



Higher adherence to Mediterranean diet is associated with lower risk of overall mortality in subjects with cardiovascular disease: prospective results from the MOLI-SANI study

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Disclosures

None



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Declaration of Interest

- I have nothing to declare



Declaration of Interest

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None of the Authors had a personal or financial conflict of interest

Background

- ✓ The **traditional Mediterranean diet** is an eating pattern typical of the Mediterranean basin that encourages

large intakes of vegetables, legumes, fruits, nuts, cereals, moderately high intake of **fish, olive oil** as main fat source and **moderate alcohol** intake during meals, but

low-to-moderate intake of dairy products (mostly in the form of *cheese* or *yogurt*), **low consumption of meat and poultry**.

This eating pattern is reportedly effective in **reducing mortality in the general population**, but few epidemiological studies have investigated the role of a Mediterranean eating pattern among **subjects with cardiovascular disease (CVD)**.



The MOLI-SANI Study

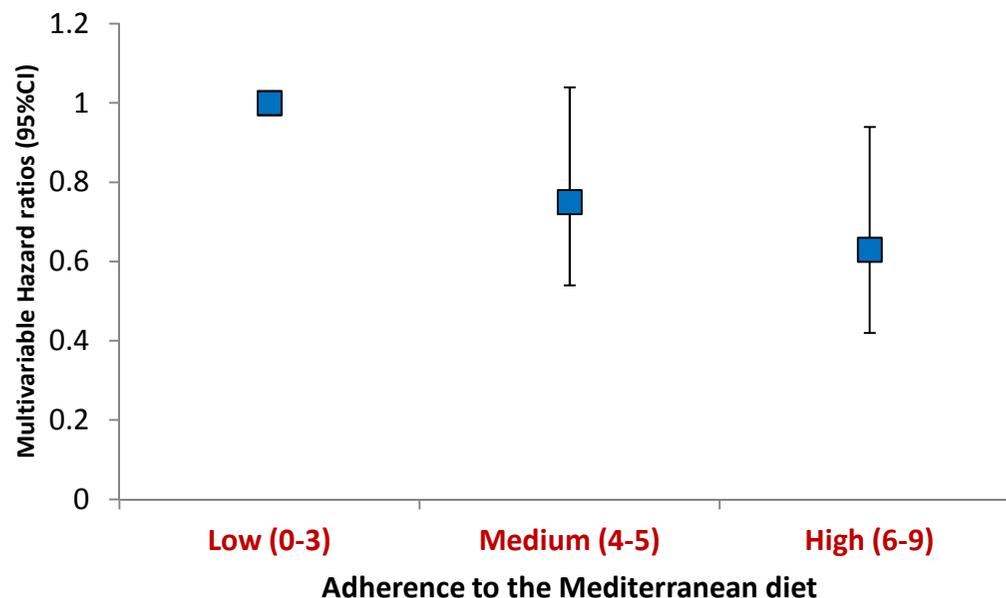
- ✓ 25,000 subjects living in the Molise region
- ✓ Aged ≥ 35 years
- ✓ Recruitment phase: 2005-2010
- ✓ First follow up: December 2011
- ✓ Second follow up: May 2015
- ✓ End points: **cardiovascular, cerebrovascular and cancer events**



Purpose and key points about Methods

- ✓ We aimed at evaluating whether adherence to a traditional Mediterranean diet is inversely associated with mortality in a sample of individuals with history of CVD at baseline.
- ✓ **Prospective study** on **1,197 individuals** (mean age 66.7 ± 10 ; 68% men) with history of CVD at baseline randomly recruited from the general population of the MOLI-SANI study (Italy). CVD included **coronary heart disease (n=814)** and **cerebrovascular events (n=387)**.
- ✓ **Food intake** was recorded by the **EPIC food frequency questionnaire**.
- ✓ **Adherence** to the Mediterranean diet was appraised by a **9-point Mediterranean diet score (MDS)**.
- ✓ **All-cause death** was assessed by linkage with Offices of Vital Statistics of the Molise Region.
- ✓ **Hazard ratios** were calculated using multivariable Cox-proportional hazard models with 95% confidence intervals.

Results



- ✓ Follow-up = **7.3 years** (median; 8,530 person-years);
- ✓ **208 all-cause deaths**;
- ✓ **A 2-point increase in the MD score was associated with 21% reduced risk of death** (5% to 34%) in a multivariable model;
- ✓ The protective effect of the MD was mainly contributed by high consumption of **vegetables** (26% in the reduction of the effect after removal from the score), **fish** (23%), **fruits and nuts** (13.4%) and by a higher ratio of **monounsaturated to saturated fats** (12.9%).

Conclusions

1. The traditional Mediterranean diet was associated with **reduced risk of all-cause mortality in adult subjects with history of ischaemic CVD** from a large Mediterranean cohort.
2. Major contributions were offered by higher consumption of **vegetables, fish, fruits/nuts and monounsaturated over saturated fatty acids.**