Background
Adherence to the Mediterranean Diet (MD) has been associated to the prevention of chronic degenerative pathologies (CDP) such as cardiovascular, neoplastic, and neurodegenerative diseases as well as all-cause mortality. The rising incidence of these diseases continues to strain our health care system, requiring and pushing towards the development of new preventive strategies. Objective of the study was to perform a systematic review of the scientific literature to accomplish a complete economic evaluation, assessing both micro-costing analysis, including direct and indirect costs of the adherence to the MD and its economic performance in terms of cost-effectiveness (CE) as a prevention strategy for CDP.

Methods
PubMed and Scopus databases were used. Combined searches were carried out for: "Mediterranean diet" associated to "cost", "cost effectiveness", "cost utility" and "cost benefit". PRISMA criteria were followed and quality assessment was performed.

Results
Eight articles were included and examined: three evaluated the CE analysis and five direct and indirect costs. Adherence to MD is more expensive than unhealthy Westernized diet (fifth vs first quintile of scores of adherence): +€0.71 per 1000 kcal (95% CI = 0.67 – 0.74; p < 0.001) vs -€0.64 per 1000 kcal (95% CI = -€0.68 – -0.61; p < 0.001). Subjects who closely adhered to the MD paid €1.2 (p < 0.001) and €1.4 (p < 0.001) daily more for food consumption, than those who weakly adhered. Total healthcare cost was estimated to be €336.720 in those who were "away" to the MD pattern and €35.880 in those who were "closer". Life-years lost due to disability was 6.8 in those who were "away" and 0.9 in those "close" to MD pattern. The incremental cost-effectiveness ratio was €50.989.

Conclusion
MD has the potential to modify disease outcomes and the costs of managing them in terms of CE. Dietary costs of the MD may be a key element which exclude certain social groups from healthy choices. Prevention policies should consider these economic barriers for the promotion and adoption of the MD especially for disadvantaged groups that are less able to afford healthier foods. Ensuring equal access to healthy food should become a mission for public health policy, for improving food behavior, consequently the population health status.

Key messages
- The Mediterranean diet is cost-effective in terms of prevention strategy against degenerative pathologies.
- Public health policy should consider the economic barrier to follow a healthy diet because cost may be a prohibitive factor especially for disadvantaged groups.