Mediterranean Diet and Longevity – Interview of Prof. emer. Antonia Trichopoulou, Full Member of the Academy of Athens

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The European Geriatric Medicine Society had its 17th congress between 11 and 13 October 2021 in Athens, Greece. On the first congress day, after the opening ceremony the keynote lecture "Mediterranean Diet and Longevity" was presented by Antonia Trichopoulou, MD, PhD, the President of the Hellenic Health Foundation and Professor emerita of the School of Medicine at the University of Athens. Professor Trichopoulou was the president of the Federation of the European Nutrition Societies (FENS) and chairperson or key member of numerous Greek, European Commission and World Health Organization Committees, as well as she is a Full Member of the Academy of Athens. Professor Trichopoulou has received numerous honors and awards, among them the award of the Federation of European Nutrition Societies (FENS) in 2011 for her "outstanding nutritionist career". Her scientific work has focused on public health nutrition and nutrition epidemiology, with emphasis on the health effects of the Mediterranean diet and traditional foods. Professor Antonia Trichopoulou has been included in the 2014 Thomson Reuters list of the Highly Cited Researchers in the field of Social Sciences and in 2018 has been named a Highly Cited Researcher by Clarivate Analytics.

Adam Lelbach (AL): Dear Professor Trichopoulou! The readers of "Idősgyógyászat" ("Geriatric Medicine") the scientific journal of the Hungarian Association of Gerontology and Geriatrics are very happy to have the possibility to read your thoughts and it is an honour that you tell us your scientific opinion in this exclusive interview. Athens is a wonderful city, the "Cradle of Europe" hopefully the good relationship could also lead to some more intense scientific collaboration in the future. Please let me ask the first question. Are you convinced that Mediterranean diet is a secret to longevity?

Antonia Trichopoulou (AT): Yes, I am convinced that the traditional Mediterranean diet is one of the major secrets to longevity because there is consistent scientific evidence of its beneficial effects on

health. Of course, the role of physical activity and heredity should not be overlooked*.

The traditional Mediterranean diet has been documented as a very healthy diet based on plant foods and the avoidance of large quantities of animal foods. It also recommends moderate consumption of wine during meals.

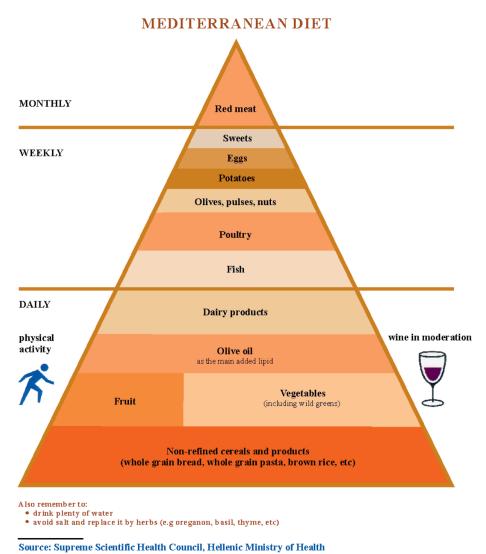
AL: Can we talk about a "general" Mediterranean diet or are there differences among the countries in the Mediterranean area?

AT: The traditional Mediterranean diet can be described by the following 9 characteristics:

- high olive oil consumption
- high consumption of legumes
- · high consumption of cereals (mostly unrefined)
- high consumption of fruits
- high consumption of vegetables
- moderate consumption of dairy products (mostly as cheese and yogurt)
- · moderate to high consumption of fish
- low consumption of meat and meat products
- moderate wine consumption during meals (if it is accepted by religion and social norms)

The dietary pattern known today as the traditional Mediterranean diet is the dietary pattern found in the olive-growing areas of the Mediterranean region in the late 1950's and early 1960's. This was a time when the consequences of World War II had been overcome but fast-food culture had not yet reached the area.

Variations of the Mediterranean diet exist but the various dietary patterns share many characteristics. For example, fish consumption varied widely between and within Mediterranean countries, with Crete in Greece and southern Italy at the lower end and Corfu, Spain and Portugal at the higher end. Also, with the exception of the Islamic populations in the Mediterranean region, populations in Greece, southern Italy, and other countries typically drank wine in low to moderate amounts with family meals.



1. ábra: The traditional Mediterranean diet depicted in the form of a pyramid.

Examples of variations of the traditional Mediterranean dietary pattern can be seen when we look at the varying plant-based foods consumed in the region, for example, the use of couscous, vegetables and legumes in north Africa; pasta, polenta or rice with vegetables and legumes in southern Europe; and bulgur and rice, with vegetables, chickpeas and other beans in eastern Mediterranean regions.

Today, when we talk about the traditional Mediterranean diet, we cannot claim that it is adhered to by all, or even most, of the inhabitants of the Mediterranean basin. Unfortunately, this dietary pattern has all but been abandoned by many individuals and population groups in the region.

AL: What are the most important "rules" of a real Mediterranean diet?

AT: Nutritional investigations have provided strong indications that a diet that adheres to the principles

of the traditional Mediterranean diet is associated with a longer life. This could be partly attributed to Mediterranean traditional foods, which are critical components of this diet.

Cooking vegetables and pulses in olive oil is important and knowing how this should be done is key. When making these traditional foods, apart from the main ingredients of olive oil, vegetables or pulses, usually onions, garlic and several aromatic herbs like parsley, oregano, dill, basil are added. The end result is tasty and highly nutritious. It does not take a lot of time to prepare these dishes, but the know-how is being lost, even though most recipes are relatively simple.

Adaption of the knowledge and experience of the traditional Mediterranean diet and the healthy traditional foods which this diet incorporate can serve as an important model for Mediterranean countries and inspire other ones in Europe and Central Asia.

AL: From an economic point of view, do you think Mediterranean diet could be a sustainable solution to the food supply for most countries and people in the World?

AT: The Mediterranean diet has evolved from a healthy dietary pattern to a sustainable dietary pattern with low environmental impacts. An important question is whether the Mediterranean dietary pattern is transferable to populations living far from the Mediterranean region.

Recent studies have documented that several aspects of the Mediterranean diet are indeed transferable to other populations. I believe that the benefits of the Mediterranean dietary pattern could be spread among larger population groups, with this dissemination inspiring healthy dietary habits across Europe.

The EAT-Lancet Commission (https://eatforum.org/ eat-lancet-commission/) calls for a Great Food Transformation: "a substantial change in the structure and function of the global food system so that it operates with different core processes and feedback". But a shift to healthier diets requires that the necessary foods are both available and affordable for low-income populations. The recent study of Kalle Hirvonen et al. entitled "Affordability of the EAT-Lancet reference diet: a global analysis ", aim to provide evidence to guide those changes by calculating the most affordable way to meet EAT-Lancet targets using available foods in almost every country of the world, and comparing the resulting dietary cost to prevailing incomes in each country (Lancet Glob Health. 2020). The 'EAT-Lancet reference diet' contains the key elements of the traditional Mediterranean diet.

AL: As a professor emerita you are very active. What do you think is an optimal way of life after retirement, how do you optimize your daily-weekly schedule?

AT: Retirement from my position as a University Professor for me was just another title that I feel I have earned, in no way did it signal the end of my passion for learning, teaching or researching. I have continued to work, at the same pace if not more, officially as the President of the Hellenic Health Foundation and as a scientist in many different ways.

I believe in the proven advice that maintaining an active and engaging lifestyle is essential. I enjoying walking and I have always adored swimming and still swim year-round in the Mediterranean Sea. Visiting museums and archaeological sites offers us a glimpse of the past, revealing humanity's adventure and help me to interpretate my personal meaning of life.

AL: Dear Professor Trichopoulou! Thank you very much for the very valuable and interesting thoughts and in the name of the members of the Hungarian Association of Gerontology and Geriatrics and the readers of our scientific journal I wish you further good health and hopefully we can see you also in Budapest in the future.

AT: Thank you very much, I would visit Budapest with pleasure since it is one of the most beautiful cities of the world and I have nice memories of Budapest. I also wish you good health and a lot of successes for the work of the Hungarian Association of Gerontology and Geriatrics in the year 2022!



Dr. Antonia Trichopoulou and Dr. Adam Lelbach

Refrences:

* Antonia Trichopoulou and Vassiliki Benetou: Impact of Mediterranean Diet on Longevity, © Springer Nature Switzerland AG 2019, C. Caruso (ed.), Centenarians, https://doi.org/10.1007/978-3-030-20762-5_10