

The Mediterranean diet is not only healthier, it also pollutes less

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Credit: Wikipedia.

The health benefits of the Mediterranean diet are well-known. As well as being healthier, a recent article concludes that the menu traditionally eaten in Spain leaves less of a carbon footprint than that of the US or the United Kingdom.

The consequences of [climate change](#) range from species extinction to sea-level increases and the spread of diseases. For this reason, researchers have been struggling for years to alleviate its effects, even limiting the pollution caused by food consumption.

A new study involving the University Hospital Complex of Huelva, Jaume I University of Castellón and the University of Huelva analyses the [carbon footprint](#) of daily menus served in Spain, based on a roughly

Mediterranean diet, and compares them to those eaten in English-speaking countries, such as the United Kingdom and the US.

"Climate change is an international priority that must be tackled from all angles, one being the family environment and consideration of our daily diet," explains Rosario Vidal, lead author of the study and researcher in the Mechanical Engineering and Construction department at the Valencian institution, to SINC.

Data was gathered at the Juan Ramón Jiménez Hospital in Huelva, which analysed a total of 448 lunches and 448 dinners throughout the four seasons of the year to satisfy calorific needs of 2,000 kcal.

Nevertheless, the figures can be widely extrapolated for the team of researchers. "These menus could have equally been served in any school, restaurant or Spanish household. The recipes analysed include typical dishes such as Andalusian gazpacho soup, vegetable pisto manchego, paella or the stew-like puchero," adds Vidal.

During the study a database was created with the carbon footprint of the foods grown, fished or produced (mainly in Spain) and the carbon footprint for each dish and menu was calculated simply by multiplying the raw amount required for its preparation.

The average daily carbon footprint obtained was 5.08 kg of CO₂ equivalent (CO₂e), much less than the average for the US (estimated at between 8.5 kg and 8.8 kg of CO₂e) or the United Kingdom (estimated at 7.4 kg of CO₂e); all for the same calorific intake. The carbon footprint was also obtained for 17 other therapeutic diets such as soft, liquid or low/high-protein diets.

"The differences between the average value of the Mediterranean diet and that of English-speaking countries is due to much less beef being

eaten in Spain (a food item with a larger carbon footprint) and more vegetables and fruit being eaten, which have a lower carbon footprints," states the expert. "Therefore, it is not only healthier, but our diet is also more ecological".

What is a carbon footprint?

A carbon footprint expresses the amount of [carbon dioxide](#) equivalent causing global warming (measured in kg of CO₂ equivalent). In addition to carbon dioxide, different pollutant gases contribute to climate change, such as methane.

Each one has a global warming potential (provided by the Intergovernmental Panel on Climate Change (IPCC)) relating to that caused by a unit of carbon dioxide. In the case of methane, this has a [global warming](#) potential of 25, which means that it is recognised as 25 kg of carbon dioxide equivalent.

More information: Rosario Vidal, Enrique Moliner, Andrej Pikula, Ángel Mena-Nieto y Agustín Ortega. 'Comparison of the carbon footprint of different patient diets in a Spanish hospital'. *Journal of Health Services Research & Policy* 2015, Vol. 20(1) 39-44.

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