

# Experts confirm that fruit and vegetable consumption reduces risk of mortality

### September 26 2013

A European study analyzes the relationship between fruit and vegetable consumption and the risk of mortality. As previous research has already suggested, this study concludes that fruit and vegetable consumption reduces all-cause mortality, and especially cardiovascular disease mortality.

The benefits of fruit and vegetable consumption are not a <u>new discovery</u>. However, new research confirms their role in reducing mortality. This reduction is more significant in the case of deaths from <u>cardiovascular disease</u>.

The analysis, recently published in the *American Journal of Epidemiology*, was directed by researchers from ten countries, including Spain, as part of the European Prospective Investigation into Cancer and Nutrition (EPIC).

The sample analyzed includes 25,682 deaths (10,438 due to cancer and 5,125 due to cardiovascular disease) among the 451,151 participants studied over more than 13 years.

"This study is the most significant <u>epidemiological study</u> that this association has examined to date," María José Sánchez Pérez, director of the Andalusian School of Public Health's (EASP) Granada Cancer Registry and one of the authors of the research, explains to SINC.

According to the results, a combined fruit and vegetable consumption of



more than 569 grams per day reduces the risk of mortality by 10% and delays the risk of mortality by 1.12 years compared to a consumption of less than 249 grams per day.

Furthermore, for every 200 gram increase in daily fruit and vegetable consumption, the risk falls by 6%. The proportion of deaths that could be prevented if everyone eating too few <u>fruit and vegetables</u> increased their consumption by 100-200 grams per day - thus reaching the recommended 400-500 grams per day - is 2.9%.

Previous studies already noted that fruit and vegetable consumption, in accordance with the recommended daily allowance, prevents the development of <u>chronic diseases</u>, and reduces the risk of mortality by 10-25%.

"There is now sufficient evidence of the beneficial effect of fruit and vegetable consumption in the prevention of cancer and other chronic diseases," Sánchez states, "for this reason, one of the most effective preventative measures is promoting their consumption in the population."

## Fruit for the heart

A diet rich in fruit and vegetables reduces the risk of cardiovascular disease mortality by 15%. Furthermore, more than 4% of deaths due to cardiovascular disease could be prevented by consuming more than 400 grams of fruit and vegetables a day.

Considering fruit consumption separately, no significant risk reduction was observed, whereas vegetable consumption alone was associated with a lower risk of mortality, which was even more significant for raw vegetables: high consumption reduces the risk of mortality by 16%.



"With regard to cancer mortality, no statistically significant risk reduction was found, although it will be necessary to assess this according to specific types of cancer," Sánchez adds.

Nevertheless, the expert highlights that given that fruit and vegetable consumption is associated with the risk of certain cancers - colon and rectal, stomach, lung, etc. - it is to be expected that their consumption will also have a positive effect on mortality due to these tumours.

## Greater effect in people with bad habits

The mortality risk reduction due to fruit and <u>vegetable consumption</u> was greater in those participants who consumed alcohol (around 30-40% risk reduction), who were obese (20%), and "possibly" also in those who smoked.

The authors add that this positive effect is probably due to their high antioxidant content, which mitigates the oxidative stress caused by alcohol, tobacco and obesity.

"As such, these population groups in particular could benefit from the positive effects of <u>fruit</u> and vegetables in preventing chronic diseases and their associated <u>mortality</u> risk," Sánchez concludes.

More information: Leenders M, Sluijs I, Ros MM, Boshuizen HC, Siersema PD, Ferrari P, Weikert C, Tjønneland A, Olsen A, Boutron-Ruault MC, Clavel-Chapelon F, Nailler L, Teucher B, Li K, Boeing H, Bergmann MM, Trichopoulou A, Lagiou P, Trichopoulos D, Palli D, Pala V, Panico S, Tumino R, Sacerdote C, Peeters PH, van Gils CH, Lund E, Engeset D, Redondo ML, Agudo A, Sánchez MJ, Navarro C, Ardanaz E, Sonestedt E, Ericson U, Nilsson LM, Khaw KT, Wareham NJ, Key TJ, Crowe FL, Romieu I, Gunter MJ, Gallo V, Overvad K, Riboli E, Bueno-de-Mesquita HB. Fruit and vegetable consumption and



mortality: European prospective investigation into cancer and nutrition. Am J Epidemiol. 2013;178(4):590-602. DOI: 10.1093/aje/kwt006. Epub 2013 Apr 18.

#### Provided by Plataforma SINC

Citation: Experts confirm that fruit and vegetable consumption reduces risk of mortality (2013, September 26) retrieved 16 April 2024 from <a href="https://medicalxpress.com/news/2013-09-experts-fruit-vegetable-consumption-mortality.html">https://medicalxpress.com/news/2013-09-experts-fruit-vegetable-consumption-mortality.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.