## Nutrition Supplements for Your Kidney Diet

# What is a nutrition supplement?

Nutrition supplements come in many forms: drinks, powders, and bars. Each form has different nutrients, but they are usually a source of protein, carbohydrate, fat, vitamins, and minerals.

Special nutrition supplements are available for people with kidney disease.

# When can a nutrition supplement help?

A nutrition supplement helps when you can't meet your nutrient needs through food alone. People with small appetites may have trouble eating enough high calorie and high protein foods.

# Where can I buy nutrition supplements?

You can buy them at drug stores or the pharmacy section of your grocery store. If you can't find the product you want on the shelves, ask the pharmacist to order it for you.

If you have a doctor's prescription for supplements, some insurance plans will cover the cost. Talk to your pharmacist or dietitian for more information.



## **Nutrition supplement drinks**

## Choosing a nutrition supplement drink

Not all nutrition supplement drinks are the same. They vary in price, flavour, amount and type of nutrients.

For patients with kidney disease, some nutrition supplement drinks can be harmful. They may also have too much potassium, phosphorus, and/or sodium in them.

Talk with your dietitian about the type and amount of nutrition supplements that work best for you.

The best nutrition supplement drink for you:

Product Type: \_\_\_\_\_

Amount: \_\_\_\_

### Using nutrition supplements

Take them **in addition** to your meals. You can use them in place of a meal once in a while. Try to have the amount of supplement drink that is suggested by your dietitian.

Follow the package directions on how to store the supplement. Do this for opened and unopened drinks.

Count your nutrition supplement drinks as fluid. You must also count any fluid or ice that you add to the supplement.



## Manage common problems with nutrition supplement drinks

The chart below lists ideas to help you manage common problems with nutrition supplement drinks.

Challenge	Solution	Example
Supplement is too rich or too sweet.	Dilute the product. Use fluids that mix well with the product.	• Water can be used to dilute nutrition supplement drinks. Use only a small amount as water will not help you meet your calorie and protein needs.
	Count the fluid from the supplement and from the diluting fluid in your fluid limit.	<ul> <li>Dilute creamy supplements with your choice of milk or other beverage (fortified soy, rice, oat, almond). Or, you can try allowed amounts of yogurt.</li> <li>Blend with allowed fruit.</li> <li>Dilute juice-type supplements with allowed fruit juice.</li> </ul>
Supplement is filling and food intake at meals is reduced.	Take smaller amounts of supplement at one time.	<ul> <li>Take small amounts throughout the day. For example, have ¼ cup (60 mL) between meals and before bed.</li> <li>Supplement drinks that have been opened can be stored in the fridge for up to 24 hours. Follow package directions on how to store open or unopen supplements.</li> </ul>
Supplement is not appealing.	Add new flavours or ingredients.	<ul> <li>Add 1 tsp (5 mL) flavored extract like mint or almond.</li> <li>Add a small amount of chocolate beverage syrup or cocoa powder to the vanilla supplement.</li> <li>Try adding instant coffee powder or a tea bag (chai or Earl Grey tea).</li> </ul>
	Chill or freeze supplement.	• Freeze the supplement into popsicles or ice cubes. Pour the supplement over ice cubes. Count the ice in your fluid limit.
	Gently heat supplement.	<ul> <li>Warm the chocolate supplement to make a drink like hot chocolate.</li> <li>Add instant coffee crystals to the warm vanilla or chocolate supplement.</li> </ul>
Tired of drinking supplement.	Use the supplement as an ingredient in other foods.	<ul> <li>For creamy-type supplements:</li> <li>Add to hot or dry cereals, or creamy soups.</li> <li>Try in recipes (see the next pages for recipes and ideas)</li> <li>For fruit beverage-type supplements:</li> <li>Use in gelatin dessert recipes instead of water.</li> </ul>
Gas, bloating, or diarrhea	Drink smaller amounts of supplement at a time.	<ul> <li>Start with ¼ cup (60 mL) of supplement once or twice a day. Then slowly increase the number of times that you take the supplement in a day. The goal is usually ½ to 1 bottle a day.</li> <li>If you have a problem with gas, avoid carbonated drinks and don't use a straw to drink.</li> </ul>
Finding the best price of	Look for sale prices and coupons.	• Look for sales and coupons online, in flyers, newspapers, or in the store.
supplements.	Check the price of other brands.	• Store brands may cost less than brand names.

## **Protein powders**

Protein powders are made from many sources including milk (whey or casein), soy, and pea protein.

#### Choosing a protein powder

Not all protein powders are the same. They vary in price and flavour.

Choose a flavour that you like. If you're baking, an unflavoured or vanilla-flavoured powder may work best.

For patients with kidney disease, some protein powders can be harmful. They may also have too much potassium, phosphorus, and/or sodium in them.

Talk with your dietitian about the type and amount of protein powder that will work best for you.

#### The best protein powder for you:

Product Type: \_\_\_\_\_

Amount: \_\_\_\_\_

#### Using a protein powder

#### To Stir

Stir 1–2 Tbsp (15–30 mL) of protein powder into moist foods:

- tapioca\*, rice pudding\*, yogurt\*, or applesauce
- salads like coleslaw, macaroni, or pasta salad
- sandwich fillings like tuna, chicken, or egg
- cold fluids such as milk\* or juice
- hot foods such as tea or cereal. Before adding the protein powder to the hot food, mix it into a small amount of cold water or milk. Then add protein powder mixture to the hot beverage or food.

\*These foods are higher in phosphorus. Limit these foods if you need to control your phosphorus levels.

#### **To Spread**

Make a protein powder spread by mixing together equal amounts of protein powder with spreads like cream cheese, chocolate hazelnut spread, peanut butter, or mayonnaise.

Make these high protein spreads ahead of time and store them in the refrigerator. Use them on bread, toast, bagels, muffins, or buns.

#### To Bake

Make higher protein baked foods by adding protein powder to cookies, cakes, muffins, or loaves.

• You may need to experiment with different amounts of protein powder in your recipes. Try a 1:1, 1:2, or 1:3 ratio of protein powder to flour.

#### **Examples:**

 $\circ$  For a 1:1 ratio:

If your recipe calls for 1 cup (250 mL) of flour, try using  $\frac{1}{2}$  cup (125 mL) of protein powder and  $\frac{1}{2}$  cup (125 mL) of flour.

• For a 1:2 ratio:

If your recipe calls for 1 cup (250 mL) of flour, try using  $\frac{1}{3}$  cup (75 mL) of protein powder and  $\frac{2}{3}$  cup (150 mL) of flour.

- You may need to add 2–3 Tbsp (30–45 mL) of extra fluid if your dough or batter is too dry.
- You may need to increase the amount of baking soda or baking powder, as the protein powder makes baked foods more dense.

### **Protein bars**

Protein bars provide extra protein if you have been asked to limit fluids.

For patients with kidney disease, some protein bars have too much potassium, phosphorus, or sodium.

- Read the ingredient list. Avoid bars with potassium or phosphorus additives.
- Look for bars with:
  - o less than 200 milligrams potassium
  - o less than 150 milligrams phosphorus
  - o at least 10 grams protein
- Talk with your dietitian about the type of protein bar that might work best for you.

## Recipes

#### Creamy hot wheat cereal

2 Tbsp	smooth wheat cereal such as Cream of Wheat® (dry)	30 mL
1 bottle (1 cup)	vanilla nutrition supplement drink	235–250 mL
¼ tsp	salt	1 mL
	berries (optional)	
	brown sugar (optional)	
	cream (optional)	

Mix cereal, vanilla nutrition supplement drink, and salt in a small saucepan on medium heat. Heat until boiling, stirring often until cereal thickens (10–12 minutes). Remove from stove and pour into bowl. Serve hot. Optional: Add brown sugar, berries, or cream.

#### Makes 1 serving.

*Nutrition information for 1 serving:* 330 calories, 11 g protein.

#### Peanut butter power balls



³∕₄ cup	peanut butter	200 mL
<sup>1</sup> ⁄4 cup	honey	60 mL
<sup>3</sup> ⁄ <sub>4</sub> cup	protein powder (chocolate or vanilla)	200 mL
1 cup	rice crisp cereal	250 mL

Mix all in a medium bowl. Mix well. Roll dough into 1-inch balls.

#### Makes 30 balls.

*Nutrition information for 4 power balls:* 227 calories, 13 g protein

#### Vanilla latte

1 bottle	vanilla nutrition supplement drink	235–250 mL
2 tsp	instant coffee powder	10 mL
1 Tbsp	boiling water	15 mL

Heat the nutrition supplement drink in a small saucepan, stirring constantly. Dissolve coffee in boiling water and stir into supplement. When mixture is heated, pour into a large coffee mug. For an extra treat, top with a small amount of whipped topping and sprinkle with cinnamon. Serve right away.



#### Makes 1 serving (1 cup/250 mL).

Nutrition information for 1 serving: 250 calories, 9 g protein.

Nutrition information may vary depending on the type of nutrition supplement drink used.

### **Finding more recipes**

Ask your dietitian about where to find other recipes using nutrition supplement drinks and protein powders.

#### Notes:

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