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## 7+ daily portions of fruit and veg linked to lowest risk of death from all causes

Veg may be more protective than fruit; change in dietary recommendations may be warranted
[Fruit and vegetable consumption and all-cause, cancer and CVD mortality: analysis of Health Survey for England data Published Online First: 31 Mar 2014. doi 10.1136/jech-2013-203500]
[Fruit and vegetable consumption and non-communicable disease: time to update the ' 5 a day' message? Published Online First: 31 Mar 2014. doi 10.1136/jech-2014-203981]

Eating at least seven daily portions of fruit and vegetables may confer the best chance of staving off death from any cause, indicates research published online in the Journal of Epidemiology and Community Health.

And vegetables may pack more of a protective punch than fruit, the data suggest.

The UK government currently recommends eating five daily portions of fruit and vegetables, prompting the suggestion in an accompanying editorial that it may be time to review national dietary recommendations.

A diet rich in fruit and vegetables has been linked to good health, but many of the studies on which this association is based have largely been carried out on people who are already likely to be health conscious.

And while plenty of fruit and vegetables in the diet are recommended to boost cardiovascular health, the evidence for its impact on warding off cancer has been less clear-cut.

The authors therefore analysed lifestyle data for more than 65,000 randomly selected adults aged at least 35, derived from annual national health surveys for England between 2001and 2008. And they tracked recorded deaths from among the sample for an average of 7.5 years.

On average, the survey respondents said they had eaten just under four portions of fruit and vegetables the previous day. During the monitoring period 4399 people died ( $6.7 \%$ of the sample).

The analysis revealed that eating fruit and vegetables was associated with a lower risk of death, overall, and deaths from heart disease/stroke and cancer. The higher the intake of fruit and vegetables, the greater the protective effects seemed to be.

Eating at least seven daily portions was linked to a $42 \%$ lower risk of death from all causes and from cancer and heart disease/stroke of $25 \%$ and $31 \%$, respectively, after excluding deaths within the first year of the monitoring period.

Vegetables may be more protective, the figures suggest: 2-3 daily portions were linked to a $19 \%$
lower risk of death, compared with a $10 \%$ lower risk for the equivalent amount of fruit. And each portion of salad or vegetables seemed to confer a 12-15\% lower risk of death.

But while fresh and dried fruit seemed to strongly curb the risk of death, a portion of frozen/tinned fruit seemed to increase it by $17 \%$, which public health doctors from the University of Liverpool describe in an accompanying editorial as "intriguing."

Might added sugars in 'processed' fruit products explain this finding, they wonder.

They conclude that current dietary guidance, which includes consumption of dried or tinned fruit, smoothies, and fruit juice as legitimate ways of reaching the '5-a-day' goal, might need to be revised.
" 150 ml of freshly squeezed orange juice (sugar 13 g ); 30 g of dried figs (sugar 14 g ); 200 ml of a smoothie made with fruit and fruit juice (sugar 23 g ) and 80 g of tinned fruit salad in fruit juice (sugar 10 g )...contain a total of some 60 g of refined sugar," they point out. "This is more than the sugar in a 500 ml bottle of cola."

As only one in four adults in England gets their recommended ' 5 a day' the health benefits of getting everyone else to up their game are "huge," they suggest.

But the study findings imply that even those who do get their recommended quota, need to eat more, they say. "Is it perhaps now time for the UK to update the ' 5 a day' message to '10 a day'? they ask.

