

Can coffee boost more than just your energy levels?

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Maybe, but be cautious about overly bold media headlines. A recent study carried out by Imperial College of London and the UN International Agency for Research on Cancer found that drinking coffee was associated with a lower mortality rate in men and women. Media headlines made claims such as 'Drink coffee to live longer: three cups a day will ward off killer diseases' or 'It's official, drinking coffee makes you life longer'

The study

The study followed 520,000 people over the age of 35 in ten European countries for 16 years. The participants were split into groups of non-consumers, low, medium-low, medium-high, or high consumers.

The results showed that, at the 16 year follow-up point, men and women who drank the most coffee had a lower risk of death (men 12%, women 7%) than those who did not drink coffee at all.

In terms of specific causes of death, in comparison with low/non-consumers, men drinking high amounts of coffee had a 59% lower risk of death from digestive disease. Likewise, women with higher coffee consumptions, had a 40% less chance of death from digestive disease, a 22% reduced risk of death from circulatory diseases such as coronary heart disease, and a 30% lower risk of death from a stroke.

The correlations with mortality rates of those with the highest consumption differed depending on whether the coffee was caffeinated or not:

For high consumers of caffeinated coffee (compared to low/non-consumers)	For high consumers of decaffeinated coffee (compared to low/non-consumers)
<ul style="list-style-type: none"> • Small reduction in overall mortality (women) • Large reduction in risk of death from digestive disease (men & women) • Reduction in risk of death from circulatory disease (women), and a stroke (men) 	<ul style="list-style-type: none"> • Small reduction in all-cause mortality • Reduction in death from digestive disease

Limitations

This study was an observational one, and therefore while the results showed interesting associations, coffee consumption cannot be conclusively proved to cause the observed effects. Coffee consumption was only assessed at one point in time, thus the findings may not be an accurate representation of long-term coffee drinking habits.

As we see from the breakdown above, the detailed picture is complex, with observed associations depending on sex, mortality cause, and whether people drank caffeinated or decaffeinated coffee. In fact, although a higher coffee consumption was linked to an overall reduced risk of early death, there was one exception which many media outlets failed to point out: women who drank the most coffee had a 12% higher risk of death from cancer than non-coffee drinkers.

Furthermore, people with existing health conditions (cancer, heart disease, diabetes and stroke) were not included in the study. The study participants may have had different coffee drinking (and lifestyle) habits than those not included in the study, and so the results may not be representative of the whole population.

Finally, different cut-off levels were used to define levels of coffee consumption in different countries (e.g. high consumers in Denmark drank >1300 ml/day, while high consumers in Italy drank >138 ml/day.) Combining these different levels may have led to inaccurate results.

General recommendations for coffee consumption

Keep in mind that coffee contains high amounts of caffeine. Caffeine can act as a stimulant, increase alertness and endurance during exercise. However, too much caffeine may act as a diuretic and affect sleep patterns. The European Food Safety Authority recommends limiting daily caffeine consumption to a maximum of 400mg. A cup of filter coffee typically contains around 90 mg while an espresso contains 80 mg of caffeine.

Remember that chocolate, cola, tea, and energy drinks also contribute to our daily caffeine intake:

- Tea (220 ml) – 50 mg
- Standard can of energy drink (250 ml) – 80 mg
- Standard can of cola (355 ml) – 40 mg
- A bar of plain chocolate (50 g) – 25 mg
- A bar of milk chocolate (50 g) – 10 mg

Specific advice for pregnant women

According to the World Health Organization, excessive caffeine intake during pregnancy may be linked to reduced birth weight, growth restriction, preterm birth and stillbirth. Therefore, it is recommended that pregnant women drink no more than 2 cups of coffee (or 4 cups of black tea) per day (200mg caffeine).