## **Special Article: Human Nutrition**

# Mediterrarean Diet and Sustainability: Social and Environmental Considerations

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#### **Mini Review**

In recent decades, the concept of the Mediterranean Diet (MD) has evolved increasing awareness that, in addition to being a healthy dietary pattern, it also promotes the economic, social and environmental dimensions of sustainability. In fact, this diet has benefits on nutrition, health and maintenance of local traditions, but also in the perspective of a better impact in terms of greenhouse gas emissions, use of water and land, energy consumption and contamination of the environment.

The Mediterranean diet eating pattern, in 2010, has had the international recognition of being declared an Intangible Cultural Heritage of Humanity by the United Nations Educational, Scientific and Cultural Organization [1]. This recognition has highlighted its benefits and effects on longevity, disease prevention and quality of life and has contributed to increasing its visibility and acceptance at an international level [1]. In many studies the Mediterranean Diet (MD) is often associated with better health and prevention of chronic diseases [2,21]. In particulary, this diet pattern has been associated with a reduced risk for cardiovascular diseases [3,4] and in other studies, with a lower risk of cancer, in addition to a lower risk of cancer mortality and cancer survivors [5,6].

A very important aspect that is highlighted in the literature is that the probability of being obese significantly decreased with increasing nutrition knowledge levels. In particulary, following Bonaccio et Al. [7] nutrition knowledge is significantly associated with higher adherence to a Mediterranean dietary and with lower prevalence of obesity in a Southern Italian region with Mediterranean diet tradition independently from education and other socioeconomic factors [8,9].

Recent studies as shown that the Mediterranean Diet is also related with better blood pressure levels, better control of glycemic indexes, inflammatory markers and lipid panel [10]. This can also lead to better results management of type II diabetes and improves the control of cardiovascular risk factors. Furthermore, Mediterranean diet adherence is associated with better cognitive status and less depressive symptoms [11].

The evolutions of the last decades in terms of growth of the world population, increase in consumption, greater attention to the issues of food safety, both in terms of food safety and food security, greater attention to the issues of environmental protection (such as the management of the use of water, land scarcity, climate change) have determined the need to increasingly consider sustainability objectives as fundamental also in dietary guides with the aim of making food not only healthy, but also sustainable for society, for environment and for the territories [12-14].

Considering that the Mediterranean diet is based on extensive consumption of cereals, fruit and vegetables with a low consumption of animal products this implies a smaller water footprint and lower greenhouse gas emissions [15].

Several studies have shown that the environmental impact of the Mediterranean diet is lower than other food patterns due to its characteristic of being a diet with a low consumption of

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animal products and more plant-based. In particular, the Mediterranean diet requires the consumption of a wide choice of cereals, fruit and vegetables.

Therefore, this explains why the promotion of the Mediterranean diet still represents an important element for the conservation of the richness of biological diversity. To this end, it is very important to be aware that the Mediterranean diet is an historical socio-cultural heritage closely linked to the lifestyles of the Mediterranean peoples. throughout their history. In fact, the Mediterranean local food system encourages local production and local consumption and this model encourages sustainability [16].

In this scenario, within the framework of Mediterranean sustainable food systems it is essential to study the Mediterranean diet in perspective of a sustainable diet pattern, for present, but also for future Mediterranean generations [18]. Considering that the Mediterranean diet impacts on all dimensions of sustainability, many questions still need to be addressed because, in the last few decades, while the Mediterranean Diet (MD) is promoted in non-Mediterranean countries, Mediterranean populations seem to be moving away from their healthy diet, such as the MD, due to globalization, economic and sociocultural factors, population growth, urbanization, and lifestyle changes.

In conclusion, today a great challenge for policy makers, but also for businesses and citizens is to move increasingly towards sustainable production and consumption practices while guaranteeing healthy and safe nutrition [19]. For this reason, is important to promote a strategy which aims at a greater diffusion of the Mediterranean diet also through a greater valorisation of the traditional and typical Mediterranean food products, through geographic labelling, quality standards and product origin identification combining tradition, sustainability and innovation [20,21].

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