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Study Says Excess Coffee May Be Linked To Early Death. Should We Believe It?

Steel yourself for the results of a new study that's making headlines: Those of us under 55 who drink a lot of coffee - more than four cups per day – may be at greater risk of an early death. And not death from heart problems, but death from all causes. The study, from Mayo Clinic Proceedings, followed people for almost two decades, and found that in both sexes, younger people were more likely to die of



(Photo credit: Wikipedia)

anything than people who drank less. Though it may sound bleak, the study really just adds to the mishmosh of coffee studies all pointing at different outcomes. And good news remains – many earlier studies have found that heavy coffee consumption is linked to reduced mortality. So the logical advice is still to enjoy your daily ritual if it seems to work for you.

But here's what the new study found. The team tracked almost 44,000 participants for 17 years, noting how many people died, and of what cause. Lifestyle factors like coffee consumption, diet, exercise, smoking, and weight were taken noted and potential confounders controlled for. It turned out that 2,500 people died during the study period, with men making up over 87% of those deaths.

The headline-worthy results: People under 55 who drank more than 28 cups per week were more like to die of almost any cause than people who drank less. Women were twice as likely to die from any cause and men were 56% more likely, compared to people who drank less. Even controlling for cigarette smoking, which is generally the big confounder in coffee studies, did not totally eliminate the link.

Before you panic and switch to tea, keep in mind some drawbacks of the study. One problem is that no one really knows what mechanism/s could explain the coffee-death link. Some are candidates, however: There's coffee's ability to boost epinephrine (adrenalin) levels in the body, its inhibition of insulin function (though this is controversial), and the fact that it may raise

8/16/2013 8:38 AM 1 of 3

blood pressure and homocysteine levels, which are both known to increase heart risk (though since heart disease was not increased in the study, these seem less likely).

Another big caveat is the age issue — the coffee-death relationship was only true for people under 55 — and the reason behind this is somewhat of a mystery. It could be that people who are dying this young are already predisposed to fatal health problems in various ways, although this is somewhat speculative. Study author Chip Lavie points out that heavy coffee drinkers differ in a number of ways from less avid consumers, so there may be other, as-yet-undiscovered things going on. The authors suggest that since heart disease wasn't increased among heavy coffee drinkers, but rather death from all causes, cancer may be a culprit. "Certainly, one would think that the main non-CV cause of death would be cancer, but we did not specifically assess this. And with cancer, one would really want to know cause-specific as opposed to cancer in general — we will probably try to assess this, although this is not quite as easy as one may think."

If you're wondering about how decaf might affect things, that answer too is unclear. The study controlled for decaf (although most people didn't drink it anyway), meaning that only caffeinated coffee was included in the correlation with mortality. However, Lavie points out that since heart disease deaths were *not* raised among the heavy coffee drinkers, one might expect the same link to be true for decaf as well. "When this questionnaire was administered 25-30 years ago," he says, "there was not much use of decaf coffee, so whether this relates with regular vs. all coffees would be guessing. If the mortality was due to cardiovascular, we would speculate that it may not apply to decaf, but we saw no increase in cardiovascular mortality in any of the groups at any of the doses."

Also keep in mind, the current study only points to a correlation, not cause-and-effect. And it only measured coffee consumption at one time-point, not many throughout the years. There could be a lot of other things at play. "It is impossible to know if this association is causal or just an association," says Lavie, "so one does not want to over-state or over-hype the dangers of drinking more than 28 cups per week, although I personally will make an effort to keep my cups at 3 or less most of the time."

But perhaps most uplifting of all is to remember that findings from a number of earlier studies contradict the new one and suggest that coffee is actually, at least on average, good for us. In fact, one recent study in *The New England Journal of Medicine*, following some 400,000 people, suggested that drinking up to six cups per day is actually linked to *reduced* mortality from all causes – 10% for men and 15% for women. The results were true whether the people drank caffeinated coffee or decaf. Given the high levels of antioxidants in coffee, there may be some logical explanations for its connection to enhanced health and longer lifespan. The authors of that study write, "Our results provide reassurance with respect to the concern that coffee drinking might adversely affect health."

Because of individual differences, genetics, and the myriad lifestyle choices we make every day, there are sure to be interactions going on that make the connection much more complicated than "coffee=death" or "coffee=longevity." Depending on all these factors, for some, coffee may be good, for others not so. So while we're waiting for the research to give us a clearer picture, talk to your doc, or go with your gut and do what you feel works best for you.

2 of 3 8/16/2013 8:38 AM

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3 of 3 8/16/2013 8:38 AM