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Agriculture and Agricultural Science Procedia 8 (2016) 433 – 440

Agriculture and Agricultural Science Procedia

Florence "Sustainability of Well-Being International Forum". 2015: Food for Sustainability and not just food, FlorenceSWIF2015

# Exploring the Italians' food habits and tendency towards a sustainable diet: the Mediterranean eating pattern

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**Abstract**

Over the last few years, the Mediterranean diet has received growing attention as it represents a sustainable diet in which nutrition, local food production, biodiversity, culture and sustainability are strongly interconnected, with a low impact on the environment.
By using repeated cross-sections of the ISTAT "Aspects of daily-life" survey over the period 1997-2012, we assess prevailing food patterns among Italians and explore the socio-economic and lifestyle determinants of their adherence to the Mediterranean diet.


Peer-review under responsibility of Fondazione Simone Cesaretti

*Keywords:* Mediterranean Diet; Socioeconomic factors; pseudo-panel

## 1. Introduction

The Mediterranean Diet (MD) eating pattern, a collection of eating habits traditionally followed by people in the various countries bordering the Mediterranean, was declared an Intangible Cultural Heritage of Humanity by UNESCO in 2010 not only for its nutritional characteristics but also for the economic, environmental and socio-cultural impacts in various areas of agricultural vocation and ecological interest (Germani et al., 2014).

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Peer-review under responsibility of Fondazione Simone Cesaretti
doi:10.1016/j.aaspro.2016.02.040

The traditional MD is characterized by a high consumption of vegetables, fresh fruit, legumes, cereals and a moderate intake of alcohol as main source of fiber and antioxidants, with fish, nuts, and olive oil that ensure a high intake of monounsaturated fatty acids, associated with a low intake of trans fatty acids from meat and sweets (Trichopoulou et al. 2003; Bach-Faig et al. 2011).

Unfortunately, it seems that Mediterranean countries are replacing the traditional MD with other less healthy eating habits and orienting their food choices towards products typical of the Western diet which is rich in refined grains, saturated fats, sugars, red and processed meat, without taking into consideration health issues and environmental sustainability (Trichopoulos and Lagiou, 2004; Leclercq et al., 2009; Laccetti et al. 2013).

There are several reasons why people keep on drifting from one dietary regimen to another although social and cultural changes appear to have contributed to radical reversal in dietary habits in Southern European societies.

Numerous research studies focus on the factors associated with the adherence to the Mediterranean diet. Some studies have emphasized the role of socioeconomic variables such as occupation, income and education (Scali et al. 2001; Lopez et al. 2009). In particular, several analyses have highlighted that people in the lower socio-economic status groups are more likely to follow less nutritious diets (Darmon and Drewnowski, 2008; Katsarou et al. 2010).

Recent nutritional surveys carried out in Italy also confirmed that income and education are associated with a greater adherence to Mediterranean style eating patterns (Bonaccio et al. 2012; Bonaccio et al. 2013). Indeed, the expensive cost of MD could represent an economic barrier and could lead people to forfeit this eating pattern in favour of less-expensive food products which enable them to save money but are however less healthy. On the other hand low levels of education have been linked to poor adherence to Mediterranean style eating patterns.

According to these studies, it is clear that the analysis of factors influencing people's dietary habits which is the main object of this study, could help to promote the MD thus reaping benefits both in terms of public health and environmental impact (Germani et al., 2014).

The aim of this paper is to analyze the relationship between the socio-economic variables and adherence to MD by using longitudinal data thus avoiding unobserved heterogeneity and the risk of spurious correlation.

The pseudo panel data set constructed from the annual Italian multipurpose survey "Aspect of Daily Life" carried out by the Italian National Statistical Institute (ISTAT) enables us to assess the prevailing food patterns of the Italians and explore the socio-economic and lifestyle determinants of their adherence to MD at regional level bearing in mind the generational effects for the period from1997 to 2012.

## 2. Good for health, good for the environment

At first sight, the MD appears to be the best and most well-balanced diet to follow. Nutrition experts, epidemiologists and researchers are strongly convinced that the Mediterranean eating pattern is extremely good for one's health, as reported in scientific literature which links MD to a number of health benefits, including reduced mortality risk and lower incidence of cardiovascular diseases (Trichopoulou et al. 2014).

Moreover, MD links environmental and human health. Indeed, the traditional MD may be considered a sustainable diet due to various reasons such as great diversity that ensures food nutritional quality of diet and biodiversity, respect for human nature and seasonality and low environmental impact because of low consumption of animal products (Burlingame and Dernini, 2011).

Dietary patterns can strongly influence GHG emissions. Several studies have shown that meat products have the most Global Warming Potential, while cereal products as well as fruit and vegetables have a lower impact on global warming (Tilman and Clark, 2014).

An increasing number of studies investigate the environmental impact of dietary models. For example, Weber and Matthews (2008) carried out a study in the U.S. which show that by eating local and seasonal food and substituting meat with fish, eggs or pulses would lead to a reduction of CO2 emissions. Scarborough et al. (2012) showed that by replacing meat with fruit, vegetables and cereals could reduce GHG emissions in the UK by up to 19%. Recently, Green et al. (2015) showed that if the average diets of UK adults conformed to WHO recommendations, their associated GHG emissions would be reduced by 17 %.

Germani et al. (2014) compared the environmental impacts and the costs of the current food consumption pattern of the Italian population and the Mediterranean model in order to investigate its overall sustainability and observed that the MD produces fewer environmental impacts than the current food consumption habits of the Italian population.