

Conclusions: Our results confirm that an intervention with VD is able to determine a reduction in circulating levels of vitamin B12.

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ASSOCIATION OF TRADITIONAL MEDITERRANEAN DIET AND NON-MEDITERRANEAN DIETARY SCORES WITH ALL-CAUSE AND CAUSE-SPECIFIC MORTALITY: PROSPECTIVE FINDINGS FROM THE MOLI-SANI STUDY

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Introduction: Health benefits associated with Mediterranean diet (MD) are well-established in non-Mediterranean population settings, while less is known on the potential health advantages associated with non-Mediterranean dietary (MD) patterns among Mediterranean populations.

Objectives: To establish the association between the traditional MD and non-MD patterns with mortality in a sample of the Italian general population, through a longitudinal analysis on 22,849 men and women from the Moli-sani study (2005–2010). A traditional MD was assessed by the Mediterranean diet score (MDS); the dietary approach to stop hypertension (DASH), the Palaeolithic diet and the Nordic diet were chosen as non-MD patterns. Hazard ratios (HR) with 95% confidence intervals (95%CI) were calculated by multivariable Cox regression and competing risk models.

Results: During follow-up (median 8.2 y), 1,237 subjects died. Higher MDS was associated with lower risk of all-cause (HR = 0.77; 95%CI 0.66–0.90, highest vs lowest quartile) and CVD (HR = 0.77; 0.59–1.00) death risk and a downward trend was found with cancer death (HR = 0.88; 0.68–1.12). Closer adherence to the DASH diet was associated with reduced all-cause but not with CVD mortality; risk reduction associated with the Palaeolithic diet was limited to non CVD-non cancer death, whereas the Nordic diet was not associated with any death risk modification.

Conclusions: A traditional MD lowers the risk of all-cause and CVD mortality in an adult general Mediterranean population; a DASH diet was associated with improved survival but not with a reduction of CVD mortality, while other non-MD diets were not associated with substantial health benefits.

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EFFECT OF A LOW GLYCEMIC INDEX MEDITERRANEAN DIET ON CARDIOVASCULAR RISK FACTORS IN WOMEN DIAGNOSED WITH BREAST CANCER: PRELIMINARY DATA FROM DEDiCa study

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Introduction: Life expectancy in women with breast cancer (BC) is 80% at 5 years. Age, medications, obesity, metabolic syndrome and diabetes increase cardiovascular risk. The Mediterranean diet (MeD) and low glycemic index (GI) diets, nevertheless, are protective. Therefore, we evaluated the effect of low-GI Mediterranean diet on cardiovascular risk factors in women treated for BC.

Methods: Two-hundred-fifty women (30–74 yr) with primary BC, participating in DEDiCa study (NCT02786875), were randomized into one of two treatments that included: recommendations on a traditional MeD with low GI carbohydrates (group A) or recommendations on a traditional MeD with whole grains (group B). At time 0 and 12 months, in a subgroup of 70 participants, we assessed dietary habits by food records and anthropometric and biochemical parameters by standard protocols.

Results: Only 24% of participants showed high adherence to the MeD at baseline. Low adherence was found for fish, legumes, fresh fruit and nuts intakes while adherence to vegetables intake was medium. The differences at 12 months showed in both groups a significant reduction ($p < 0.05$) for calories (approximately 300 Kcal), glycemic load (28% group A, 15% group B), saturated fats (10% in both groups) and an increase for monounsaturated fats (14% group A) and fiber/1000 Kcal (60% in both groups). Significant reductions ($p < 0.05$) for LDL cholesterol were observed in both groups (8%) while in group A we observed reductions for triglycerides (15%), PCR (12%), waist circumference (4 cm) and blood pressure (7%) and an increase for HDL cholesterol (16%).

Conclusions: The effect of a low GI MeD showed improvements in cardiovascular risk factors. This result is important in view of an increased cardiovascular risk in women with BC.

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OBSERVATIONAL STUDY ON ADOLESCENTS' LIFESTYLE OF PARMA: ADHERENCE TO MEDITERRANEAN DIET, PHYSICAL ACTIVITY AND TIME AND QUALITY OF SLEEP

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Introduction: Diet, physical activity and sleep are potential risk factors for overweight and obesity and could influence the proper growth during the developmental age. Therefore, monitoring adolescents' lifestyle is essential to better understand the association between body composition and possible risk behavioural variables and to design preventive programme for educating people towards healthy habits. Thus, the aim of the study was to investigate the relations between BMI and lifestyle factors in a sample of Italian adolescents.

Methods: A total of 409 students (46% females, mean age 12.5 ± 0.6 years) of two secondary schools in Parma (Italy) were enrolled in this observational study. The following data were collected for each participant through a web platform: anthropometric measures, adherence to the Mediterranean diet (KIDMED), physical activity level (PAQ-A), time and quality of sleep (PDSS). Moreover, weight status was evaluated using the IOTF gender- and age-related cut-offs for BMI.

Results: Up to 69% of participants was in a normal weight status and 14% overweight/obese. 12% showed a low adherence to the Mediterranean diet, while 28% had a high adherence. Only 1% reported a light physical activity level, 14% very intense and 85% intense or moderate. Participants' sleep duration (mean time 8h55min) was in line with the international sleep recommendation for adolescents and the 60% had a medium sleep quality.

Conclusions: Contrary to what was expected, no evidence of association was found between BMI and adherence to the Mediterranean diet, BMI and physical activity level and BMI and time/quality of sleep. However, some differences were found between genders, between normal weight status and overweight/obese subjects and between participants with low