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.


**Indication**

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**

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

**Description**

The DASH diet plan includes the following:

<table>
<thead>
<tr>
<th>Type of food</th>
<th>Servings</th>
<th>Serving size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruits</td>
<td>4–5 a day</td>
<td>1 medium fruit 1/4 cup dried fruit 1/2 cup fresh, frozen, or canned fruit</td>
</tr>
<tr>
<td>Vegetables</td>
<td>4–5 a day</td>
<td>1 cup raw leafy vegetable 1/2 cup cooked vegetable</td>
</tr>
<tr>
<td>Low-fat or non-fat dairy foods</td>
<td>2–4 a day</td>
<td>250 mL milk 1 cup yogurt 50 g cheese</td>
</tr>
<tr>
<td>Grains and grain products (include at least 3 whole-grain foods each day)</td>
<td>6–8 a day</td>
<td>1 slice bread 1 cup cereal 1/2 cup cooked rice or pasta</td>
</tr>
<tr>
<td>Lean meats, poultry and fish</td>
<td>2 or fewer a day</td>
<td>90 g cooked lean meat, skinless poultry or fish</td>
</tr>
</tbody>
</table>
### 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 the [Dietitians Association of Australia](https://www.dietitians.org.au).

### Grading

NHMRC Level 2 evidence.

### References


### 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.

- WebMD offers some tips to starting and staying on the DASH diet: [http://www.webmd.com/hypertension-high-blood-pressure/guide/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](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](http://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](http://www.dashforhealth.com)