

TOP 5 Nutrients for Wound Healing

If you have a pressure ulcer, nutrition becomes especially important. Consume a variety of foods to give your body enough nutrients to help with wound healing.

CALORIES

Having a pressure ulcer increases your calorie needs. You may need to add extra calories to food if you have trouble gaining weight.

Daily Recommendations:

30-35 calories/kilogram of body weight

Sources of extra calories:

- Snack often
- Nuts, seeds and nut butters
- Vegetable oil, butter, cream
- Avocado



PROTEIN

Protein is necessary to make and repair tissue. You may need extra protein if you have a large or draining wound or if you are underweight.

Daily Recommendations:

1-1.5 grams/kilogram of body weight

*Over 2 g/kg/day may not improve wound healing and may contribute to dehydration in the elderly

Sources of extra protein:

- Beef, poultry, pork, fish, seafood, eggs
- Milk, yogurt, cheese
- Beans, nuts, soy



WATER

Your body needs water to transport nutrients and get rid of waste products.

Daily Recommendations:

At least 8 glasses of water

*More with a draining wound, a very high-protein diet, fever, air-infused beds, or negative pressure wound therapy.

Sources of water:

- Fruits and vegetables
- Juice and milk
- Jell-O
- Popsicles
- Broth-based soups



VITAMIN C

Vitamin C helps prevent damage to your cells and repair tissue. You may need a vitamin C supplement if you have a wound that is difficult to heal or if you don't eat enough fruits and vegetables.

Daily Recommendations:

For clinical or suspected deficiency supplement up to 2,000 mg until resolved.

Recommended Dietary Allowance (RDA) for adults:

75-90 milligrams per day

*Caution in patients with renal failure.

*High doses may cause gastric upset.

Good sources of Vitamin C:

- Citrus fruit & kiwi
- Bell pepper, broccoli, cauliflower



ZINC

You need zinc to make collagen, a major protein in connective tissue necessary for wound healing.

Daily Recommendations:

For clinical deficiency: 40-50 mg of elemental zinc for up to 30 days.

RDA for adults: 8-11 milligrams per day

*You should be able to get enough zinc from food and a daily multivitamin but your needs may be increased if you have heavily draining wounds or if you don't eat enough food.

**To avoid toxicity, stop taking after 30 days. Excess zinc affects copper and iron status and can reduce the immune system.

Good sources of zinc:

- Seafood (especially oysters)
- Beef, pork, chicken
- Yogurt & cheese
- Chickpeas
- Fortified breakfast cereal, oatmeal, cashews



Recipes for Wound Healing

High-Calorie, High-Protein Fruit Smoothie

Nutrition:

320 calories, 60 grams carbohydrate, 19 grams protein

Ingredients:

6 ounces ($\frac{3}{4}$ cup) orange juice

1 banana

6 frozen strawberries (unsweetened)

1 ounce (3 tablespoons) protein powder or powdered non-fat dry milk

Directions:

Place all ingredients in blender. Blend until smooth

Fortified Oatmeal

Nutrition:

355 calories, 8 g protein

Ingredients:

$\frac{1}{3}$ cup oatmeal

$\frac{1}{2}$ cup half-and-half

$\frac{1}{2}$ cup water

$\frac{1}{3}$ tablespoon margarine or butter

Brown sugar to taste

Directions:

Measure half-and-half, water, and margarine or butter into saucepan. Bring to a boil. Add oatmeal and cook until thick. Serve with brown sugar on top.

Fortified Milk

Nutrition:

211 calories and 14 grams of protein per 1-cup serving

Ingredients:

1 quart whole or low-fat milk (can substitute soymilk or lactose-free milk)

1 cup powdered non-fat dry milk or protein powder

Optional: fresh or frozen fruit, chocolate syrup

Directions:

Blend and chill for at least 6 hours.