High Calorie, High Protein Diet

All people need calories and protein found in food for normal body functions and health. Calories provide energy to help keep the body functioning and to do physical work. We need protein to build, maintain and repair body tissue. When there is a need to build new tissue, your calorie, protein and nutrient needs increase. High calorie, high protein diets help to heal wounds, maintain or increase weight, or promote growth, and resist or fight infection. When your wounds are healed and you are at a desirable body weight, you may return to normal eating habits. If you have kidney or liver problems, please talk with a registered dietitian.

**Guidelines**

**Your weight is the best way to tell if you are getting enough calories. Check your weight twice a week.** If your weight decreases each time you weigh yourself, increase the amount of calories in your diet.

**Eat a balanced diet including a variety of foods.** Eat small, frequent meals to increase your calorie and protein intake. Follow these general guidelines:

- Drink at least 2 cups or more of milk if tolerated. Use lactose-free milk if you have a hard time digesting regular milk products. Use whole milk to get the most calories. Also include other milk products such as cheese, ice cream, pudding or yogurt.
- Eat 2 or more 3-ounce servings of meat, poultry or fish, or meat substitute such as eggs, beans, peas, lentils, cheese or peanut butter. Tofu and other soy products may also be used.
- Eat 2 or more servings of fruit or fruit juice each day.
- Eat 3 or more servings of vegetables each day. One choice should be a dark green, leafy or deep yellow-orange vegetable.
- Eat 6 or more servings of bread, grains, cereals or other starchy foods each day. These are all minimum amounts. Try to eat at least the suggested servings each day.

**Concentrate the calories in the foods you eat when possible.** This helps you get more calories with less volume. Liberal use of fats will increase calories in your diet. Add extra butter or margarine to breads, vegetables, pastas and eggs. Use gravies, cheese, mayonnaise and salad dressing liberally. Frying foods may double the calories. Follow these tips to increase the nutritional value in foods:

- Use cream instead of broth-based soups. Dilute with milk or cream instead of water.
- Do not fill up on coffee, tea, broth or water. They supply few nutrients or calories. Drink calorie-containing liquid as juices, milk, yogurt, smoothies, milkshakes, frosties or other blended drinks.
• Use cream on your cereal instead of milk.
• Eat ice cream instead of frozen juice desserts or ices. Add nuts, chocolate syrup and other toppings to make high calorie sundaes.
• Add peanut butter, dip or creamy salad dressings to raw vegetables.
• Make chicken, egg, or tuna salad instead of plain meat or eggs. Stir in grated cheese or hard-cooked eggs to add extra protein.
• Fry chicken or fish instead of baking it.
• Add sour cream, margarine, whipping cream or cheese to potatoes when mashing them.
• Eat noodles and pastas with rich cream sauces.
• Drink beverages after meals.

Eat generous amounts of protein foods such as milk, eggs, meat, fish, poultry or cheese. Include a serving at each meal and snack. Add cheese to eggs, sandwiches and salads. Add dry skim milk powder to soups, casseroles, mashed potatoes, milk and milkshakes, sauces, scrambled eggs, hot cereals. Use milk fortified with skim milk powder to make puddings and custards. Add protein powders to food items such as Jell-O, ice cream, soups, mashed potatoes, gravy, milkshakes, cereals, and applesauce to increase protein in your diet.

Guidelines for adding skim milk powder (Each tablespoon adds 33 calories and 3 grams of protein):
• Cooked cereal: Mix equal measure of skim milk powder and cereal before cooking. Cook as directed on the cereal package.
• Mashed potatoes: Add ½ cup skim milk powder to each 2 cups of mashed potatoes. Use liquid milk to give the right texture.

• Sauces, gravies, soups, custards: Add 4 tablespoons skim milk powder to each cup of fluid milk or ½ cup skim milk powder to each cup of water or broth in the recipe.
• Milk: Add 1 cup skim milk powder to 1 quart whole milk. Use for drinking and in all recipes calling for milk.

Snacks
If you feel full quickly at meals, decrease the size of your meal and eat snacks in between. Snack on foods that are high in calories and protein. Snack ideas:
• Sandwiches made with meat, eggs, fish, peanut butter or cheese
• Peanut butter on crackers, apples, pears or celery
• Milkshakes, chocolate milk, egg nog, cocoa
• Cereal and milk
• Ice cream, puddings, custard, yogurt
• Nuts
• Cheese and crackers

Sweets and snack foods such as candy and chips are alright to eat but have little nutritional value other than calories. Use these foods in moderation so that they do not fill you up and prevent you from including healthier foods.

Nutritional supplements
Commercial nutritional supplements such as Ensure or Boost can also help increase your calories and protein. They have about the same amount of protein and calories as a high calorie milkshake or hamburger. Supplements are convenient and available in most drug or grocery stores. A pharmacist can get a hard-to-find formula or one that your doctor or dietitian recommends.
High calorie, high protein supplements

<table>
<thead>
<tr>
<th>Product</th>
<th>Amount</th>
<th>Calories</th>
<th>Protein in grams</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boost Plus</td>
<td>8 ounces</td>
<td>360</td>
<td>14</td>
</tr>
<tr>
<td>Boost High Protein</td>
<td>8 ounces</td>
<td>240</td>
<td>15</td>
</tr>
<tr>
<td>*Choice DM</td>
<td>8 ounces</td>
<td>220</td>
<td>9</td>
</tr>
<tr>
<td>Carnation Instant Breakfast</td>
<td>8 ounces</td>
<td>280</td>
<td>15</td>
</tr>
<tr>
<td>Carnation Instant Breakfast</td>
<td>8 ounces</td>
<td>280</td>
<td>15</td>
</tr>
<tr>
<td>Ensure</td>
<td>8 ounces</td>
<td>250</td>
<td>9</td>
</tr>
<tr>
<td>Ensure Plus</td>
<td>8 ounces</td>
<td>360</td>
<td>13</td>
</tr>
<tr>
<td>*Glucerna Shake</td>
<td>8 ounces</td>
<td>220</td>
<td>10</td>
</tr>
<tr>
<td>*Boost Diabetic</td>
<td>8 ounces</td>
<td>250</td>
<td>14</td>
</tr>
<tr>
<td>Resource 2.0</td>
<td>8 ounces</td>
<td>480</td>
<td>20</td>
</tr>
<tr>
<td>Carnation Instant Breakfast – Lactose Free VHC</td>
<td>8 ounces</td>
<td>560</td>
<td>23</td>
</tr>
<tr>
<td>Unjury (protein powder)</td>
<td>1 scoop</td>
<td>90</td>
<td>20</td>
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</tbody>
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Please note: Most major grocery chains have store brands and comparable supplements that are lower in price than the name brands.

* For people with diabetes

Sample menu: 2600 calories, 125-145 grams of protein

<table>
<thead>
<tr>
<th>Breakfast</th>
<th>Lunch and Dinner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 serving fruit or juice</td>
<td>3 ounces of meat, fish, eggs, cheese or poultry</td>
</tr>
<tr>
<td>1 egg</td>
<td>1 cup potatoes, rice, noodles, macaroni</td>
</tr>
<tr>
<td>2 waffles, 2 pancakes or 2 slices of toast</td>
<td>½ cup cooked vegetables</td>
</tr>
<tr>
<td>2 teaspoon margarine</td>
<td>1 slice bread</td>
</tr>
<tr>
<td>1 cup high protein milk</td>
<td>2 to 3 teaspoons margarine on bread and vegetables</td>
</tr>
<tr>
<td>Bacon, ham, sausage or other meat</td>
<td>1 cup high protein milk</td>
</tr>
<tr>
<td></td>
<td>Fruit or dessert</td>
</tr>
</tbody>
</table>

Include snacks between meals.

My daily calorie needs: ___________
My daily protein needs: ___________
My daily fluid needs: ___________
Recipes

You may add protein powder, such as Unjury or Beneprotein to any of these shakes to add 90 more calories and 20 grams more protein to the recipe.

**Meal in a Glass**

Yields 1 serving, Calories 345, Protein 15 grams

- 1 envelope (1.22 ounces) vanilla flavored instant breakfast drink
- 1 cup milk
- ¼ cup frozen raspberries, strawberries or blueberries

Blend 5 to 10 seconds on high speed.

Experiment with different flavors of drink mix and fruits. For example, substitute chocolate flavored drink mix and 1 small banana or strawberry flavored drink mix with ¼ cup crushed pineapple.

**Chocolate Peanut Butter Milkshake**

Yield 2 servings, Calories 491 per serving, Protein 12 grams per serving

- 2 cups ice cream
- ½ cup Half and Half
- 1 tsp vanilla flavoring
- 2 ½ tablespoon peanut butter
- 3 tablespoon chocolate syrup

Blend together.

**Frozen Fruit Slush**

Yield 4 servings, Calories 130 per serving, Protein 1 gram per serving

- 6-ounce can frozen fruit juice concentrate
- 4 tablespoons sugar
- 3 cups crushed ice

Put all ingredients together in a blender and blend to desired thickness. Spoon into dishes and serve.

**Easy Blender Fruit Whip**

Yield 4 servings, Calories 89 per serving, Protein 2 ½ grams per serving

- 10-ounce package frozen fruit, cut into small pieces
- 2 tablespoons lemon juice
- 1 tablespoon gelatin powder
- ½ cup boiling water
- ¼ cup egg substitute

Blend gelatin, lemon juice, and boiling water for 40 seconds. Add egg white and blend 10 seconds. Continue to blend while adding frozen fruit one piece at a time. When mixture is blended, pour into a wet mold and chill at least 4 hours before serving.

Talk to your doctor or health care team if you have any questions about your care.

The Library for Health Information is available to help you find more health information at (614) 293-3707 or e-mail: health-info@osu.edu.

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