

What Is The DASH Diet?

The DASH diet was promoted by the National Heart, Lung and Blood Institute for patients with Hypertension to Control their Blood Pressure. U.S. News & World Report ranked the DASH Diet as number 1 in January 2013.

DASH stands for Dietary Approaches to Stop Hypertension.

People on the DASH diet eat lots of fruits, vegetables, whole grain, low-fat dairy foods, as well as poultry, fish, meat, nuts and beans. The quantities of added fats, red meat, and sugar-laden drinks and foods are kept to a minimum.

The DASH diet focuses on portion size, consuming a wide variety of foods and obtaining proper amount of nutrients.

The creators of the DASH diet say that not only is it designed to bring down high blood pressure, but is also a well-balanced approach to eating for people in general. The DASH diet encourages the dieter to consume less sodium (salt) and increase his/her intake of magnesium, calcium and potassium, in order to help lower blood pressure.

How effective is the DASH diet?

Patients with pre-hypertension who followed the DASH eating plan experienced an average drop of 6 mm Hg in systolic blood pressure and 3 mm Hg in diastolic Blood Pressure.

Patients with hypertension experienced reductions of 11 mm Hg in systolic blood pressure and 6 mm Hg in diastolic blood pressure.

A study published in *Circulation: Cardiovascular Quality and Outcomes* found that **“The DASH Diet reduces the 10-year risk of heart attack.”**

Why was the DASH diet created?

Hypertension has been a growing concern in the USA during the last fifty years. According to the NHLBI (National Heart, Lung and Blood Institute), high blood pressure is associated with a significantly greater risk of developing heart attack, heart failure, stroke and kidney disease. For patients aged from 40 to 70 years, for every rise of 20 mm Hg in systolic BP (SBP) or 10 mm Hg in diastolic BP (DBP), the risk of a cardiovascular disease doubles.

The first DASH study started in August 1993 and lasted until the end of July 1997. Preliminary results demonstrated that high consumption of certain minerals and fiber were linked to a drop in blood pressure. The nutritional focus of the DASH meal plans was based on part of this study.

The study compared two experimental diets with a "control diet":

- **Fruits and vegetables diet** - it was high in fruit and vegetables, but was otherwise similar to the typical American diet at the time, however, with fewer snacks and sweets. Magnesium and potassium levels were similar to the 75th percentile of US consumption. Fiber content was high.
- **The DASH diet** - high in fruits, vegetables, and low-fat dairy products. Overall fat and saturated fat levels were low, while fiber and protein levels were high. It was rich in potassium, magnesium, calcium, whole grains, poultry, fish, and nuts. Consumption of red meat, sweets and sweetened drinks were low. These two diets were compared to a third diet:
- **The control diet** - this was similar to the typical American diet at the time, with low levels of fiber, potassium, magnesium and calcium, and high levels of fat and protein.

The DASH study results

The DASH trial proved that eating patterns can affect blood pressure patients with moderate to severe hypertension. The minority-group participants on the DASH diet experienced particularly significant reductions in blood pressure, compared to those on the control diet.

Those in the fruit and vegetables group also experienced reductions in blood pressure, although these were modest in comparison to the results in the DASH group.

Even the participants on the DASH diet who started off without hypertension experienced reductions in their blood pressure. Blood pressure variations among this group on the other two diets were less noticeable.

The study showed that **participants with hypertension on the DASH diet saw falls in blood pressure within two weeks of starting their diet.**

Sodium levels in the DASH diet

One of the principal objectives of the DASH diet is to get participants to reduce their sodium intake. Sodium can raise blood pressure in sensitive people. Hence, there are two versions of the DASH diet:

- **The Standard DASH diet** - the dieter can consume up to 2,300 mg of sodium each day
- **The Low Sodium DASH diet** - the dieter can consume up to 1,500 mg of sodium each day

In traditional diets, people can consume up to 3,500 mg of sodium each day, and often more. Both DASH diet versions aim to reduce sodium consumption. The US government advises its people to limit their sodium intake to no more than 2,300 per day.

What is included in the DASH diet?

The DASH diet includes plenty of fruits, vegetables, low-fat dairy products, and whole grains, as well as some legumes, poultry and fish, plus small amounts of red meat, fats and sweets. It is low in saturated fat, total fat and cholesterol.

Below is what a typical 2,000 calorie-per-day DASH diet may consist of:

- **6 to 8 daily servings of grains** - including pasta, rice, cereal and bread. One serving could be a slice of whole-wheat bread, ½ cup of cooked pasta, rice or cereal, or 1 oz of dry cereal.
- **4 to 5 servings of vegetables** - these may include fiber- and vitamin-rich vegetables, including broccoli, sweet potatoes, greens, carrots or tomatoes. One serving could be ½ a cup of raw or cooked vegetables, or 1 cup of leafy green vegetables (raw).
- **4 to 5 servings of fruits** - these are rich in fiber, magnesium, potassium, vitamins and other minerals. One serving may include ½ cup of fresh, canned or frozen fruit, or 1 medium fresh fruit.
- **2 to 3 servings of low-fat dairy** - major sources of calcium, protein and vitamin D include cheese, yogurt and milk. For the DASH diet to work, these dairy products must be either low-fat or fat-free. One serving could include 1 cup of skim or 1% milk, 1.5 oz of cheese, or 1 cup of yogurt.
- **Up to 6 servings of fish, poultry or lean meat** - even though meats are rich in proteins, B vitamins, zinc and other nutrients, DASH dieters should keep these nutrients down and make sure the mainstay of their diet is high in fruit and vegetables. One serving may include 1 oz of poultry (cooked, skinless), lean meat or seafood, 1 egg, 1 oz of tuna (packed in water, no salt added).
- **4 to 5 servings of nuts, seeds and legumes** - these are good sources of protein, potassium, magnesium, fiber, phytochemicals, and other essential nutrients. Examples include sunflower seeds, beans, peas, lentils, almonds, peanuts and pistachios.
- **2 to 3 servings of fats and oils** - the human body needs fat to properly absorb essential vitamins as well as some other nutrients. For a healthy immune system, we have to consume adequate amounts of fats. One serving may include 1 teaspoon of margarine, 1 tablespoon of low-fat mayonnaise, or 2 tablespoons of light salad dressing.
- **Up to 5 servings per week of sweets** - being on a DASH diet does not mean giving up sweets altogether. Dieters need to keep their intake limited. One serving could include 1 cup of lemonade, ½ a cup of sorbet, 1 tablespoon of sugar, jam or jelly.
- **Alcohol** - DASH dieters should consume no more than two drinks for men and one drink for women per day.

Daily Nutritional Goals in the DASH diet (for a 2,000-Calorie Eating Plan)

Total fat	27% of calories
Saturated fat	6% of calories
Protein	18% of calories
Carbohydrate	55% of calories
Cholesterol	150 mg
Sodium	2,300 mg*
Potassium	4,700 mg
Calcium	1,250 mg
Magnesium	500 mg
Fiber	30 g

* 1,500 mg of sodium in the low sodium DASH diet

The DASH diet was not designed as a weight loss regime. It was designed to reduce blood pressure.