

The DASH Diet



Research has shown that diet affects the development of high blood pressure, or hypertension (the medical term). Recently, a study found that a particular eating plan can lower elevated blood pressure.

This fact sheet tells what high blood pressure is and how you can follow the eating plan. It offers tips on how to start and stay on the plan, as well as a week of menus and recipes for some of the dishes.

The eating plan is meant for those with elevated blood pressure. It also is a heart-healthy plan that you can share with your family.

WHAT IS HIGH BLOOD PRESSURE?

Blood pressure is the force of blood against artery walls. It is measured in millimeters of mercury (mm Hg) and recorded as two numbers—systolic pressure (as the heart beats) over diastolic pressure (between heartbeats). Both numbers are important (see chart on page 2).

When blood pressure is too high, the heart is working harder than it should.

Once developed, high blood pressure lasts a lifetime. It is a dangerous condition, which often has no warning signs or symptoms. If uncontrolled, it can lead to heart and kidney disease, and stroke.

High blood pressure affects about 50 million—or one in four—adult Americans. High blood pressure is especially common among African Americans, who tend to develop it earlier and more often than whites. Many Americans also tend to develop high blood pressure as they age. About half of all Americans age 60 and older have high blood pressure.

High blood pressure can be controlled by the following steps: lose weight, if overweight; become physically active; eat healthy, including choosing foods lower in salt and sodium; limit alcohol intake; and, if prescribed, take high blood pressure pills. All steps but the last also help prevent high blood pressure.

WHAT IS THE DASH DIET?

Even slight elevations of blood pressure above the optimal level of less than 120/80 mm Hg are unhealthy. The higher the blood pressure above normal, the greater the health risk.


BLOOD PRESSURE CATEGORIES FOR ADULTS*

	Systolic**		Diastolic**
Optimal	<120 mm Hg	and	<80 mm Hg
Normal	<130 mm Hg	and	<85 mm Hg
High-Normal	130–139 mm Hg	or	85–89 mm Hg
High			
Stage 1	140–159 mm Hg	or	90–99 mm Hg
Stage 2	160–179 mm Hg	or	100–109 mm Hg
Stage 3	≥180 mm Hg	or	≥110 mm Hg

*Categories are for those age 18 and older and come from the National High Blood Pressure Education Program. The categories are for those not on a high blood pressure drug and who have no short-term serious illness.

**If your systolic and diastolic pressures fall into different categories, your overall status is the higher category.

< means less than, and ≥ means greater than or equal to



In the past, researchers had tested various single nutrients, such as calcium and magnesium, to find clues about what affects blood pressure. These studies were done mostly with dietary supplements and their findings were not conclusive.

Then, scientists supported by the National Heart, Lung, and Blood Institute (NHLBI) tested nutrients as they occur together in food. The results were dramatic. The clinical study, called “DASH” for Dietary Approaches to Stop Hypertension, found that elevated blood pressures can be reduced with an eating plan low in saturated fat, total fat, and cholesterol, and rich in fruits, vegetables, and lowfat dairy foods. The plan is rich in magnesium, potassium, and calcium, as well as protein and fiber.

DASH involved 459 adults with systolic blood pressures of less than 160 mm Hg and diastolic pressures of 80–95 mm Hg. About half of the participants were women and 60 percent were African Americans.

DASH compared three eating plans:

- A plan similar in nutrients to what many Americans consume
- A plan similar to what Americans consume but higher in fruits and vegetables
- A “combination” plan—the DASH diet—lower in saturated fat, total fat, and cholesterol, and rich in fruits, vegetables, and lowfat dairy foods

All three plans used about 3,000 milligrams of sodium daily—about 20 percent below the U.S. average for adults. None of the plans was vegetarian or used specialty foods.

Results showed that both the fruit/vegetable and combination plans reduced blood pressure, but the combination plan had the greatest effect. The DASH eating plan reduced blood pressure by an average of about 6 mm Hg for systolic and 3 mm Hg for diastolic. It worked even better for those with high blood pressure—the systolic dropped on average about 11 mm Hg and the diastolic about 6 mm Hg. Further, the reductions came fast—within 2 weeks of starting the eating plan.

HOW DO I MAKE THE DASH?

“Following the DASH Diet” on page 4 gives the servings and food groups for the DASH eating plan. The number of servings you need may vary, depending on your caloric need.

You should be aware that the DASH plan has more daily servings of fruits, vegetables, and grains than you may be used to eating. This makes it high in fiber, which can cause bloating and diarrhea. To get used to the new eating plan, gradually increase your servings of fruits, vegetables, and grains.

GET THOSE NUTRIENTS

The DASH eating plan is rich in various nutrients believed to benefit blood pressure and in other factors involved in good health. The amounts of the nutrients vary by how much you eat. If you eat about 2,000 calories a day on the plan, the nutrients you get will include:

4,700 milligrams of potassium

500 milligrams of magnesium

1,240 milligrams of calcium

Those totals are about two to three times the amounts most Americans get.

The menus and recipes in this fact sheet also have slightly less salt and sodium than were in the DASH study's meals. These average about 2,400 milligrams of sodium per day, compared with about 3,000 milligrams in the DASH study meals. Twenty-four hundred milligrams of sodium equals about 6 grams, or 1 teaspoon, of table salt (sodium chloride). This amount follows the current recommendation of both the Federal Government's Dietary Guidelines for Americans and the NHLBI's National High Blood Pressure Education Program. The DASH eating plan makes it easier to consume less salt and sodium, because it is rich in fruits and vegetables, which are lower in sodium than many other foods. You can also keep salt and sodium down by using fewer already prepared foods and less salt at the table and in cooking. The next phase of the study—

called DASH2—is examining the relationship between blood pressure, eating patterns, and a reduced sodium intake. It should yield important findings about how much sodium and salt is advisable to prevent or control high blood pressure when using the DASH eating plan.

How can you get started on DASH? It's easy. The DASH plan requires no special foods and has no hard-to-follow recipes. One way to begin is by seeing how DASH compares with your current food habits. Use the "What's On Your Plate?" form on page 5. Fill it in for 1–2 days and see how it compares with the DASH plan. This will help you see what you need to change.

Remember that some days you may eat more than what's recommended from one food group and less of another. But don't worry. Just be sure that the average of several days or a week comes close to what's recommended.

Then, check the "Getting Started" suggestions on page 6 and the "Tips on Eating the DASH Way" listed in the box on the right. Finally, use the menus that begin on page 7—or make up your own—and you're all set.

One note: It's important that, if you have high blood pressure and take a medication, you should not stop your therapy. Use the DASH diet and talk about your drug treatment with your doctor.

TIPS ON EATING THE DASH DIET WAY

- Make it easier to increase your servings of fruits and vegetables to eight a day by trying to have two servings of fruits and/or vegetables at each meal. For instance, for lunch have one fruit and one vegetable. Then add one fruit and one vegetable as snacks.
- To increase your dairy servings to three a day, try to have one lowfat or fat free dairy serving at each meal. If you have trouble digesting dairy products, try taking lactase enzyme pills or drops (available at drugstores and groceries) with the dairy foods. Or, buy lactose free milk or milk with lactase enzyme added to it.
- Choose whole grain foods to get added nutrients, especially the B vitamins. For example, choose whole wheat bread or whole grain cereals.
- Use the percent Daily Value on food labels to compare products and choose those lowest in saturated fat, total fat, cholesterol, and sodium.
- Feed your craving for sweets with fresh or dried fruit or fruit-flavored gelatin.
- Use fresh, frozen, canned, or dried fruits.
- Use fresh, frozen, or no-salt-added canned vegetables.

FOLLOWING THE DASH DIET

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.

Use this chart to help you plan your menus or take it with you when you go to the store.



FOOD GROUP	DAILY SERVINGS (except as noted)	SERVING SIZES	EXAMPLES AND NOTES	SIGNIFICANCE OF EACH FOOD GROUP TO THE DASH EATING PLAN
Grains & grain products	7-8	1 slice bread 1 cup dry cereal* 1/2 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	4-5	1 cup raw leafy vegetable 1/2 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	4-5	6 oz fruit juice 1 medium fruit 1/4 cup dried fruit 1/2 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 1/2 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	4-5 per week	1/3 cup or 1 1/2 oz nuts 2 Tbsp or 1/2 oz seeds 1/2 cup cooked dry beans	almonds, filberts, mixed nuts, peanuts, walnuts, sunflower seeds, kidney beans, lentils and peas	rich sources of energy, magnesium, potassium, protein, and fiber
Fats & 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)	Besides fats added to foods, remember to choose foods that contain less fats
Sweets	5 per week	1 Tbsp sugar 1 Tbsp jelly or jam 1/2 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



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

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

WHAT'S ON YOUR PLATE?

Use this form to track your food habits before you start on the DASH eating plan or to see how you're doing after a few weeks. To record more than 1 day, just copy the form. Total each day's food groups and compare what you ate with the DASH plan. To see how the form looks completed, check the menus, which start on page 7.

Food	Amount (serving size)	Number of servings by DASH food group							
		Grains	Vegetables	Fruits	Dairy foods	Meat, poultry, & fish	Nuts, seeds, & dry beans	Fats and oils	Sweets
Breakfast									
<i>Example: whole wheat bread & soft margarine</i>	<i>2 slices 2 tsp</i>	2						2	
Lunch									
Dinner									
Snacks									
DAY'S TOTAL									
<i>Compare yours with the DASH plan</i>		7-8	4-5	4-5	2-3	2 or less	4-5 a week	2-3	5 a week

GETTING STARTED

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

Change gradually.

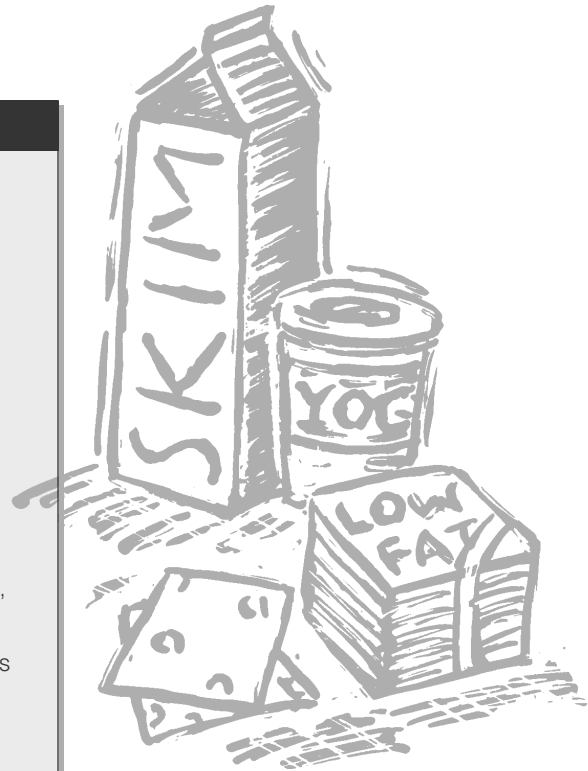
- If you now eat one or two vegetables a day, add a serving at lunch and another at dinner.
- If you don't eat fruit now or have only juice at breakfast, add a serving to your meals or have it as a snack.
- Use only half the butter, margarine, or salad dressing you do now.
- Try lowfat or fat free condiments, 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.



A WEEK WITH THE DASH DIET



Here is a week of menus from the DASH eating plan. The menus are based on 2,000 calories a day—serving sizes should be increased or decreased for other caloric levels. Also, to ease the calculations, some of the serving sizes have been rounded off. Recipes are given for starred items.

DAY 1

Food	Amount	Servings Provided							
		Grains	Vegetables	Fruits	Dairy foods	Meat, poultry, & fish	Nuts, seeds, & dry beans	Fats and oils	Sweets
Breakfast									
apple juice	1 cup			1 1/2					
bran cereal, ready-to-eat	2/3 cup	1							
raisins	2 Tbsp			1/2					
fat free milk	1 cup				1				
whole wheat bread	1 slice	1							
soft margarine	1 1/2 tsp							1 1/2	
Lunch									
chicken sandwich:									
chicken breast, no skin	3 oz					1			
American cheese, reduced fat	2 slices (1 1/2 oz)				1				
loose leaf lettuce	2 large leaves		1/2						
tomato	2 slices (1/4" thick)		1/2						
light mayonnaise	1 Tbsp							1	
whole wheat bread	2 slices	2							
apple	1 medium			1					
Dinner									
vegetarian spaghetti sauce*	3/4 cup		1 1/2						
spaghetti	1 cup	2							
Parmesan cheese	4 Tbsp				1				
green beans	1/2 cup		1						
spinach salad:									
spinach, raw	1 cup		1						
mushrooms, raw	1/4 cup		1/4						
croutons	2 Tbsp	1/4							
Italian dressing, lowfat	2 Tbsp							1	
dinner roll	1 medium	1							
frozen yogurt, lowfat	1/2 cup				1/2				
Snack									
orange juice	1 cup			1 1/2					
banana	1 large			1 1/2					
Totals		7 1/4	4 3/4	6	3 1/2	1	0	3 1/2	0

Per Day:

Calories	1,995	Magnesium	458 mg
Total Fat	50 g**	Potassium	4,254 mg
Saturated Fat	15 g	Calcium	1,384 mg
Cholesterol	124 mg***	Sodium	3,127 mg

* recipe on page 14

** g=gram

*** mg=milligram



DAY 2

2

Food	Amount		Servings Provided							
			Grains	Vegetables	Fruits	Dairy foods	Meat, poultry, & fish	Nuts, seeds, & dry beans	Fats and oils	Sweets
Breakfast										
prune juice	3/4	cup			1					
oatmeal	1/2	cup	1							
whole wheat bread	1	slice	1							
soft margarine	1	tsp							1	
fat free milk	1	cup				1				
banana	1	medium			1					
Lunch										
BBQ beef sandwich:										
lean beef	2	oz						3/4		
BBQ sauce	1	Tbsp								
roll	1	large	1 1/2							
boiled potatoes	1	cup		2						
cheddar cheese, natural	1 1/2	oz				1				
salad:										
loose leaf lettuce	2	leaves			1/2					
tomato	2	slices (1/4" thick)			1/2					
green pepper	2	strips			1/2					
salad dressing, lowfat	2	tsp							1/3	
cranberry juice	1	cup			1 1/2					
Dinner										
trout, or other fish, baked										
in lemon juice	3	oz						1		
brown rice	1/2	cup	1							
three-bean salad:										
kidney beans	1/2	cup						1		
green beans	1/2	cup		1						
yellow beans	1/4	cup		1/2						
Italian dressing, lowfat	4	tsp							2/3	
corn muffin	1	medium	1							
soft margarine	1	tsp							1	
spinach, cooked	1/2	cup		1						
Snacks										
orange	1	medium			1					
dried fruit mixture	1/4	cup (1 oz)			1					
Totals			5 1/2	6	5 1/2	2	1 3/4	1	3	0

Per Day:

Calories	2,055	Magnesium	456 mg
Total Fat	50 g	Potassium	4,404 mg
Saturated Fat	17 g	Calcium	1,076 mg
Cholesterol	180 mg	Sodium	2,579 mg

3

DAY 3



Food	Amount	Servings Provided							
		Grains	Vegetables	Fruits	Dairy foods	Meat, poultry, & fish	Nuts, seeds, & dry beans	Fats and oils	Sweets
Breakfast									
orange juice	1 cup			1 1/2					
cornflakes	3/4 cup	1							
whole wheat bread	1 slice	1							
soft margarine	1 tsp							1	
fat free milk	1 cup				1				
Lunch									
sandwich:									
ham, lean, low sodium	2 oz					3/4			
cheese, reduced fat	2 slices (1 1/2 oz)				1				
whole wheat bread	2 slices	2							
loose leaf lettuce	2 leaves		1/2						
tomato	2 slices (1/4" thick)		1/2						
mustard	1 tsp								
apple	1 medium			1					
Dinner									
chicken with Spanish rice*	1 1/2 cup	2	1			1		1/2	
green peas	1/2 cup		1						
corn muffin	1 medium	1							
melon balls	1 cup			2					
fat free milk	1 cup				1				
Snacks									
apricots, dried	1/3 cup (1 1/2 oz)			1 1/2					
almonds	1/3 cup (1 1/2 oz)						1		
orange	1 large			1 1/2					
Totals		7	3	7 1/2	3	1 3/4	1	1 1/2	0

Per Day:

Calories	1,987	Magnesium	469 mg
Total Fat	53 g	Potassium	4,857 mg
Saturated Fat	13 g	Calcium	1,372 mg
Cholesterol	153 mg	Sodium	2,921 mg

*recipe on page 14





4

DAY 4

Food	Amount	Servings Provided							
		Grains	Vegetables	Fruits	Dairy foods	Meat, poultry, & fish	Nuts, seeds, & dry beans	Fats and oils	Sweets
Breakfast									
orange juice	1 cup			1 1/2					
English muffin	1 whole	2							
marmalade	2 tsp								2/3
soft margarine	1 tsp							1	
fat free milk	1 cup				1				
Lunch									
sandwich:									
tuna, water-packed (rinsed and drained)	1/4 cup					1/2			
whole wheat bread	2 slices	2							
iceberg lettuce	1/2 cup		1/2						
tomato	2 slices (1/8" thick)		1/4						
light mayonnaise	1 Tbsp							1	
carrot and celery sticks	4 sticks each		1/4						
broccoli	2/3 cup		1 1/2						
cheddar cheese, reduced fat	1 oz				3/4				
cranberry juice cocktail	1/2 cup			3/4					
Dinner									
chicken breast, no skin	3 oz					1			
brown rice	1 cup	2							
stewed tomatoes	1/2 cup		1						
lima beans	1/2 cup		1						
spinach, cooked	1/3 cup		3/4						
dinner roll	1 medium	1							
soft margarine	1 tsp							1	
fat free milk	1 cup				1				
Snacks									
mixed nuts	1/4 cup (1 oz)							3/4	
apricots, dried	1/3 cup (1 1/2 oz)			1 1/2					
pretzels	3/4 cup (1 oz)	1							
orange	1 medium			1					
Totals		8	5 1/4	4 3/4	2 3/4	1 1/2	3/4	3	2/3

Per Day:

Calories	2,007	Calcium	1,391 mg
Total Fat	47 g	Magnesium	506 mg
Saturated Fat	11 g	Potassium	4,243 mg
Cholesterol	108 mg	Sodium	2,074 mg

5

DAY 5



Food	Amount	Servings Provided							
		Grains	Vegetables	Fruits	Dairy foods	Meat, poultry, & fish	Nuts, seeds, & dry beans	Fats and oils	Sweets
Breakfast									
orange juice	1 cup			1 1/2					
yogurt, fat free	1 cup				1				
fruit granola bars, lowfat	2	2							
fat free milk	1 cup				1				
banana	1 small			1/2					
Lunch									
turkey sandwich:									
turkey breast	3 oz					1			
loose leaf lettuce	1 leaf		1/4						
tomato	2 slices (1/4" thick)		1/2						
light mayonnaise	1 Tbsp							1	
whole wheat bread	2 slices	2							
carrots	7 sticks		1/4						
orange, fresh	1 medium			1					
Dinner									
spicy baked fish*	3 oz					1			3/4
brown rice	1 cup	2							
spinach, cooked	1 cup		2						
zucchini, cooked	1/2 cup		1						
dinner roll	1 medium	1							
soft margarine	2 tsp							2	
fat free milk	1/2 cup				1/2				
melon balls	1 cup			2					
Snacks									
peanuts	1/4 cup (1 oz)								3/4
apricots, dried	1/3 cup (1 1/2 oz)			1 1/2					
Totals		7	4	6 1/2	2 1/2	2	3/4	3 3/4	0

Per Day:

Calories	2,028	Magnesium	575 mg
Total Fat	51 g	Potassium	5,265 mg
Saturated Fat	9 g	Calcium	1,364 mg
Cholesterol	115 mg	Sodium	2,411 mg

*recipe on page 15





DAY 6

6

Food	Amount	Servings Provided							
		Grains	Vegetables	Fruits	Dairy foods	Meat, poultry, & fish	Nuts, seeds, & dry beans	Fats and oils	Sweets
Breakfast									
orange juice	1 cup			1 1/2					
bran cereal	2/3 cup	1							
whole wheat bread	1 slice	1							
soft margarine	1 tsp							1	
fat free milk	1 cup				1				
banana	1 small			1/2					
Lunch									
chicken salad sandwich:									
chicken salad*	3/4 cup					1		2	
tomato	2 slices (1/4" thick)		1/2						
whole wheat pita bread	1 small	1							
apple	1 medium			1					
Dinner									
roast beef, lean	3 oz					1			
dinner roll	1 large	1 1/2							
baked potato	1 medium		2						
soft margarine	1 tsp							1	
green beans, cooked	3/4 cup		1 1/2						
frozen peaches	1/2 cup			1					
fat free milk	1 cup				1				
Snacks									
almonds	1/3 cup (1 1/2 oz)							1	
yogurt, lowfat	1 cup				1				
orange juice	1/2 cup			3/4					
Totals		4 1/2	4	4 3/4	3	2	1	4	0

Per Day:

Calories	2,072	Magnesium	508 mg
Total Fat	55 g	Potassium	4,540 mg
Saturated Fat	12 g	Calcium	1,320 mg
Cholesterol	161 mg	Sodium	1,602 mg

*recipe on page 14



7

DAY 7



Food	Amount	Servings Provided							
		Grains	Vegetables	Fruits	Dairy foods	Meat, poultry, & fish	Nuts, seeds, & dry beans	Fats and oils	Sweets
Breakfast									
grape juice	1 cup			1 1/2					
bran flakes cereal	3/4 cup	1							
banana	1 medium			1					
whole wheat bread	1 slice	1							
soft margarine	1 tsp							1	
fat free milk	1 cup				1				
Lunch									
tuna salad sandwich:									
tuna	1/2 cup					1			
light mayonnaise	2 tsp							2/3	
iceberg lettuce	3/4 cup		3/4						
whole wheat bread	2 slices	2							
apricot nectar	3/4 cup			1					
apple	1 medium			1					
Dinner									
zucchini lasagna*	1/6 recipe	3	1		1				
spinach salad:									
spinach	1 1/4 cup		1 1/4						
tomato	2 slices (1/2" thick)		1						
Parmesan cheese	4 tsp				1/4				
oil and vinegar salad dressing:									
vegetable oil	2 tsp							2	
vinegar	1 tsp								
dinner roll	1 medium	1							
soft margarine	1 tsp							1	
Snacks									
almonds	2 Tbsp (3/4 oz)							1/2	
raisins	1/3 cup			1 1/2					
yogurt, fat free	1 cup				1				
Totals		8	4	6	3 1/4	1	1/2	4 2/3	0

Per Day:

Calories	1,976	Magnesium	506 mg
Total Fat	47 g	Potassium	4,290 mg
Saturated Fat	10 g	Calcium	1,248 mg
Cholesterol	52 mg	Sodium	1,911 mg

*recipe on page 15



RECIPES FOR HEART HEALTH

Here are some recipes to help you cook up a week of tasty heart healthy meals:

Vegetarian Spaghetti Sauce

(Day 1)

2	Tbsp	olive oil
2	small	onions, chopped
3	cloves	garlic, chopped
1 1/4	cup	zucchini, sliced
1	Tbsp	oregano, dried
1	Tbsp	basil, dried
1	8 oz can	tomato sauce
1	6 oz can	tomato paste
2	medium	tomatoes, chopped
1	cup	water

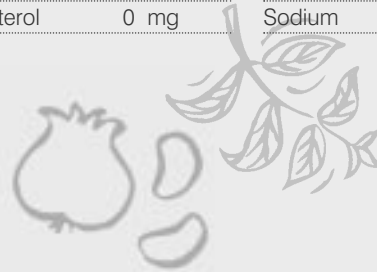
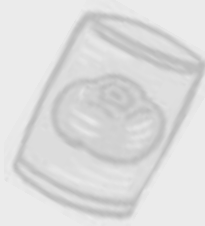
Makes 6 servings.

Serving size: 3/4 cup

Per Serving:

Calories	102	Magnesium	37 mg
Total Fat	5 g	Potassium	623 mg
Saturated Fat	1 g	Calcium	42 mg
Cholesterol	0 mg	Sodium	459 mg

1. In a medium skillet, heat oil. Saute onions, garlic, and zucchini in oil for 5 minutes on medium heat.
2. Add remaining ingredients and simmer covered for 45 minutes. Serve over spaghetti.



Chicken and Spanish Rice

(Day 3)

1	cup	onions, chopped
3/4	cup	sweet green peppers
2	tsp	vegetable oil
1	cup	tomato sauce
1	tsp	parsley, chopped
1/4	tsp	black pepper
1 1/2	tsp	garlic, minced
5	cup	white rice, cooked in unsalted water
3 1/4	cup	chicken breast, cooked (skin and bone removed), diced

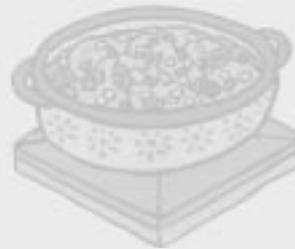
Makes 5 servings.

Serving size: 1 1/2 cup

Per Serving:

Calories	406	Magnesium	57 mg
Total Fat	6 g	Potassium	529 mg
Saturated fat	2 g	Calcium	45 mg
Cholesterol	75 mg	Sodium	367 mg

1. In a large skillet saute onions and green peppers in oil for 5 minutes on medium heat.
2. Add tomato sauce and spices. Heat through.
3. Add cooked rice and chicken and heat through.



Chicken Salad

(Day 6)

3 1/4	cup	chicken, cooked, cubed, skinless
1/4	cup	celery, chopped
1	Tbsp	lemon juice
1/2	tsp	onion powder
1/8	tsp	salt
3	Tbsp	light mayonnaise

Makes 5 servings.

Serving size: 3/4 cup

Per Serving:

Calories	183	Magnesium	25 mg
Total fat	7 g	Potassium	240 mg
Saturated fat	2 g	Calcium	17 mg
Cholesterol	78 mg	Sodium	201 mg

In a large bowl combine all ingredients. Mix well.



Spicy Baked Fish

(Day 5)

	cooking oil spray
1 lb	cod (or other fish) fillet
1 Tbsp	olive oil
1 tsp	spicy seasoning mix

1. Preheat oven to 350° F. Spray a casserole dish with cooking oil spray.
2. Wash and dry fish. Place in dish and drizzle with oil and seasoning mixture.
3. Bake uncovered for 15 minutes or until fish flakes with fork. Cut into 4 pieces. Serve with rice.

Makes 4 servings.

Serving size: 1 piece (3 oz)

Per Serving:

Calories	134	Magnesium	52 mg
Total Fat	5 g	Potassium	309 mg
Saturated Fat	1 g	Calcium	18 mg
Cholesterol	60 mg	Sodium	93 mg

Spicy seasoning mix

1 1/2 tsp	white pepper
1/2 tsp	cayenne pepper
1/2 tsp	black pepper
1 tsp	onion powder
1 1/4 tsp	garlic powder
1 Tbsp	basil, dried
1 1/2 tsp	thyme, dried



Mix all ingredients together. Store in an airtight container. Use in meat, poultry, fish, or vegetable dishes. Try replacing the salt in the salt shaker and use at the table.



Zucchini Lasagna

(Day 7)

1/2 pound	lasagna noodles, cooked in unsalted water
3/4 cup	mozzarella cheese, part-skim
1 1/2 cup	fat free cottage cheese
1/4 cup	Parmesan cheese
1 1/2 cup	zucchini, raw, sliced
2 1/2 cup	tomato sauce, low sodium
2 tsp	basil, dried
2 tsp	oregano, dried
1/4 cup	onion, chopped
1 clove	garlic
1/8 tsp	black pepper



Makes 6 servings.

Serving size: 1 piece

Per serving:

Calories	276	Magnesium	55 mg
Total Fat	5 g	Potassium	561 mg
Saturated fat	2 g	Calcium	216 mg
Cholesterol	11 mg	Sodium	380 mg

1. Preheat oven to 350° F. Lightly spray a 9 x 13 inch baking dish with vegetable oil spray. Set aside.
2. In a small bowl, combine 1/8 cup mozzarella and 1 Tbsp Parmesan cheese. Mix well and set aside.
3. In a medium bowl, combine remaining mozzarella and Parmesan cheese with all of the cottage cheese. Mix well and set aside.
4. Combine tomato sauce with remaining ingredients. Spread a thin layer of tomato sauce in the bottom of the baking dish. Add about a third of the noodles in a single layer. Spread half of the cottage cheese mixture on top. Add a layer of zucchini. Repeat layering. Add a thin coating of sauce. Top with the noodles, sauce, and reserved cheese mixture. Cover with aluminum foil.
5. Bake 30 to 40 minutes. Let stand 10 to 15 minutes. Cut into 6 portions.



MAKING THE DASH TO GOOD HEALTH

The DASH plan is a new way of eating—for a lifetime. If you slip from the eating plan for a few days, don't let it keep you from reaching your health goals. Get back on track. Here's how:

■ Ask yourself why you got off-track.

Was it at a party? Were you feeling stress at home or work? Find out what triggered your sidetrack—and start again with DASH.

■ Don't worry about a slip.

Everyone slips—especially when learning something new. Remember that changing your lifestyle is a long-term process.

■ See if you tried to do too much at once.

Often, those starting a new lifestyle try to change too much at once. Instead, change one or two things at a time. Slowly but surely is the best way to succeed.

■ Break the process down into small steps.

This not only keeps you from trying to do too much at once but also keeps the changes simpler. Break complex goals into smaller, simpler steps, each of which is attainable.

■ Write it down.

Use the table on page 5 to keep track of what you eat. This can help you find the problem. Besides noting what you eat, also record: where you are, what you're doing, and how you feel. Keep track for several days. You may find, for instance, that you eat high fat foods while watching television. If so, you could start keeping a substitute snack on hand to eat instead of the high fat foods. This record also helps you be sure you're getting enough of each food group.



■ Celebrate success.

Treat yourself to a non-food treat for your accomplishments.

WANT TO LEARN MORE?

For more information about DASH, visit the special web site at <http://dash.bwh.harvard.edu>.

Bulk copies of this DASH Diet fact sheet are available at a minimal cost from the NHLBI Information Center, P.O. Box 30105, Bethesda, MD 20824-0105.

For more about high blood pressure or other heart-related topics, write to the NHLBI Information Center. Or check out the NHLBI web site at <http://www.nhlbi.nih.gov>.

To hear recorded messages about high blood pressure prevention and treatment, call toll-free 1-800-575-WELL. The information line also has messages on high blood cholesterol. The messages are available in English and Spanish.

WHO HELPED WITH DASH?

The DASH study was sponsored by the NHLBI and conducted at four medical sites. There also was a central coordinating center at Kaiser Permanente Center for Health Research in Portland, OR.

The four sites were: Brigham and Women's Hospital, Boston, MA; Duke University Medical Center, Durham, NC; Johns Hopkins University, Baltimore, MD; and Pennington Biomedical Research Center, Louisiana State University, Baton Rouge, LA.

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