How does nutrition affect my cancer treatment and recovery?

Good nutrition allows your body to better tolerate cancer therapy with fewer side effects. It can also help you feel better and increase your energy.

It is important to eat enough calories and protein to reach and maintain goal weight. Your body usually needs more calories, protein, and other nutrients during illness, treatment, and recovery.

Proteins make up your lean body tissues. When you do not eat enough protein your body may begin to use lean body tissue for fuel, which may lead to malnutrition. Eating enough calories and protein will prevent malnutrition.

This diet plan provides enough calories and protein to help you reach and maintain your goal weight while allowing the protein you eat to be used for tissue building rather than energy.

Please weigh yourself weekly. If you are at your goal weight, try to stay about the same. If you are underweight, aim for a slow weight gain (½ to 2 pounds per week) until you reach your target. If you are overweight, do not try to lose weight until after your treatment, and then aim for a slow weight loss of not more than ½ to 2 pounds per week.

Adding Protein and Calories to Your Diet

- Eat whenever you are hungry. This may mean eating several small meals throughout the day.
- If you do not get hungry, make an effort to eat regularly. Try to eat at specific meal times with three meals and two or three snacks per day. Do not skip meals!
- Keep a variety of nutritious snack foods around. Try to snack on something every couple of hours. Try a protein shake, yogurt and fruit, or soft muffins.
- Be flexible. If you aren’t hungry in the evenings, make breakfast, mid-morning snacks, and lunch your main meals.

Avoid Eating Anything Plain

- Add healthy unsaturated fats such as olive and canola oil, peanut butter, almond butter, and avocados to foods.
- Add healthy carbohydrates and proteins such as honey, jam, wheat germ, and whey or soy protein powder.
- Add grated cheese to soups, sauces, casseroles, vegetables, mashed potatoes, rice, noodles, and meatloaf.
• Use whole milk, half & half, cream, or enriched milk in cooking and beverages.
• Add skim milk powder for extra protein. Try adding 2 tablespoons of milk powder to the amount of regular milk in recipes.
• Use sour cream or yogurt in gravy or on vegetables such as potatoes, beans, carrots, and squash. You can also use them as salad dressing for fruit.
• Serve cottage cheese with canned or fresh fruit.
• Add grated cheese, tuna, shrimp, crab meat, ground beef, beans, diced ham, or sliced boiled eggs to sauces, soup, rice, casseroles, or noodles.
• Drink shakes, smoothies, milk, and juice in place of water, coffee, tea, and diet sodas.
• Use nutritional supplements such as Carnation Instant Breakfast®, Boost®, or Ensure®. Get the “plus” variety for additional calories and protein.

High-Protein, High-Calorie Recipes

Enriched Milk
1 quart (4 cups) whole milk
1 cup skim milk powder
Put ingredients in blender and blend until milk powder is dissolved. Makes 5 cups.

Nutrition information per cup: 184 calories, 15 grams protein

High-Calorie Carnation Shake
½ cup half & half
¾ cup ice cream
1 package Carnation Instant Breakfast
Blend in blender until smooth. Serves 1.

Nutrition information per serving: 505 calories, 14 grams protein

High-Protein Milkshake
1 cup enriched milk (see first recipe)
1 generous scoop of ice cream
½ teaspoon vanilla
1 tablespoon butterscotch sauce, chocolate sauce, malt powder, or your favorite fruit
Mix all ingredients in a blender on low speed about 10 seconds or until smooth. Serves 1.

Nutrition information per serving: 657 calories, 21 grams protein

Milk-Free Double Chocolate Pudding
2 squares baking chocolate
1 tablespoon cornstarch
¼ cup granulated sugar
1 cup non-dairy creamer or soy milk
1 teaspoon vanilla
Melt chocolate in saucepan or microwave. Measure cornstarch and sugar into a separate medium-size saucepan. Add the creamer bit by bit, stirring until mixture is smooth. Cook this mixture over medium heat until warm. Stir in the melted chocolate and continue cooking until thick. Remove from heat. Blend in vanilla and cool. Serves 2.

Nutrition information per serving: 397 calories, 3 grams protein

Creamy Potato Salad
½ cup plain yogurt (low-fat or whole)
½ cup mayonnaise
¼ cup finely minced onion
1 sprig parsley, finely chopped
¼ cup chopped celery or green pepper
2 potatoes, boiled and diced
Salt to taste
Stir together yogurt, mayonnaise, onion, parsley, celery, and pepper. Stir in diced potatoes. Cover and refrigerate for several hours. Serves 4.

Nutrition information per serving: 210 calories, 3 grams protein
Macaroni and Cheese
1 to 2 tablespoons margarine
1 tablespoon flour
1 cup enriched milk (see first recipe)
1 cup shredded cheddar cheese
1 teaspoon minced onion
1 teaspoon dry mustard
2 cups cooked macaroni
Salt and pepper to taste
In a medium-size saucepan, melt the margarine over medium heat. Add the flour, stirring constantly with a whisk until the butter is completely absorbed and the mixture starts to bubble slightly. Add the milk all at once, and stir constantly until the sauce thickens enough to coat the back of the spoon. Add cheese, mustard, and onion, stirring until cheese is melted.
Stir in the cooked macaroni. Add salt and pepper to taste. Place mixture in a greased one-quart casserole dish. Bake uncovered at 400 degrees for 15 minutes or until top is slightly browned. Makes 6 servings.

Nutrition information per serving: 285 calories, 14 grams protein

Apple-Cinnamon Pancakes
1 egg
1½ cups enriched milk (see first recipe)
1 tablespoon canola oil
½ cup applesauce
1 cup wheat flour
½ teaspoon cinnamon
½ teaspoon salt
1 tablespoon baking powder
In a mixing bowl, beat egg until yellow. Add milk, oil, and applesauce, and stir until blended. Measure flour, cinnamon, salt, and baking powder on top of the liquid mixture. Stir until dry ingredients are moistened. Mixture will be slightly lumpy. Cook on griddle. Top with your favorite topping.
Makes 4 pancakes.

Note: You can also use pancake mix, adding enriched milk and applesauce instead of water.

Nutrition information per pancake: 180 calories, 7 grams protein

Fruit Mousse
6 ounce package flavored gelatin
1 cup boiling water
¼ cup sugar
1 cup crushed ice
1 cup ricotta cheese
1 cup frozen fruit
Mix gelatin and boiling water; place in blender. Add water to ice to make 1 cup and place in blender. Add ricotta, sugar, and fruit. Blend. Pour into dishes. Makes six ¾-cup servings.

Nutrition information per serving: 233 calories, 11 grams protein

Mushroom Sauce
1 can condensed cream of mushroom soup
½ cup evaporated milk
Dash of garlic powder
Mix all ingredients in saucepan and heat just to boiling point. Remove from heat immediately. Serve over meats, fish, chicken, pastas, potatoes, or cooked vegetables. Makes three ½-cup servings.

Nutrition information per serving: 136 calories, 4 grams protein
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