

## A Mediterranean-like diet is associated with lower weight in children, but has become less common in the region

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A team of researchers from eight European countries have found that a diet that is very similar to the traditional Mediterranean diet is associated with lower body weight and fat percentage in children. They also found that this diet is not common among children in Mediterranean countries. The researchers were partners in the EU-funded IDEFICS study (2006-2012), one of the largest studies to investigate health effects of a changing diet, lifestyle, and social environment and develop intervention approaches for two to ten-year olds. IDEFICS is an intervention study involving 16,220 children from eight European countries (Belgium, Cyprus, Estonia, Germany, Hungary, Italy, Spain and Sweden).

Referring to a vast amount of scientific literature, the authors of the study believe that eating a diet similar to the traditional Mediterranean dietary pattern is associated with improvement in health status. This Mediterranean-like diet is based on food groups, whereas the traditional Mediterranean diet consists of foods typical of the Mediterranean region such as olive oil, almonds, citrus fruit, etc. Using food groups enables researchers to translate this dietary pattern to other regions, e.g. where different fruits or types of grain are more commonly consumed, and then to make comparisons.

In adults living in different parts of the world including Europe, the US and Australia, a high adherence to the so-called Mediterranean-like diet has been shown to reduce the risk for metabolic syndrome, morbidity and mortality related to major chronic diseases, and is associated with living longer. While many studies in children have also shown positive health effects of this dietary pattern, only few have described the association with children's weight status or other overweight and obesity indicators such as body mass index, waist circumference or waist-to-height ratio. In particular, there is a need for studies comparing adherence to a Mediterranean-like diet in children in more European countries, with different dietary cultures, since most investigations have been performed in countries such as Spain, Greece and Italy.

In the current IDEFICS study, which was presented at the 2014 European Congress on Obesity in Sofia, Bulgaria, the researchers carried out a pan-European comparison. They tested whether following a Mediterranean-like diet was related to overweight or obesity. They looked at whether eating this diet (assessed at the beginning of the study) was related to changes in body composition after two years, including body mass index (BMI), waist circumference, waist-to-height ratio and fat mass percentage

Adherence to a Mediterranean-like diet was assessed with a questionnaire, filled out by the parents, which asked about the consumption frequencies of 43 food items, which was then scored. The score was calculated by giving one point for high intakes of each food group that was considered typical of the Mediterranean diet (vegetables, fruits and nuts, fish and cereal grains), as well as one point for low intakes of foods atypical of the Mediterranean diet (such as dairy and meat products).

An important finding of this research was that children who ate a Mediterranean-like diet were less likely

to be affected by obesity or overweight, and they did not have an increased BMI and waist circumference after two years. Interestingly, the Mediterranean-like diet, at least among children, is not necessarily a feature of Mediterranean countries anymore; the researchers found that the highest adherence to a Mediterranean-like diet was in Sweden, where children had the highest scores for cereal grains, fruits, nuts and vegetable consumption. On the other hand, the lowest overall adherence rates were found for Cyprus, and the lowest intake frequencies of vegetables were observed in Italy. The highest overweight and obesity rates were observed among children in Italy (more than 40% live with obesity or overweight), followed by those in Cyprus and Spain (more than 20%).

According to the authors the results were not entirely unexpected. They stated that dietary habits, especially in southern Europe are changing, particularly among young people. Animal products and fats are increasingly consumed, while the intake of vegetable-based foodstuffs is declining. Where people in the Mediterranean countries may have moved away from their traditional dietary pattern, people in the north may have become more health conscious, the authors hypothesise.

They conclude that the promotion of dietary habits similar to a Mediterranean diet should be considered for inclusion in European childhood obesity prevention strategies. Health authorities need to focus more on the promotion of increasing the consumption of fruit, vegetables, legumes, nuts and fish among children. Moreover, their findings suggest that a Mediterranean-like diet can easily be adopted in other countries with different food cultures, such as the Nordic dietary pattern.

For further information please see:

[Tognon G, Hebestreit A, Lanferet A, et al. \(2014\). Mediterranean diet, overweight and body composition in children from eight European countries: Cross-sectional and prospective results from the IDEFICS study. Nutrition, Metabolism and Cardiovascular Diseases 24:205-213.](#)