristomal skin and stoma with warm water. Dry.
19. Apply clean sleeve or dressing.
20. Reposition patient and replace bedding.
21. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Cleanse irrigation equipment and rinse. The equipment must be drained and allowed to dry before storing.
2. Document in patient's record:
   a. Procedure and observations.
   b. Amount and character of stool and fluid.
   c. Patient's response to procedure.
   d. Appearance of peristomal skin.
   e. Instructions given to patient/caregiver.
   f. Communication with physician.
PURPOSE:
To cleanse and empty the sigmoid colon of flatus, mucus and feces. To stimulate peristalsis and help establish regular evacuation of the bowels.

CONSIDERATIONS:
1. Irrigation is not appropriate for ileostomies, ascending or transverse colostomies.

EQUIPMENT:
Gloves
Colostomy irrigation set (sleeve, belt, clamp, bag, cone, tubing) or irrigation sleeve to fit two-piece appliance
Water-soluble lubricant
Lukewarm water
Fresh colostomy pouch or security pad (small dressing)
Soft washcloth or paper towel
Impervious plastic bag
Disposable apron

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Place 500-1000 mL of lukewarm water into irrigating bag with clamp. Open clamp to let water flow through, expelling any air in system, then re-clamp.
4. Hang irrigating bag on hook so that the bottom of the bag is at the patient's shoulder level when seated.
5. Remove pouch and, if necessary, clean exposed area with a damp towel or washcloth.
6. Apply irrigating sleeve over stoma and attach belt. Tighten belt so that it fits snugly. If patient is using a two-piece ostomy appliance, attach irrigation sleeve to the existing flange.
7. Have patient sit on chair in front of the toilet.
8. Place irrigation sleeve in the toilet.
9. Lubricate cone.
10. Insert gloved, lubricated finger into stoma to determine angle at which cone can be inserted safely. Release the clamp slightly so the cone can be inserted into the stoma while there is a small flow of water.
11. Insert cone. To ensure that there is no escape of water press cone firmly against stoma. When a cone is used, it can be inserted as far as possible without causing any discomfort.
12. Initial irrigation should be 250-500 mL warm water. Patient may experience a vagal response if water volume is too large. For ongoing irrigations, instill 500-1000 mL water over a period of 10 minutes. If patient complains of cramps or discomfort, shut flow off and resume flow when cramps have ceased. Check water temperature and rate of flow.
13. Remove tubing or cone, fold down top of sleeve and clamp. For the next 15 minutes, have patient remain in bathroom while colostomy drains.
14. Have patient take slow deep breaths, move the abdominal musculature in and out, bend forward and gently massage the lower abdomen to enhance evacuation of bowel contents.
15. Rinse sleeve by pouring warm water through sleeve and over stoma.
16. Wipe off bottom of sleeve with a paper towel. Clamp the bottom of the sleeve to the top of the sleeve.
17. Advise the patient that return may continue for the next 30 to 45 minutes.
18. Remove sleeve, wash skin and stomal, and apply a new pouch or security pad.
19. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Cleanse the irrigation equipment, rinse. The equipment must be drained and allowed to dry before storing.
2. Document in patient's record:
   a. Procedure and observations.
   b. Amount and character of stool and fluid.
   c. Patient's response to procedure.
   d. Appearance of peristomal skin.
   e. Instructions given to patient/caregiver.
      Communication with physician.
PURPOSE:
To clean the intestinal tract in preparation for barium enema, diagnostic procedures or colostomy closure.

CONSIDERATIONS:
1. This procedure is performed on sigmoid, descending or transverse colostomies.
   a. A loop colostomy has only one stoma, but there are two openings in it.
   b. A double-barrel colostomy has two stomas that may be separated on the body. Proximal stoma discharges fecal material and distal stoma drains mucus from lower colon and rectum.
   c. An end colostomy has one stoma with one opening.
2. This procedure is not appropriate for patients with ascending colostomies, ileostomies or cecostomies. If this is requested, contact the patient's physician for special instructions.
3. Irrigation of the rectal stump is sometimes requested as part of the bowel prep for reconnecting an end colostomy. Follow procedure for Fleets enema.

EQUIPMENT:
Gloves
Colostomy irrigation set (sleeve, belt, clamp, bag, cone and tubing)
Lukewarm tap water
Water-soluble lubricant
Soft washcloth or towel
Fresh colostomy pouch
Pitcher (optional)
Impervious plastic bag
Disposable apron

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.

To Irrigate Distal Stoma:
1. Fill irrigation bag with 500-800 mL of lukewarm tap water. Prime the tubing. Hang bag near toilet. The lower level of bag should be at patient's shoulder level when seated.
2. Remove pouch and if necessary, clean exposed area with a damp cloth.
3. Have patient sit on toilet.
4. Put sleeve faceplate over distal stoma and snap on belt. Place sleeve in toilet.
5. Insert cone into distal stoma (usually this is on patient's left side). Press cone firmly against stoma. Allow 500 mL water to run at a rate that is comfortable for patient. Hold cone in place 10 to 15 seconds. Remove cone, fold down top of sleeve and clamp.
6. Have patient remain on toilet until water has been expelled from rectum and feeling of pressure is gone.

To Irrigate the Proximal Stoma:
1. Refill bag with 500-1000 mL of lukewarm water. Prime the tubing.
2. Hang irrigating bag on hook so that the bottom of the bag is at the patient's shoulder level when seated.
3. Apply irrigating sleeve over stoma and attach belt. Tighten belt so that it is snugly. If patient is using a two-piece ostomy appliance, attach irrigation sleeve to the existing flange.
4. Have patient sit on chair in front of toilet.
5. Place irrigation sleeve in the toilet.
7. Insert gloved, lubricated finger into stoma to determine angle at which cone can be inserted safely. Release the clamp slightly so the cone can be inserted in the stoma while there is a small flow of water.
8. Insert cone. To ensure that there is no escape of water, press cone firmly against stoma. Cone can be inserted as far as possible without causing any discomfort.
9. Instill 500-1000 mL water over a period of 10 minutes. If patient complains of cramps or discomfort, shut flow off and resume flow when cramps have ceased. Check water temperature and rate of flow. If patient does not routinely irrigate, patient may experience a vagal response if volume is too large.
10. Remove cone, fold down top of sleeve and clamp. For the next 15 minutes have patient remain in bathroom while colostomy drains.
11. Have patient take slow deep breaths, move the abdominal musculature in and out, bend forward and gently massage the lower abdomen to enhance evacuation of bowel contents. It may take up to 45 minutes for fecal return.
12. Rinse sleeve, by pouring warm water through sleeve and over stoma.
13. Wipe off bottom of sleeve with a paper towel. Clamp the bottom of the sleeve to the top of the sleeve.
14. Advise the patient that return may continue for the next 30 to 45 minutes.
15. Remove sleeve, wash skin and stoma, and apply a new pouch or security pad.
16. Discard soiled supplies in appropriate containers.
AFTER CARE:

1. Cleanse irrigation equipment and rinse. The equipment must be drained and allowed to dry before storing.
2. Instruct patient to take irrigation set to hospital. This procedure may be repeated prior to surgery for colostomy closure or barium enema.
3. Document in patient's record:
   a. Procedure and observations.
   b. Amount and character of stool and fluid.
   c. Patient's response to procedure.
   d. Appearance of peristomal skin.
   e. Instructions given to patient/caregiver.
PURPOSE:
Introduction of solution into the rectum to aid evacuation.

CONSIDERATIONS:
1. Obtain physician order.
2. No more than three cleansing enemas should be given in one day. If these are ineffective, call physician for further instructions.
3. Treatment should be discontinued if bleeding, extreme pain or symptoms of shock are evident. Notify physician.
4. Standard irrigating enema volumes: 750-1000 mL for an adult, 300-500 mL for a school-aged child, 250-350 mL for a toddler or preschooler and 150-250 mL for an infant.

EQUIPMENT:
Enema set
Solution, as prescribed by physician
Bedpan
Plastic-lined underpads
Water-soluble lubricant
Gloves
Disposable apron

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Protect the bed and position the patient on his left side, if possible, with right knee flexed.
4. Fill enema container with prescribed solution.
   Unless otherwise specified, temperature of solution should be slightly warmer than body temperature.
   Prime the tubing.
5. ONLY WITH PHYSICIAN ORDER: With a lubricated, gloved finger, gently examine the rectal area for impaction and to rule out obstruction.
6. Lubricate tip of tubing and gently insert into rectum 2-4 inches for an adult, 2-3 inches for a child and 1 to 1-1/2 (one and one-half) inches for an infant.
7. Raise enema container no higher than 18 inches above the rectum for an adult, 12 inches for a child and 6 to 8 inches for an infant.
8. Open the clamp and allow the solution to run slowly into the rectum.
9. Encourage the patient to relax by taking deep breaths through the mouth. If mild cramping occurs, it may be necessary to clamp the tubing at intervals to enable patient to retain entire quantity of solution. If patient experiences pain or severe abdominal cramping, discontinue procedure and notify physician.
10. Have patient retain solution for 15 minutes, if possible.
11. Place patient on toilet or bedpan to expel solution.
12. Cleanse patient as indicated and make comfortable.

13. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Cleanse bedpan, rinse, dry and replace in proper place.
2. Document in patient's record:
   a. Procedure and observations.
   b. Results.
   c. Patient's response to procedure.
   d. Instructions given to patient/caregiver.
   e. Communication with physician.
**Purpose:**
To relieve distention, expel flatus, stimulate peristalsis or initiate a bowel movement.

**Considerations:**
1. Obtain physician order.
2. Treatment should be discontinued if bleeding; extreme pain or symptoms of shock are evident. Notify physician.

**Equipment:**
- Enema set
- Water-soluble lubricant
- 250 mL warm tap water
- Bedpan
- Plastic-lined underpads
- Gloves
- Disposable apron

**Procedure:**
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Position patient on left side.
4. Fill enema bag with tap water and prime tubing.
5. Lubricate tip of tubing and gently insert into the rectum approximately 2-4 inches for an adult, 2-3 inches for a child and 1 to 1-1/2 (one and one-half) inches for an infant.
6. Raise enema bag no higher than 18 inches above rectum for an adult, 12 inches for a child and 6-8 inches for an infant. Open clamp and allow water to run slowly into the rectum.
7. Lower bag about 12 inches below the rectum and allow water to return. DO NOT allow bag to empty completely before lowering since this would introduce air into the colon.
8. Continue this process for about 20 minutes, changing solution as it becomes discolored or cool.
9. When gas bubbles cease, patient feels more comfortable and abdominal distention subsides, allow solution to drain out of the rectum by lowering bag.
10. Cleanse patient and make comfortable.
11. Discard soiled supplies in appropriate containers.

**Aftercare:**
1. Cleanse reusable equipment, rinse, dry and wrap in clean towel.
2. Document in patient's record:
   a. Procedure and observations.
   b. Results.
   c. Patient's response to procedure.
   d. Instructions given to patient/caregiver.
   e. Communication with physician.
PURPOSE:
The introduction of small amounts of solution into the rectum in order to soften hardened fecal material. Can also be used for local astringent, medication or emollient action.

CONSIDERATIONS:
1. Obtain physician order.
2. Treatment should be discontinued if bleeding, extreme pain or symptoms of shock are evident. Notify physician.
3. An oil retention enema may be ordered by the physician to soften the fecal mass. This is usually followed by a cleansing enema or digital removal of stool several hours later.
4. Standard volume for retention enema is 50-250 mL.

EQUIPMENT:
Disposable retention enema
Plastic-lined under pads
Gloves
Disposable apron
Lubricant

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Collect equipment and position patient, preferably on left side with right knee flexed.
4. Gently insert lubricated enema tube into rectum 2 to 4 inches for an adult, 2 to 3 inches for a child or 1 to 1-1/2 inches for an infant and squeeze solution into rectum.
5. Apply light pressure to anal area with a tissue and slowly withdraw tube.
6. Have patient retain solution at least 30 minutes. An oil retention enema is usually followed by a cleansing enema or manual removal of stool in approximately 1 hour, if necessary.
7. Cleanse patient and make comfortable.
8. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Document in patient's record:
   a. Procedure and observations.
   b. Results.
   c. Patient's response to procedure.
   d. Instructions given to patient/caregiver.
   e. Communication with physician.
**Digesive – Gastrostomy or Jejunostomy Tube Feeding**

**SECTION: 2.10**

**Purpose:**
To provide hydration, nutrition or medication via surgical opening into the stomach or jejunum when oral route is contraindicated.

**Considerations:**

1. Special formulas or blender-prepared nutrients may be administered at room temperature and should be discarded if not used within a 24-hour period.

2. Possible side effects to consider are distention, vomiting, diarrhea and constipation. Therefore, frequency of feeding, amount of formula, concentration of formula and content of formula may need to be adjusted. Consultation with physician or registered dietician may be indicated.

3. During continuous feedings, assess frequently for abdominal distention.

4. Medications may be administered through the feeding tube per MD orders and instructions only. Liquid preparations are preferred. Enterocoated tablets cannot be used. Flush tubing with water before and after to ensure full instillation of complete dose of medication. Each medication should be given separately and flushed with 20 to 30 mL water between each medication.

5. Gastrostomy tubes (G-tubes) that have a balloon tip should be changed as ordered by physician; other types of G-tubes (e.g. mushroom, molecot) are changed in an outpatient setting. Jejunostomy tubes are only changed by physician.

6. If patient needs more water intake than is allowed with the enteral feeding, physician orders need to be obtained to determine the amount of extra water and frequency needs to be given to the patient daily.

**Equipment:**

- 60 mL syringe
- Graduated container
- Glass of water
- Prepared formula
- Clamp
- Gloves
- Protective sheet
- Enteral feeding bag and tubing
- Enteral feeding pump (optional)

**Procedure:**

1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Prepare measured amount of formula or medication in appropriate container.
4. Elevate the patient's bed to a high- or semi-Fowler's position to prevent aspiration and to facilitate digestion.
5. Place protective sheet under tubing to protect bedding and clothes.
6. Remove cap or plug from the feeding tube.
7. Aspirate stomach contents with syringe. Note amount of residual withdrawn and inject gastric fluid back into tube. DO NOT discard this fluid. If the residual is greater than 100 mL or twice the hourly rate of feeding, call the physician. DO NOT administer feeding.
8. Connect enteral bag tubing, pump tubing or syringe to gastrostomy or jejunostomy tube.
9. If using a bulb or catheter-tip syringe, remove the bulb or plunger and attach the syringe to feeding tube to prevent excess air from entering. **Jejunostomy should not be bolus fed. DO NOT use this option for jejunostomy.**
10. If using the infuser controller, follow manufacturer's directions. Purge the tubing of air and attach it to the feeding tube.
11. Open the regulator clamp of enteral tube or pump and adjust flow rate. When using syringe, fill syringe with formula and release the feeding tube to allow formula to flow through. When syringe is three-quarters empty, add more solution. Recommended rate is 200-350 mL over 10 to 15 minutes depending on the patient's tolerance and the doctor's orders.
12. Flush tube with 50-60 mL of water after each feeding to ensure patency per MD order.
13. Pinch tubing and remove enteral bag, controller tubing or syringe and then clamp or cap feeding tube.
14. Leave patient in semi-Fowler's position for at least 30 minutes.
15. Discard soiled supplies in appropriate containers.

**After Care:**

1. Cleanse reusable equipment and rinse. Allow equipment to air-dry and wrap in clean towel to be used at next feeding.
2. Document in patient's record:
   a. Verification of proper tube placement.
   b. Amount of aspirated stomach content.
   c. Feeding solution and amount.
   d. Medications administered.
   e. Amount of water administered.
   f. Patient's response to procedure.
   g. Instructions given to patient/caregiver.
PURPOSE:
To introduce a tube through the nose and into the stomach to administer medications and feedings when oral route is contraindicated. (Does not include Dobhoff or other soft, pliable tubes with stylets.)

CONSIDERATIONS:
1. It is important to explain the procedure to the patient to relieve apprehension.
2. Position patient upright and assess gag reflex before inserting tube. If high-Fowler’s position is contraindicated, place patient on side.
3. Nasogastric tube should never be forced if obstruction is encountered. Discontinue insertion immediately if excessive coughing or signs of respiratory distress are present.
4. Feeding tubes should be changed every 4 to 6 weeks or as otherwise specified to prevent erosion of esophageal, tracheal, nasal and oropharyngeal mucosa. Alternate nostrils with each tube change.
5. Frequent oral and nasal hygiene is required.
6. If the patient is unconscious, bend the head toward the chest. This will help close the trachea. Also, advance the tube between respirations to make sure it does not enter the trachea. You will need to stroke an unconscious patient’s neck to facilitate passage of the tube down the esophagus.
7. Watch for cyanosis while passing the tube in an unconscious patient. Cyanosis indicates that the tube has entered the trachea.
8. Never place the end of the tube in a container of fluid while checking for placement. If the tube is in the trachea, the patient could inhale the water.
9. DO NOT tape the tube to the forehead; it can cause necrosis of the nostril.
10. Pain or vomiting after the tube is inserted indicates tube obstruction or incorrect placement.
11. Recognize the complications when the tube is in for prolonged periods: nasal erosion, sinusitis, esophagitis, esophagotracheal fistula, gastric ulceration and pulmonary and oral infections.
12. Per Joint Commission recommendations, all tubes and catheters should be labeled to prevent the possibility of tubing misconnections. Staff should emphasize to all patients the importance of contacting a clinical staff member for assistance when there is an identified need to disconnect or reconnect devices.
13. Upon receipt of referral, Intake will assure that referring source has verified Nasogastric tube placement via x-ray and tube has been marked at the nares with indelible ink. Length of NG tube from nares to tip will be documented on the referral as well as x-ray result.

EQUIPMENT:
Nasogastric tube, of specified size
Clamp
Water-soluble lubricant
Glass of water or ice chips
Tape
Stethoscope
Irrigating syringe
Gloves
Towel or disposable pads
Flashlight

PROCEDURE:
Insertion
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Assemble equipment and examine tube for defects (rough edges or partially closed lumens).
4. Position patient, preferably in high-Fowler’s, if not contraindicated. Drape patient with towel or disposable pads.
5. Instruct patient to blow nose to clear nostrils. Use a flashlight and occlude one nostril at a time to assess patency of nostrils before choosing site for insertion. Ascertain from patient any history of nasal surgery, injury or deviated septum.
6. Measure tube for placement from tip of nose to ear lobe to bottom of xiphoid process; mark tube with tape. Note location on tube; you may mark tube with tape or nontoxic marker.
7. Provide patient with glass of water or ice chips. Lubricate tip of tube with water-soluble lubricant and begin insertion. Rotating tube 180 degrees after it reaches the nasopharynx may help to prevent tube from entering patient’s mouth. Instruct patient to take a swallow of water or suck on ice chips once tube passes nasopharynx. It is helpful to have the patient, unless contradicted, keep his/her chin tucked toward chest so that the tube passes into the stomach and not lungs.
8. Continue insertion in rhythm with swallowing until desired length of tube is passed.
9. a. Determine that tube is in stomach:
   • Assess tubes exit site at nares and placement of “marking” on tube.
   • If “mark” is at nare, no further action is required.
   • If “mark” is at nare but clinician has suspicion of migration, contact MD.
   • If tube migrates more than two inches, notify physician of tube migration and need for possible repeat x-ray. Obtain and document physician orders.
b. Gently aspirate stomach content with irrigating syringe. Fluid from stomach or small bowel may be green, tan, brown, clear, yellow, bloody or bile-colored. Pulmonary fluid may be tan, off white, clear or pale yellow. Ph from stomach is 1.0 to 6.5, from small intestine 7.5 to 8.0, from
the lungs over 6.0; however, none of these is fail-safe. If any doubt exists, placement should be checked with X-rays. It should be noted that chest X-ray is the only way to confirm correct placement.

10. Anchor tube with tape or securement device. Discomfort from weight of tube may be relieved by using a rubber band and safety pin to secure tube to patient's clothing. Remove safety pin from clothing before changing clothing.

11. Cap end of tube or proceed to Digestive – Nasogastric Tube Feeding.

12. Discard soiled supplies in appropriate containers.

Removal
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Place a towel across the patient's chest and inform him/her that the tube is to be withdrawn.
4. Rotate tubing and inject approximately 10 mL of saline before clamping tubing.
5. Remove the tape from the patient's nose.
6. Instruct the patient to take a deep breath and hold it.
7. Slowly but evenly withdraw tubing and cover it with a towel as it emerges. (As the tube reaches the nasopharynx, you can pull quickly.)
8. Provide the patient with materials for oral care and lubricant for nasal dryness.
9. Monitor the patient for signs of gastrointestinal difficulties or changes.

AFTER CARE:
1. Cleanse reusable equipment, rinse, dry and cover with clean towel.
2. Document in patient's record:
   a. Procedure and observations.
   b. Size and type of tube inserted.
   c. Time of insertion or removal.
   d. Patient's response to procedure.
   e. Instructions given to patient/caregiver.
   f. Communication with physician.
PURPOSE:
To administer nutrients and medications into the stomach via a nasogastric tube.

CONSIDERATIONS:
1. Checking placement of nasogastric tube is essential prior to any feeding or administration of medications.
2. Special formulas or blender-prepared nutrients are to be administered at room temperature and discarded if not used within a 24-hour period.
3. Possible side effects to consider are distention, vomiting, diarrhea and constipation. Therefore, frequency of feeding, amount of formula, concentration of formula and content of formula may need to be adjusted. Consultation with physician or registered dietician may be indicated.
4. During continuous feedings, assess frequently for abdominal distention.
5. Medications may be administered through the feeding tube. Liquid preparations are preferred. Enterocoated tablets cannot be used. Flush tubing with water before and after to ensure full instillation of complete dose of medication. Each medication should be given separately and flushed with 20-30 mL of water between each medication.
6. A nasogastric tube is not an appropriate long-term option for enteral feeding. Prolonged intubation may result in sinusitis, erosion of the nasal septum or esophagus or distal esophageal strictures. A gastrostomy or jejunostomy tube is appropriate for therapy expected to last more than 4 to 6 weeks.
7. Frequent oral and nasal hygiene is required.
8. Per Joint Commission recommendations, all tubes and catheters should be labeled to prevent the possibility of tubing misconnections.
9. Staff should emphasize to all patients the importance of contacting a clinical staff member for assistance when there is an identified need to disconnect or reconnect devices.

EQUIPMENT:
- 60 mL syringe
- Graduated container
- Glass of water
- Prepared formula
- Clamp
- Gloves
- Protective sheet
- Stethoscope
- Enteral feeding bag and tubing
- Enteral feeding pump (optional)

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Prepare measured amount of formula or medication in appropriate container.
4. Elevate the patient's bed to a high- or semi-Fowler's position to prevent aspiration and facilitate digestion.
5. Place protective sheet under tubing to protect bedding and clothes.
6. Remove cap or plug from the feeding tube.
7. Determine that tube is in stomach:
   - Assess tubes exit site at nares and placement of "marking" on tube.
   - If "mark" is at nare, no further action is required.
   - If "mark" is at nare but clinician has suspicion of migration, contact MD.
   - If tube migrates more than two inches, notify physician of tube migration and need for possible repeat x-ray. Obtain and document physician orders.
8. Aspirate stomach contents. Note amount of residual withdrawn and inject gastric fluid back into tube. DO NOT discard this fluid. If residual is greater than 100 mL or twice the hourly rate of feeding, call physician. DO NOT administer feeding.
9. Prime enteral bag tubing to remove air and connect enteral bag tubing, pump tubing or syringe to nasogastric tube.
10. If using a bulb or catheter-tip syringe, remove the bulb or plunger and attach the syringe to the pinched-off feeding tube to prevent excess air from entering.
11. If using an infuser controller, follow manufacturer's directions. Purge the tubing of air and attach it to the feeding tube.
12. Open the regulator clamp of enteral tube or pump and adjust flow rate. When using syringe, fill syringe with formula and release the feeding tube to allow formula to flow through. When syringe is three-quarters empty, add more solution. Recommended rate is 200-350 mL over 10 to 15 minutes, depending on the patient's tolerance and the doctor's orders.
13. Flush tube with 50-60 mL of water after each feeding to ensure patency.
14. Pinch tubing and remove enteral bag, controller tubing or syringe and clamp or cap feeding tube.
15. Leave patient in high- or semi-Fowler's position for at least 30 minutes.
16. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Cleanse reusable equipment and rinse. Allow to air-dry and wrap in clean towel to be used at next feeding.
2. Document in patient's record:
   a. Verification of proper tube placement.
   b. Amount of aspirated stomach content.
c. Feeding solution and amount.
d. Medications administered.
e. Amount of water administered.
f. Patient's response to procedure.
g. Instructions given to patient/caregiver.
h. Communication with physician, when necessary.
PURPOSE:
To provide instruction on obtaining accurate measurements critical to the nutrition assessment of the patient and to identifying patients at risk.

CONSIDERATIONS:
1. Medical nutrition therapy (MNT) is the process of assessing the patient, identifying treatment goals, developing the nutrition care plan and applying specific interventions through multidisciplinary team approaches.
2. A nutritional assessment should be performed on all patients upon admission.
3. The nutrition assessment includes but is not limited to:
   a. Subjective data.
   b. Objective data.
   c. Physical assessment.
   d. Planning and-interventions.
   e. Evaluation or outcome measures.
4. Patients determined to be at risk nutritionally should be referred to a Registered Dietitian (RD).

PROCEDURE:
1. Determine patient's Desirable Body Weight (DBW):
   a. The National Institutes of Health (NIH) defines Desirable (normal or ideal) Body Weight (DBW). The following guide may be used to calculate DBW of medium-frame persons (subtract 10% for small or add 10% for large frame persons):
      - Women: Allow 100 pounds for first 5 feet of height, plus 5 pounds for each additional inch.
      - Men: Allow 106 pounds for first 5 feet of height, plus 6 pounds for each additional inch.
2. Determine Body Mass Index (BMI): BMI is an index of a person's weight in relation to height; it is determined by dividing the weight in kilograms by the height in meters squared. BMI will be used to determine weight category in all patients.
   \[ \text{BMI} = \frac{\text{Weight (kg)}}{\text{Height (m)}^2} \]
3. Determine patient's weight status using the following guide:
   a. BMI < 18.5 underweight
   b. BMI 18.5-24.9 = normal
   c. BMI 25-29.9 = overweight
   d. BMI >30 = obese
      * 30.0-34.9 Grade I
      * 35.0 - 39.9 Grade II
      * >40 Grade III (extreme)
4. Adjusted Body Weight (AjBW) is recommended for calculating the energy requirements of persons who are 125% or more of their DBW. To determine AjBW use the following guide:

### Nutritional needs for adults:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Protein Needs (g/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Adults</td>
<td>0.8</td>
</tr>
<tr>
<td>Elderly Adults</td>
<td>0.8-1.0</td>
</tr>
<tr>
<td>Under Catabolic Stress</td>
<td>1.0-2.0</td>
</tr>
</tbody>
</table>

5. Protein requirements are based on grams of protein per kilogram of ABW or DBW and are condition-specific; the following are formulas used to calculate protein requirements for specific patient statuses:

### Protein Needs*

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Fluid Needs (mL/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-30</td>
<td>40</td>
</tr>
<tr>
<td>20-55</td>
<td>35</td>
</tr>
<tr>
<td>55-75</td>
<td>30</td>
</tr>
<tr>
<td>&gt; 75</td>
<td>25</td>
</tr>
</tbody>
</table>

6. Fluid requirements are based on millimeters of free water fluid per kilogram of ABW and are condition-specific; a minimum of 1500 mils recommended unless contraindicated by patient's clinical condition; the following are fluid requirements for specific patient statuses:

### Fluid Needs*

7. The following should be considered when assessing a patient's nutritional intake:
   a. Food diary: Use a food diary to record the patient's intake for a 24-hour period. Clinicians may use any tool for recording food intake; however, consideration should be given to provide directions appropriate to the patient and/or caregiver's abilities.
   b. To determine the patient's understanding of diet instructions use the following guide:
      - Can patients do the following?
        1. Name 3 foods and portion sizes allowed on their diet
        2. Identify the times of the day they are supposed to eat meals.
        3. Identify a 1-cup, 2-cup, 1-tablespoon and 1-teaspoon measuring utensil from their kitchen.
        4. Name a snack food they are allowed to eat on their diet.
        5. Describe a sample menu for 1 day.
        6. Tell you the name of their diet and the reason why is important to follow the diet.
AFTERCARE:

1. Document the following in the patient's medical record:
   a. Height: measure at least annually for patients 65 years or older.
   b. Weight: Frequency per physician's orders or at least monthly.
   c. Nutrient requirements: State method used and show calculations for listing calories, protein, and fluid requirements; these parameters should be recalculated whenever the patient's condition changes.
   d. Comparison between food intake nutrient levels and requirement of nutrients
   e. Modifications suggested to patient/caregiver.
   f. Communication to physician and/or caregivers
   g. Referrals to other disciplines.

References:


PURPOSE:
To provide direct nutritional route when oral route cannot be utilized.

CONSIDERATIONS:
1. The first gastrostomy tube (G-tube) change is commonly done by the physician.
2. Tubes are usually changed as ordered by the physician. Silicone tubes have longer life than latex tubes.
3. A specific G-tube should be used whenever possible. Foley catheters are not designed for this use and must be changed more often than G-tubes made for this use. In addition, Foley catheters do not have an external bumper and will migrate if an external stabilization device is not used.
4. Review feeding technique with patient/caregiver to be sure it is done correctly.
5. Special skin care is required if skin is denuded around stoma. Appropriate skin protective products may be applied until denuded area is healed.
6. Per Joint Commission recommendations, all tubes and catheters should be labeled to prevent the possibility of tubing misconnections.
7. Staff should emphasize to all patients the importance of contacting a clinical staff member for assistance when there is an identified need to disconnect or reconnect devices.

EQUIPMENT:
Foley catheter or G-tube balloon of prescribed size (if specific size not ordered, replace with size currently in use)
Sterile 30 mL catheter-tip syringe
Bottle of sterile water (50 mL) and syringe
4x4 dressings or tracheostomy dressing (optional)
Paper/cloth tape
Basin with soap and water
Towels
Stethoscope
Catheter plug
Suture set (if G-tube sutured)
Water-soluble lubricant
Skin-care products, as indicated
Gloves

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Assemble and prepare equipment and supplies needed.
4. Place patient in supine position.
5. Deflate balloon and remove Foley catheter. (Occasionally, gastrostomy tube will be sutured and suture will have to be removed prior to reinsertion of catheter.)

[Note: Note the distance between distal tip of tube (gastric end) and “skin level” point on tube. Mark new catheter to indicate appropriate depth of insertion.]
6. Wash stoma with soap and water. Pat dry.
7. Open catheter pack and Foley catheter package and place wet-proof towel near abdomen.
8. Lubricate catheter with water-soluble lubricant.
9. With moderate pressure, gently insert catheter along gastrostomy pathway until it passes into stomach, approximately 4 to 6 inches.
10. Test catheter placement by aspirating gastric contents.
11. Inflate balloon with sterile water (check port to determine amount of water needed).
12. Pull back gently on catheter until slight resistance is obtained and secure with tape using Chevron technique, an external stabilization device or the external bumper on the G-tube.
13. Apply small dressing around tube and tape as indicated.
14. Clamp catheter at distal end with catheter plug.
15. Discard soiled supplies in appropriate containers.
16. Assess fluid amount in balloon every 7 to 10 days. If less than manufacturer’s recommended amount, check for leaks and refill to recommended volume.

AFTER CARE:
1. Leave extra Foley catheter or balloon replacement G-tube in home.
2. Document in patient’s record:
   a. Procedure and observations.
   b. Stoma site appearance.
   c. Patient’s response to procedure.
   d. Instructions given to patient/caregiver.
   e. Communication with physician.
PURPOSE:
To remove hardened or putty-like stools from the rectum to prevent interference with the normal passage of feces.

CONSIDERATIONS:
1. Explain treatment and procedure to patient as well as teach that proper diet, sufficient fluid intake and adequate exercise will assist in preventing further impactions.
2. The nurse should assess for impaction when patient has poor results from an enema, when the rectal tube is inserted with difficulty or when there is a history of no elimination for a long period of time.
3. Obtain physician order for both manual disimpaction and enemas.

EQUIPMENT:
- Plastic-lined under pads
- Disposable enema set with castile soap or oil retention enema
- Bedpan
- Toilet tissue
- Gloves
- Disposable apron
- Water-soluble lubricant

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Position patient on left side, if possible, with right knee flexed.
4. Administer cleansing or oil retention enema. This step may not be possible due to severe impaction; therefore, proceed to Step 5 after completing Step 3.
5. Lubricate index finger liberally.
6. Advise patient to breathe with mouth open.
7. MUST OBTAIN SPECIFIC PHYSICIAN ORDER FOR MANUAL DISIMPACTION: Insert index finger into rectum and remove fecal particles by finger manipulation. Gently stimulate the anal sphincter by two or three circular motions of the finger before finger is removed (this stimulates peristalsis and aids evacuation). Discontinue treatment if bleeding or any untoward reaction occurs, e.g., extreme pain, shock, etc. Notify physician immediately.
8. Follow removal of impaction with a cleansing enema.
9. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Cleanse reusable equipment, rinse, dry and replace in proper place.
2. Document in patient's record:
   a. Procedure and observations.
   b. Results.
   c. Patient's response to procedure.
   d. Instructions given to patient/caregiver.
ESTIMATING PATIENT HEIGHT AND WEIGHT

ESTIMATING HEIGHT (cm)

<table>
<thead>
<tr>
<th>Males</th>
<th>Formula for Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>White 6-18 years</td>
<td>[KH(cm) \times 2.22] + 40.54</td>
</tr>
<tr>
<td>Black 6-18 years</td>
<td>[KH(cm) \times 2.18] + 39.60</td>
</tr>
<tr>
<td>White 19-59 years</td>
<td>[KH(cm) \times 1.88] + 71.85</td>
</tr>
<tr>
<td>Black 19-59 years</td>
<td>[KH(cm) \times 1.79] + 73.42</td>
</tr>
<tr>
<td>White 60-80 years</td>
<td>[KH(cm) \times 2.08] + 59.01</td>
</tr>
<tr>
<td>Black 60-80 years</td>
<td>[KH(cm) \times 1.37] + 95.79</td>
</tr>
</tbody>
</table>

Use the following formula to convert height from centimeters to inches:

\[
\text{Height in inches} = \frac{\text{Height in cm}}{2.54}
\]

ESTIMATING WEIGHT (kg)

<table>
<thead>
<tr>
<th>Males</th>
<th>Formula for Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>White 6-18 years</td>
<td>[KH(cm) \times 0.68] + [MAC(cm) \times 2.64] – 50.08</td>
</tr>
<tr>
<td>Black 6-18 years</td>
<td>[KH(cm) \times 0.59] + [MAC(cm) \times 2.73] – 48.32</td>
</tr>
<tr>
<td>White 19-59 years</td>
<td>[KH(cm) \times 1.19] + [MAC(cm) \times 3.21] – 86.82</td>
</tr>
<tr>
<td>Black 19-59 years</td>
<td>[KH(cm) \times 1.09] + [MAC(cm) \times 3.14] – 83.72</td>
</tr>
<tr>
<td>White 60-80 years</td>
<td>[KH(cm) \times 1.10] + [MAC(cm) \times 3.07] – 75.81</td>
</tr>
<tr>
<td>Black 60-80 years</td>
<td>[KH(cm) \times 0.44] + [MAC(cm) \times 2.86] – 39.21</td>
</tr>
</tbody>
</table>

Use the following formula to convert weight in kilograms to pounds:

\[
\text{Weight (lbs)} = \text{Weight(kg)} \times 2.2
\]
FOOD RECORD FOR MEALS/SNACKS

Keeping a food record will help your dietitian or nurse get a better idea of food items, calories or nutrients you are eating. You will have one sheet for each day the dietitian has asked you to record. This may seem like a lot of work, but it will help us help you!

Instructions:

- Please write down everything you eat and drink each day; be as specific as you can. Include meal or snack times.

- Include the name of every food you eat
  
  Examples: Not just sandwich, but bologna sandwich  
  Not just salad, but lettuce and tomato salad

- Include the amount of each kind of food and beverage you have.
  
  Examples: 2 slices rye bread with 2 slices bologna and 1 tablespoon mayonnaise  
  1 cup of black coffee with 2 teaspoons sugar

- Include whether food was raw or cooked; if cooked, tell how.
  
  Examples: 2 fried eggs, 2 slices roast chicken with gravy

- Include brand names.

- Include SUPPLEMENTS like Ensure, Sustacal.

THANK YOU FOR YOUR HELP!

______________________________________
Clinical Dietitian or Nurse
FOOD RECORD FOR MEALS AND SNACKS

Name: ____________________________________________

Vitamin? □ Yes □ No Brand: ______________________ Date ____________

Please complete the following information for all foods and beverages eaten on this day.

<table>
<thead>
<tr>
<th>Meal</th>
<th>Time</th>
<th>Food (Only 1 food per line)</th>
<th>Amount Eaten</th>
<th>Brand</th>
<th>Cooking Method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>

Last Update 9/10

Strength of Evidence Level: 3

Digestive – Appendix B – Nutritional Assessment: Food Record for Meals/Snacks

SECTION: 2

__RN__LPN/LVN__HHA
Complete the screen by filling in the boxes with the appropriate numbers. Total the numbers for the final screening score.

### Screening

<table>
<thead>
<tr>
<th>A</th>
<th>Has food intake declined over the past 3 months due to loss of appetite, digestive problems, chewing or swallowing difficulties?</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>severe decrease in food intake</td>
</tr>
<tr>
<td>1</td>
<td>moderate decrease in food intake</td>
</tr>
<tr>
<td>2</td>
<td>no decrease in food intake</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B</th>
<th>Weight loss during the last 3 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>weight loss greater than 3 kg (6.6 lbs)</td>
</tr>
<tr>
<td>1</td>
<td>does not know</td>
</tr>
<tr>
<td>2</td>
<td>weight loss between 1 and 3 kg (2.2 and 6.6 lbs)</td>
</tr>
<tr>
<td>3</td>
<td>no weight loss</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C</th>
<th>Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>bed or chair bound</td>
</tr>
<tr>
<td>1</td>
<td>able to get out of bed / chair but does not go out</td>
</tr>
<tr>
<td>2</td>
<td>goes out</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D</th>
<th>Has suffered psychological stress or acute disease in the past 3 months?</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>yes</td>
</tr>
<tr>
<td>2</td>
<td>no</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E</th>
<th>Neuropsychological problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>severe dementia or depression</td>
</tr>
<tr>
<td>1</td>
<td>mild dementia</td>
</tr>
<tr>
<td>2</td>
<td>no psychological problems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F1</th>
<th>Body Mass Index (BMI) (weight in kg) / (height in m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>BMI less than 19</td>
</tr>
<tr>
<td>1</td>
<td>BMI 19 to less than 21</td>
</tr>
<tr>
<td>2</td>
<td>BMI 21 to less than 23</td>
</tr>
<tr>
<td>3</td>
<td>BMI 23 or greater</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F2</th>
<th>Calf circumference (CC) in cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>CC less than 31</td>
</tr>
<tr>
<td>3</td>
<td>CC 31 or greater</td>
</tr>
</tbody>
</table>

**Screening score**

(max. 14 points)

- 12-14 points: Normal nutritional status
- 8-11 points: At risk of malnutrition
- 0-7 points: Malnourished

For a more in-depth assessment, complete the full MNA® which is available at [www.mna-elderly.com](http://www.mna-elderly.com)


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For more information: [www.mna-elderly.com](http://www.mna-elderly.com)
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Let’s eat for the health of it

Start by choosing one or more tips to help you...

- Build a healthy plate
- Cut back on foods high in solid fats, added sugars, and salt
- Eat the right amount of calories for you
- Be physically active your way
Build a healthy plate

Before you eat, think about what goes on your plate or in your cup or bowl. Foods like vegetables, fruits, whole grains, low-fat dairy products, and lean protein foods contain the nutrients you need without too many calories. Try some of these options.

**Make half your plate fruits and vegetables.**
- Eat red, orange, and dark-green vegetables, such as tomatoes, sweet potatoes, and broccoli, in main and side dishes.
- Eat fruit, vegetables, or unsalted nuts as snacks—they are nature’s original fast foods.

**Switch to skim or 1% milk.**
- They have the same amount of calcium and other essential nutrients as whole milk, but less fat and calories.
- Try calcium-fortified soy products as an alternative to dairy foods.

**Make at least half your grains whole.**
- Choose 100% whole-grain cereals, breads, crackers, rice, and pasta.
- Check the ingredients list on food packages to find whole-grain foods.

**Vary your protein food choices.**
- Twice a week, make seafood the protein on your plate.
- Eat beans, which are a natural source of fiber and protein.
- Keep meat and poultry portions small and lean.

**Keep your food safe to eat**—learn more at www.FoodSafety.gov.

Cut back on foods high in solid fats, added sugars, and salt

Many people eat foods with too much solid fats, added sugars, and salt (sodium). Added sugars and fats load foods with extra calories you don’t need. Too much sodium may increase your blood pressure.

**Choose foods and drinks with little or no added sugars.**
- Drink water instead of sugary drinks. There are about 10 packets of sugar in a 12-ounce can of soda.
- Select fruit for dessert. Eat sugary desserts less often.
- Choose 100% fruit juice instead of fruit-flavored drinks.

**Look out for salt (sodium) in foods you buy—it all adds up.**
- Compare sodium in foods like soup, bread, and frozen meals—and choose the foods with lower numbers.
- Add spices or herbs to season food without adding salt.

**Eat fewer foods that are high in solid fats.**
- Make major sources of saturated fats—such as cakes, cookies, ice cream, pizza, cheese, sausages, and hot dogs—occasional choices, not everyday foods.
- Select lean cuts of meats or poultry and fat-free or low-fat milk, yogurt, and cheese.
- Switch from solid fats to oils when preparing food.*

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*Examples of solid fats and oils*

<table>
<thead>
<tr>
<th>Solid Fats</th>
<th>Oils</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef, pork, and chicken fat</td>
<td>Canola oil</td>
</tr>
<tr>
<td>Butter, cream, and milk fat</td>
<td>Corn oil</td>
</tr>
<tr>
<td>Coconut, palm, and palm kernel oils</td>
<td>Cottonseed oil</td>
</tr>
<tr>
<td>Hydrogenated oil</td>
<td>Olive oil</td>
</tr>
<tr>
<td>Partially hydrogenated oil</td>
<td>Peanut oil</td>
</tr>
<tr>
<td>Shortening</td>
<td>Safflower oil</td>
</tr>
<tr>
<td>Stick margarine</td>
<td>Sunflower oil</td>
</tr>
<tr>
<td></td>
<td>Tub (soft) margarine</td>
</tr>
<tr>
<td></td>
<td>Vegetable oil</td>
</tr>
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</table>
Eat the right amount of calories for you

Everyone has a personal calorie limit. Staying within yours can help you get to or maintain a healthy weight. People who are successful at managing their weight have found ways to keep track of how much they eat in a day, even if they don’t count every calorie.

Enjoy your food, but eat less.

- Get your personal daily calorie limit at www.ChooseMyPlate.gov and keep that number in mind when deciding what to eat.
- Think before you eat…is it worth the calories?
- Avoid oversized portions.
- Use a smaller plate, bowl, and glass.
- Stop eating when you are satisfied, not full.

Cook more often at home, where you are in control of what’s in your food.

When eating out, choose lower calorie menu options.

- Check posted calorie amounts.
- Choose dishes that include vegetables, fruits, and/or whole grains.
- Order a smaller portion or share when eating out.

Write down what you eat to keep track of how much you eat.

If you drink alcoholic beverages, do so sensibly—limit to 1 drink a day for women or to 2 drinks a day for men.

Be physically active your way

Pick activities that you like and start by doing what you can, at least 10 minutes at a time. Every bit adds up, and the health benefits increase as you spend more time being active.

Note to parents

What you eat and drink and your level of physical activity are important for your own health, and also for your children’s health.

You are your children’s most important role model. Your children pay attention to what you do more than what you say.

You can do a lot to help your children develop healthy habits for life by providing and eating healthy meals and snacks. For example, don’t just tell your children to eat their vegetables—show them that you eat and enjoy vegetables every day.
Use food labels to help you make better choices

Most packaged foods have a Nutrition Facts label and an ingredients list. For a healthier you, use this tool to make smart food choices quickly and easily.

Check for calories. Be sure to look at the serving size and how many servings you are actually consuming. If you double the servings you eat, you double the calories.

Choose foods with lower calories, saturated fat, trans fat, and sodium.

Check for added sugars using the ingredients list. When a sugar is close to first on the ingredients list, the food is high in added sugars. Some names for added sugars include sucrose, glucose, high fructose corn syrup, corn syrup, maple syrup, and fructose.

Dietary Guidelines for Americans

The Dietary Guidelines for Americans, 2010 are the best science-based advice on how to eat for health. The Guidelines encourage all Americans to eat a healthy diet and be physically active.

Improving what you eat and being active will help to reduce your risk of chronic diseases such as diabetes, heart disease, some cancers, and obesity. Taking the steps in this brochure will help you follow the Guidelines.

For more information, go to:
• www.DietaryGuidelines.gov
• www.ChooseMyPlate.gov
• www.Health.gov/paguidelines
• www.HealthFinder.gov

The U.S. Departments of Agriculture and Health and Human Services are equal opportunity providers and employers.
There are so many benefits to maintaining a healthy weight—and fitting into your 5-year-old jeans is just about the least important one! But who decides what a healthy weight is? And how can you find out what your healthy weight is?

Why should you aim for a healthy weight?
You hear it all the time these days. The United States, we are told, is becoming an overweight nation. Obesity has reached epidemic proportions, and it is a major public health concern. But is all this fuss justified? It would seem so. The statistics are scary. At this point, two of every three American adults are overweight or obese. Overweight and obesity put people at risk for a number of health-threatening conditions, including:

- Diabetes
- Heart disease
- High cholesterol
- Stroke
- High blood pressure
- Gallbladder disease
- Arthritis
- Many forms of cancer, including uterine, breast, colorectal, kidney, and gallbladder.

Getting to, and staying at, a healthy weight reduces all of these risks. But just what is a healthy weight? It’s different for each individual. To find your healthy weight, you have to figure out your body mass index—your BMI.

What is the BMI, and how can you find yours?
The BMI is the most commonly used method today for determining whether individuals are overweight, obese, or at a healthy weight. It is an index of weight adjusted for an individual’s height.

If you’re a math whiz, you can figure out your BMI by dividing your weight in pounds by your height in inches squared. The formula looks like this: $BMI = \frac{\text{weight (pounds)}}{\text{height (inches)}^2} \times 703$. If your eyes have already glazed over, don’t despair. You can figure out your BMI using the chart in this handout.

Is your BMI where you want it to be? How does your BMI measure up? Check this chart to find out:

<table>
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While BMI is considered a very reliable method for determining a healthy weight, certain body types might not fit accurately into the classifications. For example, a very muscular woman might fall into the “overweight” category when she is actually fit and healthy. And a woman who has lost muscle mass, such as an elderly woman, may fall into the “healthy weight” category when she is actually malnourished.

Are there other ways to determine a healthy weight?

In addition to your BMI, it’s also a good idea to figure out your waist size; this is a good indicator of your risk for developing diseases associated with overweight. To find your waist size, place a measuring tape snugly around your waist. If your waist measures more than 35 inches, you may be at increased risk (40 inches for men).

Your healthy weight: can you get there from here?

If your weight is not where you want it to be, talk with your physician about what you can do. It’s not easy, but it is possible to lose weight. There are so many different ways to succeed with weight loss these days that you’re sure to find one that works for you. And while a normal-weight BMI should be your ultimate goal, even a smaller weight loss of just 5% to 10% of your body weight (that’s 10 to 20 pounds if you weigh, say, 200 pounds) can make a real difference in your health.
REFERENCES


