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VEGETABLES FRIED IN EXTRA VIRGIN OLIVE OIL MORE NUTRITIONALLY BENEFICIAL THAN BOILED

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A new study carried out by the University of Granada revealed that frying vegetables typical to the Mediterranean diet in EVOO, as opposed to boiling, is a much better method of

cooking in terms of nutrient value.

There has been much debate on the pros and cons of different cooking methods for vegetables and how certain cooking techniques affect phenolic compounds.

This latest study aimed to put domestic cooking techniques to the test and determine how they affect or enhance the antioxidant qualities as well as the quantities of phenolic compounds found in a Spanish Mediterranean diet which typically contains high volumes of potato, pumpkin, eggplant and tomato.

The Mediterranean diet in Spain is also characterized by high consumption of EVOO which, alongside vegetables, are sources of certain compounds that have been linked to the prevention of chronic degenerative diseases like cancer, diabetes and macular degeneration, a condition that causes blindness.

During the study three cooking methods were employed; 120 gram cubes of the vegetables were fried in EVOO, or boiled in water, or boiled in a mix of water and EVOO.

All tests were carried out under controls with close analysis of the cooking methods and storage of the vegetables in optimum conditions so as to accurately measure factors like moisture, fat, dry matter, phenol content and antioxidant capacity, said the university.

In what they described as a “breakthrough in food science,” the researchers found frying in EVOO produced higher levels of natural phenols.

“While comparing the total phenol content of the fresh vegetables, we found both increases and decreases in their levels, depending on the cooking method employed,” said one of the authors of the work, Professor Cristina Samaniego Sanchez.

“As a heat transfer medium, the EVOO increases the amount of phenols in the vegetables, in contrast with other methods such as boiling, which use a water-based heat transfer medium.”

According to the results of the study, the overall quality of the vegetables was significantly improved when fried in EVOO because the produce becomes enriched with EVOO phenols transferred from the oil.

“We conclude that frying in EVOO was the technique with the highest associated increases of phenols and can therefore be considered an improvement in the cooking process, although it also increases the calorie density of the food because of the amount of oil absorbed,” Sanchez added.

“If the concentration of phenols found in the raw ingredients is high to start with, the overall concentration level is further increased if EVOO is employed during the cooking process, while boiling does not significantly affect the concentration levels.” Boiling is recommended if the vegetables are to be consumed together with the cooking medium (i.e. the water).

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