

POLICY AND PROCEDURE MANUAL
Nutrition Care

Policy #: **NP 9.0**

POLICY TITLE: Nutrition Therapy Role for Skin and Wound Care in HealthEast Hospitals.

POLICY: At HealthEast there is an organized facility system for the identification of patients with pressure ulcers or the potential for them, and a Nutrition Protocol will be initiated as part of the interdisciplinary treatment for these patients.

PURPOSE: By identification of patients with pressure ulcers or at risk of developing pressure ulcers, early intervention including nutrition will prevent further tissue breakdown and promote healing.

PROCEDURE:

1. Patients will be assessed by a qualified Dietitian, a) in acute care: when the Braden score is <15 for 2 consecutive days, b) in long term acute care: when the Braden score is <15.
 - Nutrition Therapy will receive a daily report of Braden Risk on patients in facilities using computerized charting and may receive a RD consult.
 - Nutrition Therapy will receive the admission Braden score on the Nursing Admission Nutrition Screen paper form in facilities using paper admission nutrition screen form and may receive a RD consult.
2. Nutrition risk will be determined based on the Nutrition Therapy Policy/Procedure for Determining Levels of Care. If appropriate, the patient may be placed on a nutrition protocol for Skin and Wound Care.
3. The dietitian will be notified of patients with any new wounds by nursing.
4. Part of the assessment process may include a comparison of actual patient intake to calculated needs.
5. Blood glucose levels will be monitored with a goal BG level ≤ 180 to aid in improved wound healing.
6. Guidelines to be used when calculating nutritional needs of patients with impaired skin integrity are based on guidelines from the American Society of Parenteral and Enteral Nutrition and the American Dietetic Association: Dietitians in Nutrition Support. Nutritional provisions may be adjusted based on individual patient needs and clinical judgment.
 - a. Protein requirements based on 1-2 g protein/kg of body weight. May be increased due to draining wounds and/or fistulae. *Refer to protocol.*
 - b. Fluid Requirements based on 25-35 ml/kg of body weight (1500 ml minimum). May be increased due to evaporation from an open wound bed, severe pressure ulcers, draining wounds, or fever. *Refer to protocol.*
 - c. Calorie requirements based on 25-40 kcal/kg of body weight. *Refer to protocol.*
 - d. Vitamin/mineral supplementation will be recommended if appropriate. Dietitian may order and adjust vitamin/mineral supplementation per protocol.
 1. Vitamin A should not be used in patients with a documented history of or current cirrhosis, jaundice, liver failure or significantly elevated LFT's.
 2. Vitamin C dose should be adjusted for patients with documented history of or current chronic or acute renal failure.
 - e. Dietitian may order albumin and/or pre-albumin levels to be checked when necessary to monitor patient response to nutrition therapy.

7. Patients will be monitored for response to nutrition care per Nutrition Therapy Continuum of Care Model. (Special attention will be given to weight changes, wound healing, GI tolerance of nutrition, albumin, prealbumin and/or additional laboratory values.)
8. The Nutrition Therapy Protocol for wound healing is approved for use in HealthEast facilities for the prevention and treatment of skin breakdown.

Submitted by: HE Directors of Nutrition Services
HE Clinical Nutrition Managers

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Revised: 4/04, 6/04, 6/05, 1/06, 3/08

Authorized by: Nutrition Support Committee
Pharmacy & Therapeutics Committee

Other Reference:

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Nutrition Therapy Protocol for Adult Patients with Pressure Ulcers/Wounds

Nutritional provisions may be adjusted based on individual patient needs and clinical judgment.

STAGE	TOTAL CALORIES ¹ <i>See below for obese patients.²</i>	PROTEIN ¹ <i>See below for obese patients.²</i>	FLUID ¹	MULTIVIT AND MINERALS	VITAMIN C	ZINC	VITAMIN A <i>(Do not use in renal or liver failure.)</i>
Prevention in at-risk patients	-25-35 kcal/kg -Weekly weights -Liberalize diet -Pro/Kcal supplement	1-1.5gm/kg	≥30-35ml/kg (minimum of 1500 ml)	Multivitamin ³ with mineral 1 q day (if oral/enteral intake does not meet 80-100% RDA/DRI)			
STAGE I Skin may appear red/ blue/purple, and/or feel firm or boggy.	≥25 kcal/kg	1 -1.2gm/kg	≥30ml/kg (minimum of 1500 ml)	Multivitamin ³ with mineral 1 q day (if oral/enteral intake does not meet 80-100% RDA/DRI)			-RDA/RDI -Increase up to 25,000 IU daily x 10 days ⁴
STAGE II Partial thickness, abrasion, blister or shallow crater.	25-30 kcal/kg	1.25-1.5gm/kg	≥30ml/kg (minimum of 1500 ml)	Multivitamin ³ with mineral 1 per day (in addition to oral/enteral intake)	500mg q day or BID 0-250mg q other day in renal failure	220mg ZnSO4 q day x 14 days	-RDA/RDI -Increase up to 25,000 IU daily x 10 days ⁴
STAGE III Full thickness, necrosis, deep crater w/ or w/o undermining.	30-35 kcal/kg	1.5-1.8gm/kg	-30-35 ml/kg (minimum of 1500 ml) -25ml/kg w/ fluid retention	Multivitamin ³ with mineral 1 per day (in addition to oral/enteral intake)	500mg q day or BID 0-250mg q other day in renal failure	220mg ZnSO4 q day x 14 days	-RDA/RDI -Increase up to 25,000 IU daily x 10 days ⁴
STAGE IV Full thickness, necrosis, undermining, sinus tracts, damage to muscle/bone.	30-40 kcal/kg	1.5-2.0gm/kg Can exceed 2.0 depending on size, number, and amount of drainage	-30-35ml/kg (minimum of 1500 ml) -25cc/kg w/ fluid retention -Monitor for dehydration at higher protein levels	Multivitamin ³ with mineral 1 per day (in addition to oral/enteral intake)	500mg q day or BID 0-250mg q other day in renal failure	220mg ZnSO4 q day x 14 days	-RDA/RDI -Increase up to 25,000 IU daily x 10 days ⁴
Maximum levels	Needs may be tailored depending on individual needs (IC preferred)	Needs may be tailored depending on individual needs	As tolerated to maintain adequate hydration	Multivitamin ³ with mineral 1 tab BID	Up to 2000mg q day (divided doses); reassess after 10-14 days	220mg ZnSO4 q day x 6 weeks (for ongoing losses)	D/C at 10 days
Parenteral	Same as above	Same as above	Same as above	Multivitamin & minerals <i>(in all HE TPN formulations)</i>	No add'l Vit. C to TPN <i>(due to risk of precipitates)</i>	0-10mg q day x 10 days to TPN	No add'l Vit. A to TPN

Oral/Enteral

¹ Calorie, protein & fluid needs may be tailored based on individual patient needs & diagnoses.

² **OBES PATIENTS:** Total calories based on 14-31 kcal/kg actual body weight or 20-35 kcal/kg adjusted body weight depending on degree of obesity and wound. May use metabolic testing if available. Adjusted body weight calculation: [actual body weight (ABW) - ideal body weight (IBW)] x (0.25-0.5) + IBW. Protein needs based on adjusted body weight depending on degree of obesity.

³ Renal vitamin for patients with renal failure.

⁴ Level of supplementation may exceed the Tolerable Upper Intake limit of 10,000 IU/day if medically indicated. Supplement water soluble ADEK with fat malabsorption. HealthEast has the following tablets available: 10,000 IU and 25,000 IU.