

# Interventions for Pressure Ulcers

## STAGE I

### Provide:

- Adequate calories—30–35 kcal/kg
- Adequate protein—1–1.2 g/kg
- Adequate fluids—25–35 mL/kg
- Daily multivitamin and mineral supplement

### If nutritional intake is inadequate to meet needs, consider:

- Favorite/comfort foods
- Assistance with meals
- Proper positioning
- Emotional support
- Enhanced foods
- Medical nutritional products
- Baseline laboratory data



### Key points to remember

- Evaluate renal function before recommending additional protein
- Each patient has a unique situation; use your clinical judgment to adjust these recommendations
- Document all interventions in the medical record
- Request a medical nutrition therapy (MNT) consultation, if nutrition is a concern

## STAGE II OR SKIN TEARS

### Provide:

- Adequate calories—30–35 kcal/kg
- Adequate protein—1.2–1.3 g/kg
- High-quality protein foods (eg, animal proteins)

(cont'd on other side)

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Interventions for Pressure Ulcers — side 2

(STAGE II OR SKIN TEARS, cont'd)

- Adequate fluids—30–35 mL/kg (add 10–15 mL/kg if on air-fluidized mattress)
- Daily multivitamin and mineral supplement

Consider all Stage I interventions plus:

- Protein module
- Tube feeding if oral intake does not meet needs
- Targeted nutrition supplementation (eg, arginine, glutamine, and HMB for 2- to 4-week trial or until documented closure of wound)
- Updated laboratory data

STAGE III AND IV OR DEEP TISSUE INJURY

Provide:

- Adequate calories—30–35 kcal/kg
- Adequate protein—1.3–2.0 g/kg
- High-quality protein foods (eg, animal proteins)
- Adequate fluids—30–35 mL/kg (add 10–15 mL/kg if on air-fluidized mattress)
- Targeted nutrition supplementation (eg, arginine, glutamine, and HMB BID for 2- to 4-week trial or until documented closure of wound)

- Daily multivitamin and mineral supplement
- If suspected nutrient deficiency:
  - Vitamin C—500–1000 mg BID daily
  - Vitamin A—10,000–25,000 IU daily for 7–21 days
  - Zinc—15–50 mg elemental for 2–4 weeks (220 mg zinc sulfate=50 mg elemental zinc)

Consider all Stage II interventions plus:

- Appetite stimulant
- Anabolic agent
- Updated laboratory data

References

Breslow RA, Bergstrom N. Nutritional prediction of pressure ulcers. *J Am Diet Assoc.* 1994;94:1301-1304.

*Treatment of Pressure Ulcers.* Washington, DC: US Department of Health and Human Services, Agency for Health Care Policy and Research; 1994.

Litchford MD. *The Advanced Practitioner's Guide to Nutrition and Wounds.* Greensboro, NC: CASE Software; 2004.

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