Algorithm for prevention of pressure ulcers: nutrition guidelines†

**Trigger Condition:**
- Unintended wt. loss ≥5% in 30 days; ≥10% in 180 days
- BMI = 18.5 \( \text{(weight (lb) / (height (in) x height (in)) x 703)} \) or weight (kg) / (height (m) x height (m))
- Swallowing Problems/dysphagia
- Receiving enteral or parenteral nutrition
- Poor oral intake
- At risk of developing pressure ulcer (i.e., low score on Braden Scale§)
- Immobility
- Infections (i.e., respiratory, urinary tract, gastrointestinal)
- Decline in ADLs (activities of daily living)
- Other selected conditions per facility

† Body Mass Index
§ Braden BJ & Bergstrom N. Decubitus 1989;2(3):44

**Dietitian Assessment:**
- Current weight/height
- Determine deviation from Usual Body Weight
- Body Mass Index (BMI)
- Interview for Food Preferences/Intolerances
- Determine nutritional needs
  1. Calories 30-35 kcal/kg body wt (BW)†
  2. Protein 1.25-1.5 g/kg
  3. Fluid (1 mL fluid per calorie intake/d or minimum of 1500 mL/day or per medical condition)
- Compare nutrient intake with nutritional needs: assess adequacy
- Laboratory values (within 30 days)
  1. Serum protein levels may be affected by inflammation, renal function, hydration and other factors and do not reflect nutritional status
  2. Consider lab values as one aspect of the assessment process. Refer to facility policy for specific labs
- Risk factors for pressure ulcer development
  1. Medical history
  2. Validated risk assessment (i.e., Braden Scale)
  3. Malnutrition (use screening tool, e.g., Mini Nutritional Assessment (MNA® for > 65 years located at www.mna-elderly.com)
  4. Medical Treatments
  5. Medications (review type of medications)
  6. Ability to meet nutritional needs orally (if inadequate, consider alternative method of feeding) consistent with individual’s wishes
  7. Oral Problems (e.g. chewing, swallowing) EAT-10: A Swallowing Screening Tool available at Nestlé Nutrition Institute (www.nestlenutrition-institute.org)

**Considerations:**
- Incorporate fortified foods at meals for weight gain
- Provide supplements between meals as needed
- Vary the type of supplements offered to prevent taste fatigue
- Provide preferred food/food substitutions
- At admission weigh weekly x 30 days and then monthly
- Monitor acceptance of food and/or supplements offered
- Monitor tolerance of oral nutritional supplements, e.g., diarrhea
- Provide a vitamin/mineral supplement, if intake is poor
- Provide assistance at meal time, if needed
- Encourage family involvement
- Offer food/fluid at appropriate texture for condition
- Liberalize restrictive diets
- Consult with Pharmacist and provide food and drugs at appropriate times and amounts
- Consider alternative method of feeding and if consistent with individual’s wishes and goals of therapy:
  1. Provide tube feeding to meet needs per assessment
  2. Monitor tolerance, if needed recommend a specialty formula
  3. Provide parenteral nutrition when gut is non-functioning

At nutrition risk? yes

No

Monitor Status as needed or following a change in condition

Yes

Provide Nutrition Therapy

At nutrition risk?

Re-assess & Document as needed


† These are general guidelines based on various clinical references and are not intended as a substitute for medical advice or existing facility guidelines. An individual assessment is recommended.

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Algorithm for Treatment of Pressure Ulcers: Nutrition Guidelines†

**Trigger Condition:**
Medical records confirm presence of Pressure Ulcer/s

**Assess:**
- Caloric needs: $30-35 \text{ kcal/kg body wt (BW)}$
- Protein needs: $1.25 \text{ g - 1.5 g/kg BW}$
- Fluid needs: $1 \text{ mL/kcal or minimum of 1500 mL/day (unless medically contraindicated)}$
- Evaluate current dietary intake
- Evaluate amount and quality of protein provided

**Dietitian Assessment:**
- Current weight/height
- Determine deviation from Usual Body Weight
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  1. Medical history
  2. Validated risk assessment (i.e. Braden Scale)
  3. Malnutrition (screening tool i.e., Mini Nutritional Assessment (MNA® for >65 years located at www.mna-elderly.com)
  4. Medical treatments
  5. Medications (type of medications)
  6. Ability to meet nutritional needs orally (if inadequate, consider alternative method of feeding) consistent with individual’s wishes
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**Considerations:**
- Incorporate fortified foods at meals for weight gain
- Provide supplements between meals as needed
- Vary the type of supplements offered to prevent taste fatigue
- Provide preferred fluids with meds
- Consider hydration pass between meals
- Provide preferred fluids with meds
- Fortified Foods
- Weekly weights
- Consider Oral Supplements

**Document Plan for Fluid/Protein Intake**
- Consider hydration pass between meals
- “MVI* to meet Dietary Recommended Intakes
- Fortified Foods
- Weekly weights
- Consider Oral Supplements

**Consult Prevention Plan plus**
- Consider: High protein formula
- Consider: Lower carbohydrate formula
- Consider: Peptide-based, high MCT formula
- Consider: Lower electrolyte formula

**Outcome**
- If goal of therapy is complete healing, monitor with PUSH Tool, Document as needed

**Document Plan: RD follows NCP**
- Vitamin/mineral supplement
- Fortified Foods
- Weekly weights
- Consider Oral Supplements

**Consider Prevention Plan plus**
- Consider: MVI* to meet Dietary Recommended Intakes
- Fortified Foods
- Weekly weights
- Consider Oral Supplements

**Consult Prevention Plan plus**
- Consider: High protein formula
- Consider: Lower carbohydrate formula
- Consider: Peptide-based, high MCT formula
- Consider: Lower electrolyte formula

**Reassess weekly, document:**
- Formula tolerance: meeting 100% of estimated nutritional needs from TF formula and modular/s as needed

**Reassess as needed & document**
- If goal of therapy is complete healing, monitor with PUSH Tool, Document as needed

**Considerations:**
- Incorporate fortified foods at meals for weight gain
- Provide supplements between meals as needed
- Vary the type of supplements offered to prevent taste fatigue
- Provide preferred food/fluids at appropriate times and amounts
- Liberalize restrictive diets
- Consult with pharmacist and provide food and drugs at appropriate times and amounts

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- Liberalize restrictive diets
- Consult with pharmacist and provide food and drugs at appropriate times and amounts

**Consideration:**
- Consider alternative method of feeding and if consistent with individual’s wishes and goals of therapy:
  - Provide parenteral nutrition for non-functioning GI tract

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