Patient Education

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Getting Enough \\ \section*{\title{
Getting Enough Protein and Protein and Calories Calories \\ \\ \\ Nutrition to support your healing
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Your body needs more protein and calories for wound healing and when you are ill, receiving treatment, and recovering.

This handout will help you:

- Identify high-protein, high-calorie foods.
- Learn ways to increase protein and calories in your diet.

These are guidelines only. It is best to talk about your specific dietary needs with a dietitian or diet technician.

Proper nutrition supports the healing process and helps your body maintain weight and fight infections. Do not limit or restrict your food intake until your healing is complete and you have recovered fully. Your body needs more nutrients than normal to heal well.

## Your Nutrient Needs

Your nutrient needs are based on your ideal body weight.

- Your ideal body weight is: $\qquad$ kilograms ( $\qquad$ pounds).
- Based on this weight, you need: $\qquad$ grams of protein each day. This is $\qquad$ servings of protein.
- Your calorie needs are: $\qquad$ calories each day.


## Protein Sources

This is a list of high-quality protein foods. The amount given is equal to 1 protein serving, or 7 grams of protein.

- 1 ounce of any cooked fish, poultry, or lean meat
- 1 ounce of hard cheese, such as Swiss or cheddar
- 1 egg or $1 / 4$ cup liquid egg substitute
- 1 cup milk (skim, $1 \%, 2 \%$, or whole)
- $1 / 4$ cup dry powdered milk
- 1 cup yogurt (low-fat or nonfat)
- $1 / 4$ cup canned tuna or salmon
- 2 tablespoons peanut butter
- 1 cup pudding
- 3/4 cup custard

One protein serving equals about 7 grams of protein.

- $1 / 4$ cup firm tofu
- 3/4 cup ice milk
- 6 medium cooked oysters
- 2 ounces of shrimp, clams, lobster, scallops, or crab
- $1 / 2$ cup cooked peas or beans
- 1 ounce nuts
- $1 / 4$ cup cottage cheese


## Boosting Protein

Here are some tips for adding protein to your diet:

- Add 1 cup skim milk powder to a quart of whole milk (see recipe for Milk Mixture on page 5). Blend and chill. Use this Milk Mixture for cooking as well as drinking.
- Use milk, Milk Mixture, evaporated milk, or cream instead of water for cooking hot cereal. Also use these liquids instead of water to make instant cocoa, canned soups, custards, and pudding.
- Add extra pureed or chopped meat or tofu to scrambled eggs, omelets, or soups. For example, add chicken to cream of chicken soup, ham to split pea soup, or beef to tomato soup.
- Add chopped, hard-cooked eggs to sauces, soups, casseroles, and to chicken or tuna salads. Blend egg substitute into fruit juice, eggnog, or milkshakes. Eat desserts, such as custard, that are made with eggs.
- Spread peanut butter on toast, crackers, or raw fruit or vegetables. Try it on apple slices, bananas, and celery.
- A snack of salted or unsalted nuts or roasted soybeans will add extra protein as well as calories to your diet.
- Breakfast bars, granola bars, and yogurt make good betweenmeal snacks.
- Try supplements or special drinks (see pages $3,4,5$, and 6 ).
- Add grated cheese to vegetables, sauces, soups, and casseroles. Melt a slice of cheese on an English muffin. Cottage cheese and fruit or cheese and crackers are good between-meal snacks.


## Boosting Calories

These tips will help you add calories to your diet:

- Eat smaller meals more often, or divide meals in half. For example, have an egg and toast for breakfast and then have some fruit and cereal for a midmorning snack.
- Add butter or margarine to hot cereal, eggs, cooked vegetables, mashed potatoes, pasta, rice, noodles, crackers, and soups.
- Use gravies and sauces on meats and vegetables. A variety of sauce mixes are available in the grocery store.
- Use sour cream to top fruits, meats, cream soups, and baked potatoes. You can also add it to sauces or scrambled eggs and omelets.
- Use mayonnaise or salad dressing on salads, hard-cooked eggs and sandwiches. Avoid reduced-fat or fat-free products.
- Pour cream or evaporated milk over cereals, puddings, Jell-O, and fruit. Make puddings and custard with cream or evaporated milk instead of milk.
- Spread cream cheese and jelly or honey on crackers or English muffins. Sprinkle cinnamon and sugar on buttered toast.
- Eat dried fruits as snacks or add them to baked goods such as muffins or bread.
- Use whipped cream or ice cream on top of pies, Jell-O, pudding, fruit, or cocoa.
- Add avocados to salads. Eat guacamole and chips as a snack.
- Make large casseroles and freeze extra servings for quick snacks later.
- Keep a cooler or a thermos filled with a favorite shake or soup by the side of your bed or chair.


## High-Protein, High-Calorie Supplements

If you find that you cannot eat enough solid food to boost your calories, try adding a liquid protein supplement to your diet. You can buy these supplements at most drugstores and grocery stores. Your pharmacist can order supplements that are not generally stocked.
Most supplements come in a variety of flavors and do not contain lactose. You can add syrups, fruit, instant coffee, or other flavorings to unflavored supplements.

Here are some supplements you may want to try:

| Supplement | Serving Size | Calories in 1 Serving | Protein Grams in 1 Serving | Protein Servings in a Package |
| :---: | :---: | :---: | :---: | :---: |
| Boost* (Nestlé) | 8 oz . | 240 | 10 | $11 / 2$ |
| Boost Plus* (Nestlé) | 8 oz . | 360 | 14 | 2 |
| Boost Diabetic (Nestlé) | 8 oz . | 250 | 13.8 | 2 |
| Boost High Protein (Nestlé) | 8 oz. | 240 | 15 | 2 |
| Ensure* (Abbott) | 8 oz . | 250 | 9 | $11 / 2$ |
| Ensure Plus* (Abbott) | 8 oz . | 355 | 13 | 2 |
| Enlive (Abbott) | 8 oz . | 300 | 10 | $11 / 2$ |
| Resource Boost Breeze (Nestlé) | 8 oz . | 250 | 9 | $11 / 2$ |
| Carnation Instant Breakfast <br> - Powdered (Nestlé) | 8 oz . | 280 | 12 | 2 |
| Carnation Instant Breakfast <br> - Ready-to-drink (Nestlé) | 8 oz . | 200 | 12 | 2 |
| Carnation Instant Breakfast VHC (Nestlé) | 8 oz . | 560 | 22 | 3 |
| Slim-Fast | 11 oz . | 220 | 10 | $11 / 2$ |
| Slim-Fast High Protein | 11 oz . | 190 | 15 | 2 |
| Glucerna Shake (Abbott) | 8 oz . | 220 | 10 | 1 |
| ScandiShake | 1 pkg . | 440 | 5 | 1 |
| Nepro (Abbott) | 8 oz . | 425 | 17 | 1 |
| Benecalorie (Nestlé) | 1.5 oz . | 330 | 7 | 1 |
| Polycose Liquid (Abbott) | 1 tablespoon | 30 | Add to juice, milk, drinks, soup, gravy, or blended foods. |  |
| Polycose Powder (Abbott) | 1 tablespoon | 23 |  |  |
| Protein Powder | A variety of protein powder supplements are available. Mix with foods or beverages. |  |  |  |

*These supplements can also be used in cooking in place of milk.

## Special Drinks

Prepare these drinks at home to supplement your diet as needed. Some flavorings are suggested, but please change them to match your own taste preferences.

## Milk Mixture

Makes four 8-oz. portions
Combine:
1 quart regular whole milk
1 cup powdered milk
Chill well. Use in place of regular milk for cooking or in special drinks.

## Breakfast in a Glass

10 oz. per portion
Blend well:
$1 / 2$ cup whole milk or Milk Mixture
$1 / 4$ cup orange or pineapple juice
$1 / 4$ cup liquid egg substitute
$1 / 2$ banana
1 teaspoon sugar

## Egg Nog

10 oz. per portion
Blend well:
1 cup whole milk or Milk Mixture
$1 / 4$ cup liquid egg substitute
$1 / 2$ teaspoon sugar

High-Protein Shake
12 oz. per portion
Blend until smooth:
$1 / 2$ cup whole milk
1 cup ice cream
1 package Carnation Instant Breakfast

## Basic Banana Smoothie

1 portion
Blend until smooth:
1 cup vanilla $2 \%$ low-fat yogurt 1 frozen banana
3 ice cubes

Per portion:
265 calories
18 grams protein

## Sherbet Drink

10 oz. per portion
Blend well:
$1 / 4$ cup orange juice
$1 ⁄ 2$ cup orange sherbet
Add:
4 ounces soda pop (orange, lemonlime, or cream soda)

## Peanut Butter Smoothie

1 portion
Blend until smooth:
1 cup 2\% low-fat milk
2 tablespoons peanut butter
1 frozen banana

## Crunchy Orange Smoothie

Makes 1 portion
Blend until smooth:
1 cup 2\% low-fat yogurt
2 tablespoons frozen orange juice concentrate
$1 / 2$ cup granola

## Yogurt Shake

8 oz. per portion
Blend until smooth:
$1 / 2$ cup whole milk or Milk Mixture
$1 / 4$ cup fruit yogurt
$1 / 4$ cup soft fresh or canned fruit

Per portion:
215 calories
1 gram protein (0 protein servings)

Per portion:
415 calories
17 grams protein ( $21 / 2$ protein servings)

Per portion:
450 calories
18 grams protein (3 protein servings)

Per portion:
With whole milk:
255 calories
8 grams protein (1 protein serving)
With Milk Mixture:
310 calories
13 grams protein (2 protein servings)

A portion of meat the size of a deck of cards counts as 3 protein servings.

## Questions?

Your questions are important. Call your doctor or health care provider if you have questions or concerns. UWMC clinic staff are also available to help.

Dietitian/
Diet Technician:
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University of Washington

