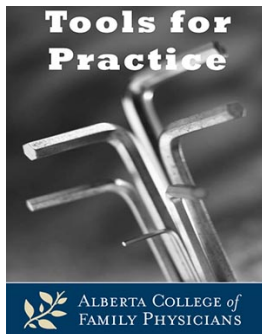


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Reviewed: August 2, 2016
Evidence Updated: New evidence
Bottom Line: No change
First Published: October 1, 2012



Coffee: Advice for our Vice?

Clinical Question: Does drinking coffee impact mortality or other health outcomes in the general population?

Bottom Line: Coffee consumption is associated with a possible small reduction in mortality in cohort studies. While the evidence is not strong enough to recommend non-drinkers to start consuming coffee, coffee drinkers can be reassured that it does not result in harm (except in pregnancy).

Evidence:

- Meta-analysis¹ of 21 cohort studies including 997,464 people in US, Europe or Japan.
 - Largest included cohort study² followed 402,260 people in US (age 50-71 years) for 14 years.
 - Drinking coffee was associated with several confounders (more likely to smoke cigarettes, drink alcohol, be physically inactive, and have poor diet).
 - After adjusting for confounders, coffee drinkers (compared to those that did not drink coffee), had a statistically significant lower risk of overall mortality:
 - About 15% relative risk reduction for two-three cups/day.
 - No dose-response relationship; risk was similar whether individuals drank one or eight cups/day.
 - Cardiovascular deaths decreased, deaths due to cancer were unchanged.
- Other meta-analyses^{3,4} (including one of 36 observational studies of 1,279,804 individuals³) found similar results for cardiovascular events and mortality.

Context:

- Decaffeinated coffee seems to convey similar health benefits, so the benefit may not be due to caffeine.²
- Similar evidence for drinking tea.⁵

- Evidence is from cohort studies, and therefore can only show association (not causation) with reduced mortality.
 - Unfortunately, a large randomized controlled trial is unlikely.
 - However, this evidence seems to rule out clinically important harm.
- Cancer rates: Some research suggests coffee consumption is associated with reduced rates of some cancers,^{6,7} while other studies find no association.⁷⁻¹⁰
- Coffee intake is also associated with a reduced risk of diabetes¹¹ and depression.¹²
- Coffee use in pregnancy (particularly ≥ 4 cups/day) increases the risk of fetal loss.¹³ Pregnant women should be advised of this potential risk.

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Conflict of Interest: All authors drink and enjoy coffee.

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