



# DASH (Dietary Approaches to Stop Hypertension) diet to prevent and control hypertension

### Intervention

A change in overall diet pattern that emphasises fruits, vegetables and low-fat dairy products, and which includes whole grains, fish, poultry and nuts but limits saturated fat, red meat, sweets and sugar-containing beverages.

The dietary changes result in a reduced consumption of sodium and an increased consumption of potassium, calcium and magnesium compared with a typical Australian diet.

There are strong similarities between the DASH diet and the Mediterranean diet. However, the DASH diet does not emphasise olive oil and fish and does not include wine: http://www.racgp.org.au/your-practice/guidelines/handi/interventions/nutrition/the-mediterranean-diet-for-reducing-cardiovascular-disease-risk/

### **Indication**

The DASH diet has been rated the best diet for overall health and wellness for the past 5 years in a row.

Reduction of blood pressure. The DASH diet has been shown to reduce blood pressure within 2 to 4 weeks (by 6 mmHg systolic and 3 mmHg diastolic). After this initial reduction the blood pressure is maintained rather than reduced further. Effects are more pronounced in people who are hypertensive rather than normotensive.

The DASH diet may further reduce cardiovascular disease (CVD) risk through reduction in total cholesterol, low density lipoproteins (LDLs) and body mass index (BMI).

Changes achieved with the DASH diet predict a reduction of CVD of approximately 13% using the 10-year Framingham risk score.

## **Availability**

### **Description**

The DASH diet consists of foods that are readily available in Australia.

The DASH diet plan includes the following:

Type of food	Servings	Serving size
Fruits	4–5 a day	1 medium fruit 1/4 cup dried fruit 1/2 cup fresh, frozen, or canned fruit
Vegetables	4-5 a day	1 cup raw leafy vegetable 1/2 cup cooked vegetable
Low-fat or non-fat dairy foods	2-4 a day	250 mL milk 1 cup yogurt 50 g cheese
Grains and grain products (include at least 3 whole- grain foods each day)	6–8 a day	1 slice bread 1 cup cereal 1/2 cup cooked rice or pasta
Lean meats, poultry and fish	2 or fewer a day	90 g cooked lean meat, skinless poultry or fish







# **Description** (continued)

Nuts, seeds and legumes	4–5 per week	1/3 cup nuts 1 tablespoon seeds 1/2 cup cooked dry beans
Fats and oils	2–3 a day	1 teaspoon margarine 1 tablespoon low-fat mayonnaise 2 tablespoons light salad dressing 1 teaspoon vegetable oil
Sweets	5 or fewer per week	1 tablespoon sugar 1 tablespoon jam 15 g jelly beans 250 mL lemonade

### **Tips and Challenges**

Referral to a dietitian is recommended for tailored advice and ongoing follow-up. Refer to Dietitians Association of Australia.

### **Grading**

NHMRC Level 2 evidence.

#### References

Salehi-Abargouei A, Maghsoudi Z, Shirani F. Effects of Dietary Approaches to Stop Hypertension (DASH)-style diet on fatal or nonfatal cardiovascular diseases – incidence: a systematic review and meta-analysis on observational prospective studies. Nutrition 2013; 29:611–618.

Siervo M, Lara J, Chowdhury S et al. Effects of the Dietary Approach to Stop Hypertension (DASH) diet on cardiovascular risk factors: a systematic review and meta-analysis. British Journal of Nutrition 2015;113: 1–15.

### **Consumer Resources**

There are numerous books about the DASH diet (e.g. The DASH diet, The DASH diet for beginners, The DASH diet action plan The DASH diet for weight loss).

Most consumer resources for the DASH diet have been developed in the United States (US). The National Heart, Lung and Blood Institute (part of the US Department of Health and Human Services) promotes the DASH diet as a well-balanced diet for the general public as well as those with hypertension. Some call it the American version of the Mediterranean diet.

- The US Department of Health and Human Services has produced a brief guide to lowering blood pressure with the DASH diet <a href="http://www.nhlbi.nih.gov/files/docs/public/heart/dash\_brief.pdf">http://www.nhlbi.nih.gov/files/docs/public/heart/dash\_brief.pdf</a> and a more general guide to lowering blood pressure <a href="http://www.nhlbi.nih.gov/files/docs/public/heart/hbp\_low.pdf">http://www.nhlbi.nih.gov/files/docs/public/heart/hbp\_low.pdf</a>
- WebMD offers some tips to starting and staying on the DASH diet: http://www. webmd.com/hypertension-high-blood-pressure/guide/dash-diet

It also has an action set for using the DASH diet: http://www.webmd.com/hypertension-high-blood-pressure/tips-for-following-the-dietary-approaches-to-stop-hypertension-dash-diet

- DASH Diet Oregon provides some useful information and resources about the DASH diet. While this is a free site, it is paid for by the Oregon Dairy Council. www.dashdietoregon
- A US-based paid site offers online DASH diet programs (including education, support, meal plans, tracking tools and recipes). http://www.dashforhealth.com

