

# **CVD Risk: Mediterranean diet**



## **Summery**

A change in overall dietary pattern to increase intake of fresh fruits, vegetables, grains, nuts and fish and decrease intake of meat and dairy, known as the Mediterranean diet.

Total energy intake is adapted to meet individual needs. There is no specific fat restriction, as long as fat is mostly derived from fatty fish and plant sources (particularly olive oils or nuts). Patients view the Mediterranean diet as tastier and more filling than low-fat diets, which leads to increased long-term compliance.

## $\rightarrow$

## **Indication & Benefits**

Prevention of subsequent cardiovascular events in **patients who have had myocardial infarction** or who are at **high risk of cardiovascular disease**.

According to the large PREDIMED randomised trial, patients at **high risk had either type 2 diabetes or three or more of the following**:

- smoker
- hypertension
- high LDL
- low HDL
- high BMI
- family history of cardiovascular disease.

Compared with a low-fat diet, patients randomised to a Mediterranean diet had a 30% reduced risk of a cardiovascular event at 5 years.

The Mediterranean diet may also be indicated to:

- lower the risk or mitigate the severity of type 2 diabetes
- reduce the risk of colorectal, breast and other cancers
- manage weight (despite high fat content).



## **Practical Description**

The Mediterranean diet comprises:

- high monounsaturated (eg olive oil) to saturated (eg fatty red meat) ratio at least 2:1
- high intake of legumes
- high intake of fruits and vegetables
- high intake of grains and cereals
- moderate quantities of fish, white meat and low-fat dairy
- low to moderate consumption of red wine
- low intake of red meat, processed meat and eggs
- low intake of sweets, sweet desserts and sweet drinks.

Refer to the *Consumer resources* for food group portion guide.

## Simple guidelines for implementing the MedDiet in clinical practice

Assess adherence to a Mediterranean diet using the <u>PREDIMED 14-item Questionnaire</u>. This tool can also be used for monitoring changes at future clinical consultations.

Introduce simple changes to the patient's diet, such as:

- using olive oil instead of other oils/ fats for cooking and dressing salads and cooked vegetables
- consuming vegetables with every meal (including leafy greens and tomatoes)
- consuming 2–3 serves of fresh fruit per day
- consuming legumes (cooked dried beans) 3 times per week (in salads, soups, casseroles, veggie burgers, falafel)
- having 2–3 serves of fish or seafood per week (at least one oily fish such as salmon or sardines)
- eating at least 3 serves of nuts per week (include walnuts and almonds)
- choosing white meat (poultry without skin or rabbit) instead of fatty processed meats (sausages, burgers) and keep red meat portions small and lean
- choosing natural (unsweetened) yoghurt as snack on most days
- cooking regularly (at least twice a week) with tomato, garlic and onion, and aromatic/culinary herbs as a base for pasta sauces, casseroles and baked dishes.

## Discourage consumption of:

- cream, butter, margarine
- processed meats (sausages, salami), fatty meats and poultry skin, deep-fried battered foods
- carbonated and sugared beverages
- pastries, cakes, sweet biscuits and lollies
- processed savoury snacks (potato chips, savoury biscuits)

## Tips and challenges

Suggest resources for recipe ideas (Mediterranean cookbooks, websites). Empower the patient to try new recipes and enjoy meals with family and friends.

Encourage incidental activity such as gardening, walking to local shops for fresh ingredients and preparing meals at home.

Provide patient with a suggested meal plan to get them started, and if available to the patient recommend consultation with a dietician. An important feature of the PREDIMED dietary intervention was the intensive sessions with dietitians at regular intervals (3-monthly) who provided tailored advice. Referral to a dietitian is recommended for tailored advice and ongoing follow-up. Refer to <u>Dietitians Association of Australia</u>. Despite the high percentage of fat in this diet, it is bulky and has low energy density. It is filling: followers are less likely to snack between meals, so this diet does not lead to weight gain.



## **Availability**

Mediterranean diet foods and recipes are readily available in Australia.

While some traditional ingredients and recipes used in the Mediterranean diet are not commonly used in Australia (rabbit, offal, cuttlefish, octopus), the general principles are readily adaptable in any cuisine.

Refer to *Consumer resources* for a reconstructed traditional Greek-style Mediterranean diet in Australia.



## Resources

Queensland Health (AUS), <u>Mediterranean diet (health.qld.gov.au)</u>
Patient.co (UK), <u>Health benefits of the Mediterranean Diet</u>, <u>How to Follow the Mediterranean Diet</u>

### Books:

Itsiopoulos C, <u>The Mediterranean diet</u>. Includes background research overview, weekly menus and 80 traditional recipe



## **Evidence**

#### NHMRC Level 1 evidence

- 1. de Lorgeril M, Renaud S, Mamelle N, et al. Mediterranean alpha-linolenic acid-rich diet in secondary prevention of coronary heart disease. Lancet, 1994;343: 1454-9.
- 2. Estruch R, Ros E, Salas-Salvado J, et al; PREDIMED Study Investigators. Primary prevention of cardiovascular disease with a Mediterranean diet. N Engl J Med, 2013;368: 1279–90.

- 3. Nordmann AJ, Suter-Zimmermann K, Bucher HC, et al. Meta-analysis comparing Mediterranean to low-fat diets for modification of cardiovascular risk factors. Am J Med, 2011;124: 841–51.e2.
- 4. Itsiopoulos C, Brazionis L, Kaimakamis M, eet al. Can the Mediterranean diet lower HbA1c in type 2 diabetes? Results from a randomized cross-over study. Nutr Metab Cardiovasc Dis, 2011 Sep;21(9): 740-7. DOI: 10.1016/j.numecd.2010.03.005. Epub 2010 Jul 31.

This email was sent to exaple@mail.com. If you'd rather not receive this kind of email, you can unsubscribe or manage your email preferences.







