

Caffeine consumption may extend life expectancy for people with kidney disease

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A new study in *Nephrology Dialysis Transplantation* indicates that consuming more caffeine may help reduce the risk of death for people with chronic kidney disease.

An inverse relationship between coffee consumption and mortality has

been reported in the general population. However, the association between [caffeine](#) consumption and mortality for people with [chronic kidney disease](#) remains uncertain. The researchers hypothesized that caffeine consumption might be associated with lower mortality among participants with chronic kidney [disease](#).

The possible protective effect of caffeine might be related with effects at vascular level as caffeine is known to promote the release of substances, such as nitric oxide, that improve the function of the vessel.

About 89 percent of the adult USA population consumes caffeine daily. Approximately 14 percent of adults in the United States have chronic kidney disease. Chronic kidney disease is associated with increased [health care costs](#) and a higher risk of death. The prevalence of the disease is expected to continue to increase worldwide.

The study involved data from 4,863 American people observed from 1999 to 2010. Compared with people who consumed a smaller amount of caffeine-containing beverages, caffeine consumers were more likely to be male, non-Hispanic white, have a higher education level and higher annual income, be current or former smokers, have higher alcohol consumption, and have fewer previous strokes.

The results of the analysis suggest an inverse association between caffeine consumption and all-cause mortality among participants with chronic kidney disease. Comparing with people that consumed less caffeine, patients that consumed higher levels of caffeine presented a nearly 25% reduction in the risk of death over a median follow-up of 60 months.

According to Miguel Bigotte Vieira, one of the study's lead authors, "Our study showed a protective effect of [caffeine consumption](#) among patients with chronic kidney disease. The reduction in mortality was

present even after considering other important factors such as age, gender, race, smoking, other diseases, and diet. These results suggest that advising patients with kidney disease to drink more caffeine may reduce their mortality. This would represent a simple, clinically beneficial, and inexpensive option, though this benefit should ideally be confirmed in a randomized clinical trial." The author emphasized that this observational study cannot prove that caffeine reduces the risk of death in patients with chronic [kidney](#) disease, but only suggests the possibility of such a [protective effect](#).

More information: Caffeine consumption and mortality in chronic kidney disease: a nationally representative analysis, *Nephrology Dialysis Transplantation* (2018). [DOI: 10.1093/ndt/gfy234](https://doi.org/10.1093/ndt/gfy234)

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