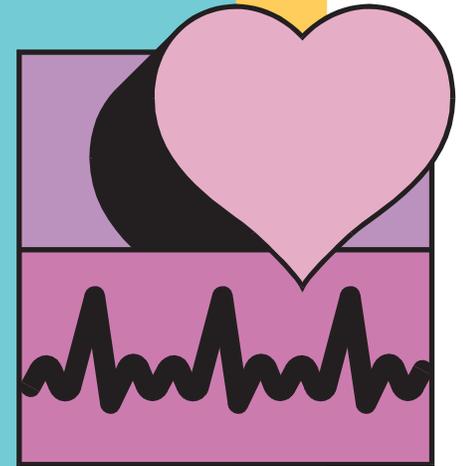




# The DASH diet eating plan

Research has found that diet affects the development of high blood pressure, or hypertension. The average level of sodium consumed by Americans is 3,300 milligrams a day. The upper limit currently recommended by the National High Blood Pressure Education Program is 2,400 milligrams a day. Blood pressure can be lowered by following a particular eating plan—called the Dietary Approaches to Stop Hypertension (DASH) eating plan—and reducing the amount of sodium consumed between 1,500 and 2,400 milligrams a day. The DASH study was sponsored by the National Heart, Lung, and Blood Institute (NHLBI) and conducted at four medical centers: Brigham and Women’s Hospital, Boston, MA; Duke University Medical Center, Durham, NC; Johns Hopkins University, Baltimore, MD; Pennington Biomedical Research Center, Louisiana State University, Baton Rouge, LA.



## What is high blood pressure?

Blood pressure is the force of blood against artery walls. It is measured in millimeters of mercury (mmHg) and recorded as two numbers—systolic pressure (as the heart beats) over diastolic pressure (as the heart relaxes between beats). Both numbers are important.

### Blood Pressure Levels for Adults

Category	Systolic (mmHg)		Diastolic (mmHg)	Result
<b>Normal</b>	Less than 120	<i>and</i>	Less than 80	Great!
<b>Prehypertension</b>	120–139	<i>or</i>	80–89	It is time to make changes in diet and exercise habits. If you are overweight, losing weight will help reduce blood pressure.
<b>Hypertension</b>	140 or higher	<i>or</i>	90 or higher	If your blood pressure is this level or higher during three visits to a doctor, you will be diagnosed with hypertension. Ask your doctor or nurse how to control it.

# The DASH eating plan

The DASH eating plan is rich in lower-calorie foods such as fruits and vegetables. You can reduce calories by substituting fruits and vegetables for higher-calorie foods.

## fruits

### To increase fruits –

- Eat fruits in place of cookies and candy for snacks. *You'll save 80 calories.*
- Eat dried fruits instead of pork rinds or chips. *You'll save 230 calories.*

## vegetables

### To increase vegetables –

- Choose a small hamburger with 3 ounces of meat instead of 6 ounces. Choose carrot sticks on the side. *You'll save more than 200 calories.*
- Bring cut-up vegetables to have with a sandwich at lunch instead of chips. *You'll save about 120 calories.*
- Choose another side vegetable rather than a starchy dish. *You can save up to 200 calories.*

## dairy

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

- Have a ½ cup of lowfat frozen yogurt instead of chocolate, pie or frosted cake. *You can save 100 calories.*
- Choose nonfat fruit yogurt at snack time instead of donuts or candy bars. *You can save about 100 calories.*
- Include milk and lowfat cheese in casseroles.

## calories

### To save calories –

- Use lowfat or fat-free condiments, especially mayonnaise.
- Reduce oil and margarine in recipes by half, and order salad dressings on the side.
- Eat smaller portions and eat slowly. Limit meat to 6 ounces a day. That is all you need.
- Choose lowfat and fat-free dairy products.
- Check food labels to compare fat content of packaged foods.
- Limit intake of foods with added sugar, such as pies, candy bars, ice cream, regular soft drinks and fruit drinks.
- Drink water or club soda.
- Choose fruits and vegetables instead of salty snack foods.
- Use lower-fat methods of preparing foods such as broiling, baking and grilling.
- Limit your meals at quick service restaurants. They tend to be high in fat and sodium and low in fruits and vegetables.



# The DASH Eating Plan

The DASH eating plan shown below is based on **1,800 calories a day**. The number of daily servings in a food group may vary from those listed, depending on your caloric needs. Use this chart to help you plan your menus or take it with you when you go to the store.



Food Group	Daily Serving	Servings Sizes	Examples and Notes	Role
Grains and Grain Products	7-8	1 slice bread 1 oz dry cereal ½ cup cooked rice, pasta or cereal	Whole-wheat bread, English muffin, pita bread, bagel, cereals, grits, oatmeal, crackers, unsalted pretzels and popcorn	Major sources of energy and fiber
Vegetables	4	1 cup raw leafy vegetable ½ cup cooked vegetable 6 oz vegetable juice	Tomatoes, potatoes, carrots, green peas, squash, broccoli, turnip greens, collards, kale, spinach, artichokes, green beans, lima beans, sweet potatoes	Rich sources of potassium, magnesium and fiber
Fruits	4	6 oz fruit juice 1 medium fruit ¼ cup dried fruit ½ cup fresh, frozen or canned fruit	Apricots, bananas, dates, grapes, oranges, orange juice, grapefruit, grapefruit juice, mangoes, melons, peaches, pineapples, prunes, raisins, strawberries, tangerines	Important sources of potassium, magnesium and fiber
Lowfat or fat-free dairy foods	2-3	8 oz milk 1 cup yogurt 1 ½ oz cheese	Fat-free (skim) or lowfat (1%) milk, fat-free or lowfat buttermilk, fat-free or lowfat regular or frozen yogurt, lowfat and fat-free cheese	Major sources of calcium and protein
Meats, poultry and fish	2 or less	3 oz cooked meats, poultry or fish	Select only lean; trim away visible fats; broil, roast or boil instead of frying; remove skin from poultry	Rich sources of protein and magnesium
Nuts, seeds and dry beans	2-3 per week	½ cup or 1 ½ oz nuts 2 Tbsp or ½ oz seeds ½ cup cooked dry beans and peas	Almonds, filberts, mixed nuts, peanuts, walnuts, sunflower seeds, kidney beans, lentils	Rich sources of energy, magnesium, potassium, protein and fiber
Fats and Oils	2-3	1 tsp soft margarine 1 Tbsp lowfat mayonnaise 2 Tbsp light salad dressing 1 tsp vegetable oil	Soft margarine, lowfat mayonnaise, light salad dressing, vegetable oil such as olive, corn, canola or safflower	DASH has 27% of calories as fat, including fat in added foods
Sweets	5 per week	1 Tbsp sugar 1 Tbsp jelly or jam ½ oz jelly beans 8 oz lemonade	Maple syrup, sugar, jelly, jam, fruit-flavored gelatin, jelly beans, hard candy, fruit punch, sorbet, ices	Sweets should be low in fat

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