

DASH Diet

The **DASH** study (**D**ietary **A**pproaches to **S**top **H**ypertension) found risk of elevated blood pressure could be reduced with a low-fat eating plan rich in dairy, fruits, and vegetables. The plan is also rich in calcium, potassium, and magnesium, and protein (especially from fish, poultry, and nuts) and fiber (from fruits, vegetables, and whole grains). A second DASH study found that eating the DASH diet in combination with a reduced sodium intake results in the greatest benefit towards lowering high blood pressure. The DASH diet can be used to maintain or achieve a healthy weight and promote overall health. The diet is rich in fruits and vegetables which have been shown to lower cancer risk, high in dairy which is shown to lower osteoporosis risk, and low in saturated fat, trans fats, and cholesterol which have been shown to lower cardiovascular disease risk. Exercise is also a key element in maintaining a healthy weight and a healthy weight is a factor in normal blood pressure control.

Where's the sodium?

Only a small amount of sodium occurs naturally in foods. Most sodium is added during processing. The following table provides examples of the varying amounts of sodium in some foods. When reading the nutrition label, look for sodium and milligrams instead of percentages.

Food groups	Amount	Sodium (mg.)
<u>Grains and Grain Products</u>		
Cooked cereal, rice, pasta (all unsalted)	½ cup	0-5
Ready-to-eat cereal	1 cup	100-360
Bread	1 slice	110-175
<u>Vegetables</u>		
Fresh or frozen, (cooked without salt)	½ cup	1-70
Canned or frozen with sauce	½ cup	140-460
Tomato juice, canned	¾ cup	820
<u>Fruit</u>		
Fresh, frozen, canned	½ cup	0-5
<u>Lowfat or fat-free dairy foods</u>		
Milk	1 cup	120
Yogurt	8 oz.	160
Natural cheeses	1 ½ oz.	110-450
Processed cheeses	1 ½ oz.	600
<u>Nuts, seeds and dry beans</u>		
Peanuts, salted	1/3 cup	120
Peanuts, unsalted	1/3 cup	0-5
Beans, cooked from dried or frozen without salt	½ cup	0-5
Beans, canned	½ cup	400
<u>Meats, fish and poultry</u>		
Fresh meat, fish, poultry	3 oz.	30-90
Tuna canned, water pack, no salt added	3 oz.	34-45
Tuna canned, water pack	3 oz.	250-350
Ham, lean, roasted	3 oz.	1,020

Tips to reduce salt and sodium

- Use reduced sodium or no-salt-added products. For example, choose low or reduced sodium, or no-salt-added versions of foods and condiments when available.
- Buy fresh, plan frozen, or canned with “no-salt-added” vegetables.
- Use fresh poultry, fish, and lean meat, rather than canned, smoked, or processed types.
- Choose ready-to-eat breakfast cereals that are lower in sodium.
- Limit cured foods (such as bacon and ham), foods packed in brine (such as pickles, pickled vegetables, olives, and sauerkraut), and condiments (such as MSG, mustard, horseradish, catsup, and barbecue sauce). Limit even lower sodium versions of soy sauce and teriyaki sauce.

- Use spices instead of salt. In cooking and at the table, flavor foods with herbs, spices, lemon, lime, vinegar, or salt-free seasoning blends (like Mrs. Dash). Start by removing the salt shaker from the house.
- Cook rice, pasta, and hot cereals without salt. Cut back on instant or flavored rice, pasta, and cereal mixes, which usually have added salt. Try to make more food from “scratch.”
- Choose “convenience” foods that are lower in sodium. Cut back on frozen dinners, mixed dishes such as pizza, packaged mixes, canned soups or broths, and salad dressing – these often have a lot of sodium.
- Rinse canned foods, such as tuna, canned vegetables, and beans to remove some sodium.
- Look for frozen dinner foods with less than 500 milligrams of sodium. Look for brands such as “Healthy Choice[®]”, Smart Ones[®], Lean Cuisine[®], Lean Gourmet[®], etc.

Reducing sodium when eating out

- Ask how foods are prepared. Ask that they be prepared without added salt, MSG, or salt-containing ingredients. Most restaurants are willing to accommodate requests.
- Know the terms that indicate high sodium content: pickled, cured, soy sauce, broth.
- Move the salt shaker away.
- Limit condiments, such as mustard, catsup, pickles, and sauces with salt-containing ingredients.
- Choose fruit or vegetables instead of salty snack foods.

Label language

Food labels can help you to choose items lower in sodium and saturated and total fat. Look for the following labels on cans, boxes, bottles, bags, and other packaging:

Phrase	What it means
<u>Sodium</u>	
Sodium free or salt free	Less than 5 mg. per serving
Very low sodium	35 mg. or less of sodium per serving
Low sodium	140 mg. or less of sodium per serving
Low sodium meal	140 mg. or less of sodium per 3 ½ oz. (100 g.)
Reduced or less sodium	At least 25 percent less sodium than the regular version
Light in sodium	50 percent less sodium than the regular version
Unsalted or no salt added	No salt added to the product during processing

Phrase	What it means
<u>Fat</u>	
Fat free	Less than 0.5 g. per serving
Low saturated fat	1 g. or less per serving
Lowfat	3 g. or less per serving
Reduced fat	At least 25 percent less fat than the regular version
Light in fat	Half the fat compared to the regular version

Sample menus for DASH 1500, 1800 and 2000 calories per day are listed on the following pages.

A registered dietitian can tell you the number of calories you need per day.

Additional information is available from the following Web site:

http://www.nhlbi.nih.gov/health/public/heart/hbp/dash/new_dash.pdf

Sources

Zemel, M. B. (1997), Dietary Patterns and Hypertension: The DASH Study. *Nutrition Review*, 55: 303-305.
 Developed with assistance from Annette Cole, UIUC Graduate Dietetic Intern

1500 Calories/Day DASH Diet - Sample Menu

Food	Amount	Servings Provided	
Breakfast			Total number of servings in 1500 calories/day menu: 5.5 - Grains 4 - Vegetables 4 - Fruits 3 - Dairy Foods 2 - Meats, Poultry, Fish ¼ - Nuts 1½ - Fats & Oils
Orange juice	6 ounces	1 fruit	
Skim milk	8 ounces (1 cup)	1 dairy	
Corn flakes (with 1 tsp sugar)	¾ cup	1 ½ grains	
Banana	1 medium	1 fruit	
Light whole wheat bread (with 1 TBSP jelly)	1 slice	1 grain	
Lunch			
Baked chicken	3 ounces	1 poultry	
Pita bread	½ slice, large	1 grain	
Raw vegetable medley consisting of: Carrot and celery sticks Radishes Loose-leaf lettuce	3-4 sticks of each 2 2 leaves	All equal 1 vegetable	
Part skim mozzarella cheese	1 ½ slices (1 ½ ounces)	1 dairy	
Skim milk	8 ounces (1 cup)	1 dairy	
Fruit cocktail in water	½ cup	1 fruit	
Dinner			
Herb baked cod	3 ounces	1 fish	
Scallion rice	½ cup	1 grain	
Steamed broccoli	½ cup	1 vegetable	
Stewed tomatoes	½ cup	1 vegetable	
Spinach salad consisting of: Raw spinach Cherry tomatoes Cucumber	½ cup 2 2 slices	All equal 1 vegetable	
Light Italian salad dressing	1 tablespoon	½ fat	
Soft margarine	1 teaspoon	1 fat	
Melon balls	½ cup	1 fruit	
Snacks			
Mini pretzels	1 ounce (¾ cup)	1 grain	
Mixed nuts	2 tablespoons	¾ nuts	
Diet Ginger Ale	12 ounces	0	

Tips on eating the DASH way:

- Start small. Make gradual changes in your eating habits.
- Center your meal around carbohydrates, such as pasta, rice, beans, or vegetables.
- Treat meat as one part of the whole meal, instead of the focus.
- Use fruits or low-fat, low-calorie foods such as sugar-free gelatin for desserts and snacks.

REMEMBER! If you use the DASH diet to help prevent or control high blood pressure, make it part of a lifestyle that includes choosing foods lower in salt and sodium, keeping a healthy weight, being physically active, and, if you drink alcohol, doing so in moderation.

1800 Calories/Day DASH Diet - Sample Menu

Food	Amount	Servings Provided	
Breakfast			Total number of servings in 1800 calories/day menu: 8 - Grains 4 - Vegetables 4 - Fruits 3 - Dairy Foods 1 ¾ - Meats, Poultry, Fish 1 - Nuts 2½ - Fats & Oils
Orange juice	6 ounces	1 fruit	
Skim milk	8 ounces (1 cup)	1 dairy	
Corn flakes (with 1 tsp sugar)	1 cup	2 grains	
Banana	1 medium	1 fruit	
Whole wheat bread (with soft margarine) (with 1 TBSP jelly)	1 slice 1 teaspoon	1 grain 1 fat	
Lunch			
Chicken salad	½ cup	¾ poultry	
Pita bread	½ slice, large	1 grain	
Raw vegetable medley consisting of: Carrot and celery sticks Radishes Loose-leaf lettuce	3-4 sticks of each 2 2 leaves	All equal 1 vegetable	
Part skim mozzarella cheese	1 ½ slices (1 ½ ounces)	1 dairy	
Skim milk	8 ounces (1 cup)	1 dairy	
Fruit cocktail in water	½ cup	1 fruit	
Dinner			
Herb baked cod	3 ounces	1 fish	
Scallion rice	1 cup	2 grains	
Steamed broccoli	½ cup	1 vegetable	
Stewed tomatoes	½ cup	1 vegetable	
Spinach salad consisting of: Raw spinach Cherry tomatoes Cucumber	½ cup 2 2 slices	All equal 1 vegetable	
Light Italian salad dressing	1 tablespoon	½ fat	
Whole wheat dinner roll	1 small	1 grain	
Soft margarine	1 teaspoon	1 fat	
Melon balls	½ cup	1 fruit	
Snacks			
Mini pretzels	1 ounce (¾ cup)	1 grain	
Mixed nuts	1 ½ ounces	1 nuts	
Diet Ginger Ale	12 ounces	0	

Tips on eating the DASH way:

- Start small. Make gradual changes in your eating habits.
- Center your meal around carbohydrates, such as pasta, rice, beans, or vegetables.
- Treat meat as one part of the whole meal, instead of the focus.
- Use fruits or low-fat, low-calorie foods such as sugar-free gelatin for desserts and snacks.

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2000 Calories/Day DASH Diet - Sample Menu

Food	Amount	Servings Provided	
Breakfast			<p style="text-align: center;">Total number of servings in 2000 calories/day menu:</p> <p>8 - Grains 4 - Vegetables 5 - Fruits 3 - Dairy Foods 2 - Meats, Poultry, Fish 1 - Nuts 2½ - Fats & Oils</p> <hr/> <p style="text-align: center;">Tips on eating the DASH way:</p> <ul style="list-style-type: none"> Start small. Make gradual changes in your eating habits. Center your meal around carbohydrates, such as pasta, rice, beans, or vegetables. Treat meat as one part of the whole meal, instead of the focus. Use fruits or low-fat, low-calorie foods such as sugar-free gelatin for desserts and snacks. <hr/> <p>REMEMBER! If you use the DASH diet to help prevent or control high blood pressure, make it part of a lifestyle that includes choosing foods lower in salt and sodium, keeping a healthy weight, being physically active, and, if you drink alcohol, doing so in moderation.</p>
Orange juice	6 ounces	1 fruit	
1% low fat milk	8 ounces (1 cup)	1 dairy	
Corn flakes (with 1 tsp sugar)	1 cup	2 grains	
Banana	1 medium	1 fruit	
Whole wheat bread (with soft margarine) (with 1 TBSP jelly)	1 slice 1 teaspoon	1 grain 1 fat	
Lunch			
Chicken salad	¾ cup	1 poultry	
Pita bread	½ slice, large	1 grain	
Raw vegetable medley consisting of: Carrot and celery sticks Radishes Loose-leaf lettuce	3-4 sticks of each 2 2 leaves	All equal 1 vegetable	
Part skim mozzarella cheese	1 ½ slices (1 ½ ounces)	1 dairy	
1% low fat milk	8 ounces (1 cup)	1 dairy	
Fruit cocktail in water	½ cup	1 fruit	
Dinner			
Herb baked cod	3 ounces	1 fish	
Scallion rice	1 cup	2 grains	
Steamed broccoli	½ cup	1 vegetable	
Stewed tomatoes	½ cup	1 vegetable	
Spinach salad consisting of: Raw spinach Cherry tomatoes Cucumber	½ cup 2 2 slices	All equal 1 vegetable	
Light Italian salad dressing	1 tablespoon	½ fat	
Whole wheat dinner roll	1 small	1 grain	
Soft margarine	1 teaspoon	1 fat	
Melon balls	½ cup	1 fruit	
Snacks			
Dried apricots	1 ounce (¼ cup)	1 fruit	
Mini pretzels	1 ounce (¾ cup)	1 grain	
Mixed nuts	1 ½ ounces	1 nuts	
Diet Ginger Ale	12 ounces	0	

If you are a registered University of Illinois student and you have questions or concerns, or need to make an appointment, please call: **Dial-A-Nurse at 333-2700**

If you are concerned about any difference in your treatment plan and the information in this handout, you are advised to contact your health care provider.

Visit the McKinley Health Center Web site at: <http://www.mckinley.uiuc.edu>