



[http://www.nhlbi.nih.gov/hbp/prevent/h\\_eating/h\\_eating.htm](http://www.nhlbi.nih.gov/hbp/prevent/h_eating/h_eating.htm)

Your Guide To Lowering Blood Pressure, from NHLBI:

## Healthy Eating

Research has shown that following a healthy eating plan can both reduce the risk of developing high blood pressure and lower an already elevated blood pressure. For an overall eating plan, consider the DASH eating plan. "DASH" stands for "Dietary Approaches to Stop Hypertension," a clinical study that tested the effects of nutrients in food on blood pressure. Study results indicated that elevated blood pressures were reduced by an eating plan that emphasizes fruits, vegetables, and lowfat dairy foods and is low in saturated fat, total fat, and cholesterol. The DASH eating plan includes whole grains, poultry, fish, and nuts and has reduced amounts of fats, red meats, sweets, and sugared beverages. A second clinical study, called "DASH-Sodium," looked at the effect of a reduced dietary sodium intake on blood pressure as people followed either the DASH eating plan or a typical American diet. Results showed that reducing dietary sodium lowered blood pressure for both the DASH eating plan and the typical American diet. The biggest blood pressure-lowering benefits were for those eating the DASH eating plan at the lowest sodium level (1,500 milligrams per day).

The DASH-Sodium study shows the importance of lowering sodium intake whatever your diet. But for a true winning combination, follow the DASH eating plan and lower your intake of salt and sodium.

- [Facts About the DASH Eating Plan](#)
- [Healthier Eating with DASH](#)
- [Getting Started with DASH](#)
- [How to Lower Calories on the DASH Eating Plan](#)
- [Heart Healthy Recipes](#)

- [Tips on How to Make Healthier Meals](#)
- [A Word About Fats](#)

## Healthier Eating with DASH

### The DASH Eating Plan

The DASH eating plan shown below is based on *2,000 calories a day*. The number of daily servings in a food group may vary from those listed depending on your caloric needs.

<b>Food Group</b>	<b>Daily Servings (except as noted)</b>	<b>Serving Sizes</b>
<i>Grains &amp; grain products</i>	7-8	1 slice bread 1 cup ready-to-eat cereal* ½cup cooked rice, pasta, or cereal
<i>Vegetables</i>	4-5	1 cup raw leafy vegetable ½cup cooked vegetable 6 ounces vegetable juice
<i>Fruits</i>	4-5	1 medium fruit ¼cup dried fruit ½cup fresh, frozen, or canned fruit 6 ounces fruit juice
<i>Lowfat or fat free dairy foods</i>	2-3	8 ounces milk 1 cup yogurt 1 ½ounces cheese
<i>Lean meats, poultry, and fish</i>	2 or less	3 ounces cooked lean meats, skinless poultry, or fish
<i>Nuts, seeds, and dry beans</i>	4-5 per week	1/3 cup or 1 ½ounces nuts 1 tablespoon or ½ounce seeds ½cup cooked dry beans

<i>Fats &amp; oils**</i>	2-3	1 teaspoon soft margarine 1 tablespoon lowfat mayonnaise 2 tablespoons light salad dressing 1 teaspoon vegetable oil
<i>Sweets</i>	5 per week	1 tablespoon sugar 1 tablespoon jelly or jam 1/2ounce jelly beans 8 ounces lemonade

\* Serving sizes vary between 1/2cup -1 1/4cups. Check the product's nutrition label.

\*\* Fat content changes serving counts for fats and oils: For example, 1 tablespoon of regular salad dressing equals 1 serving; 1 tablespoon of a lowfat dressing equals 1/2serving; 1 tablespoon of a fat free dressing equals 0 servings.

## Getting Started with DASH

It's easy to adopt the DASH eating plan. Here are some ways to get started:

### Change gradually.

- If you now eat one or two vegetables a day, add a serving at lunch and another at dinner.
- If you don't eat fruit now or have only juice at breakfast, add a serving to your meals or have it as a snack.
- Use only half the butter, margarine, or salad dressing you do now.
- Try lowfat or fat free condiments, such as fat free salad dressings.
- Gradually increase dairy products to three servings per day. For example, drink milk with lunch or dinner, instead of soda, alcohol, or sugar-sweetened tea. Choose lowfat (1 percent) or fat free (skim) dairy products to reduce total fat intake.

### Treat meat as one part of the whole meal, instead of the focus.

- Buy less meat. If it's not there, you won't eat it.
- Limit meat to 6 ounces a day (two servings)--all that's needed. Three to four ounces is about the size of a deck of cards.
- If you now eat large portions of meat, cut them back gradually--by a half or a third at each meal.

- Include two or more vegetarian-style (meatless) meals each week.
- Increase servings of vegetables, rice, pasta, and dry beans in meals. Try casseroles and pasta, and stir-fry dishes, having less meat and more vegetables, grains, and dry beans.

## Use fruits or lowfat foods as desserts and snacks.

- Fruits and lowfat foods offer great taste and variety. Use fruits canned in their own juice. Fresh fruits require little or no preparation. Dried fruits are easy to carry with you.
- Try these snack ideas: unsalted pretzels or nuts mixed with raisins; graham crackers; lowfat and fat free yogurt and frozen yogurt; plain popcorn with no salt or butter added; and raw vegetables.

## How to Lower Calories on the DASH Eating Plan

The DASH eating plan was not designed to promote weight loss. But it is rich in lower calorie foods, such as fruits and vegetables. You can make it lower in calories by replacing higher-calorie foods with more fruits and vegetables--and that also will make it easier for you to reach your DASH diet goals. Here are some examples:

### To increase fruits--

- Eat a medium apple instead of four shortbread cookies. You'll save 80 calories.
- Eat 1/4 cup of dried apricots instead of a 2-ounce bag of pork rinds. You'll save 230 calories.

### To increase vegetables--

- Have a hamburger that's 3 ounces instead of 6 ounces. Add a 1/2 cup serving of carrots and a 1/2 cup serving of spinach. You'll save more than 200 calories.
- Instead of 5 ounces of chicken, have a stir fry with 2 ounces of chicken and 1 1/2 cups of raw vegetables. Use a small amount of vegetable oil. You'll save 50 calories.

### To increase lowfat or fat free dairy products--

- Have a 1/2 cup serving of lowfat frozen yogurt instead of a 1 1/2- ounce milk chocolate bar. You'll save about 110 calories.

And don't forget these calorie-saving tips:

- Use lowfat or fat free condiments, such as fat free salad dressings.
- Eat smaller portions--cut back gradually.
- Choose lowfat or fat free dairy products to reduce total fat intake.

- Use food labels to compare fat content in packaged foods. Items marked lowfat or fat free are not always lower in calories than their regular versions. See and [15](#) on how to read and compare food labels.
- Limit foods with lots of added sugar, such as pies, flavored yogurts, candy bars, ice cream, sherbet, regular soft drinks, and fruit drinks.
- Eat fruits canned in their own juice.
- Add fruit to plain yogurt.
- Snack on fruit, vegetable sticks, unbuttered and unsalted popcorn, or bread sticks.
- Drink water or club soda.

## How to Use the Food Label

<p><b>Frozen Peas:</b></p> <hr/> <p><b>Nutrition Facts</b>  Serving Size: 1/2 cup  Servings Per Container: about 3</p> <hr/> <p><b>Amount Per Serving</b>  <b>Calories:</b> 60    <b>Calories from Fat:</b>  0</p> <hr/> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="text-align: right; width: 20%;">% Daily Value*</th> </tr> </thead> <tbody> <tr> <td><b>Total Fat</b> 0g</td> <td style="text-align: right;"><b>0%</b></td> </tr> <tr> <td style="padding-left: 20px;">Saturated Fat 0g</td> <td style="text-align: right;"><b>0%</b></td> </tr> <tr> <td><b>Cholesterol</b> 0mg</td> <td style="text-align: right;"><b>0%</b></td> </tr> <tr> <td><b>Sodium</b> 125mg</td> <td style="text-align: right;"><b>5%</b></td> </tr> <tr> <td><b>Total Carbohydrate</b> 11g</td> <td style="text-align: right;"><b>4%</b></td> </tr> <tr> <td style="padding-left: 20px;">Dietary Fiber 6g</td> <td style="text-align: right;"><b>22%</b></td> </tr> <tr> <td style="padding-left: 20px;">Sugars 5g</td> <td></td> </tr> <tr> <td><b>Protein</b> 5g</td> <td></td> </tr> </tbody> </table> <hr/> <table style="width: 100%;"> <tr> <td style="width: 50%;">Vitamin A 15%</td> <td style="width: 50%;">Vitamin C 30%</td> </tr> <tr> <td>Calcium 0%</td> <td>Iron 6%</td> </tr> </table> <p><small>* Percent Daily Values are based on a 2,000 calorie diet.</small></p>		% Daily Value*	<b>Total Fat</b> 0g	<b>0%</b>	Saturated Fat 0g	<b>0%</b>	<b>Cholesterol</b> 0mg	<b>0%</b>	<b>Sodium</b> 125mg	<b>5%</b>	<b>Total Carbohydrate</b> 11g	<b>4%</b>	Dietary Fiber 6g	<b>22%</b>	Sugars 5g		<b>Protein</b> 5g		Vitamin A 15%	Vitamin C 30%	Calcium 0%	Iron 6%	<p>Food labels can help you choose foods lower in sodium, as well as calories, saturated fat, total fat, and cholesterol. The label tells you:</p> <p><b>Amount per Serving:</b> Nutrient amounts are given for one serving. If you eat more or less than a serving, add or subtract amounts. For example, if you eat 1 cup of peas, you need to double the nutrient amounts on the label.</p> <p><b>Nutrients:</b> You'll find the milligrams of sodium in one serving.</p> <p><b>Number of Servings:</b> The serving size is 1/2 cup. The package contains about 3 servings.</p> <p><b>Percent Daily Value:</b> Percent Daily Value helps you compare products and tells you if the food is high or low in sodium. Choose products with the lowest Percent Daily Value for sodium.</p>
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## Compare Labels

Which of these two items is lower in sodium? To tell, check the Percent Daily Value. The answer is given below.

### Frozen Peas:

#### Nutrition Facts

Serving Size: 1/2 cup

Servings Per Container: about 3

#### Amount Per Serving

Calories: 60    Calories from Fat: 0

	% Daily Value*
<b>Total Fat</b> 0g	<b>0%</b>
Saturated Fat 0g	<b>0%</b>
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 125mg	<b>5%</b>
<b>Total Carbohydrate</b> 11g	<b>4%</b>
Dietary Fiber 6g	<b>22%</b>
Sugars 5g	
<b>Protein</b> 5g	

Vitamin A 15%    Vitamin C 30%  
Calcium 0%      Iron 6%

\* Percent Daily Values are based on a 2,000 calorie diet.

### Canned Peas:

#### Nutrition Facts

Serving Size: 1/2 cup

Servings Per Container: about 3

#### Amount Per Serving

Calories: 60    Calories from Fat: 0

	% Daily Value*
<b>Total Fat</b> 0g	<b>0%</b>
Saturated Fat 0g	<b>0%</b>
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 380mg	<b>16%</b>
<b>Total Carbohydrate</b> 12g	<b>4%</b>
Dietary Fiber 3g	<b>14%</b>
Sugars 4g	
<b>Protein</b> 4g	

Vitamin A 6%      Vitamin C 10%  
Calcium 2%      Iron 8%

\* Percent Daily Values are based on a 2,000 calorie diet.

*ANSWER: The frozen peas. The canned peas have three times more sodium than the frozen peas.*

Sodium also is found in many foods that may surprise you, such as baking soda, soy sauce, monosodium glutamate (MSG), seasoned salts, and some antacids--the range is wide.

Before trying salt substitutes, you should check with your doctor, especially if you have high blood pressure. These contain potassium chloride and may be harmful for those with certain medical conditions.

For an overall eating plan, consider the DASH diet. DASH stands for "Dietary Approaches to Stop Hypertension." DASH was a clinical study that tested the effects on blood pressure of nutrients as they occur together in food. It found that blood pressures were reduced by an eating plan low in saturated fat, total fat, and cholesterol, and rich in fruits, vegetables, and lowfat dairy foods. The DASH diet includes whole grains, poultry, fish, and nuts, and has reduced amounts of fats, red meats, sweets, and sugared beverages. It also is rich in potassium, calcium, and magnesium, as well as protein and fiber.

A second study, called DASH-Sodium, found that even when using the DASH diet, lowering salt and sodium is important--blood pressure was lowest when both lifestyles were followed. See [Box 10](#) for more on the findings from DASH-Sodium about the effects of lowering salt.

[Box 16](#) gives the servings and food groups for the DASH diet. The number of servings you require may vary, depending on your caloric need.