

# Three-five cups of coffee per day may reduce CVD mortality risk by up to 21 percent, report says

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Credit: George Hodan/public domain

Drinking 3-5 cups of coffee per day could cut an individual's cardiovascular disease (CVD) mortality risk by up to 21%, according to research highlighted in a EuroPREvent session report published by the Institute for Scientific Information on Coffee (ISIC), a not-for-profit organisation devoted to the study and disclosure of science related to

coffee and health<sup>1</sup>.

The finding is significant given that coronary heart disease and stroke remain the primary cause of death across Europe, responsible for 51% of all deaths in women and 42% of all deaths in men.<sup>2</sup> Over four million people die from CVD annually in Europe and overall, CVD is estimated to cost the EU economy €196 billion every year.<sup>3</sup>

The ISIC session report highlights the research presented at a Satellite Symposium held during the European Association for Cardiovascular Prevention & Rehabilitation's 2015 congress in Lisbon, Portugal, on the subject of 'Coffee and CVD Mortality'. Leading researchers in this field presented on the role of lifestyle factors in CVD [mortality risk](#) reduction, the epidemiological evidence on [coffee](#) and CVD mortality, and the conclusions from meta-analyses on coffee and CVD mortality.

Key highlights:

- The lowest CVD mortality risk is seen at an intake of approximately 3 cups of coffee per day, with a percentage risk reduction of up to 21%.<sup>1</sup>
- Two 2014 meta-analyses suggest an association between [coffee consumption](#) and CVD risk, proposing a 'U-shaped' pattern whereby optimal protective effects were achieved with 3-5 cups of coffee per day.<sup>3,4</sup>
- Drinking 3-4 cups of coffee per day is associated with an approximate 25% lower risk of developing type 2 diabetes compared to consuming none or less than 2 cups per day.<sup>5</sup> People with diabetes typically have a higher CVD mortality risk, therefore this association may be linked to a decreased CVD risk.<sup>6</sup>
- In males, a combination of 5 healthy behaviours (a healthy diet, moderate alcohol consumption (10 to 30 g/ day), no smoking,

being physically active and having no abdominal adiposity) could prevent 79% of myocardial infarction events.<sup>7</sup>

- Half of CVD cases in women could be avoided by modifying lifestyle choices, as approximately 73% of CHD cases and 46% of clinical CVD are attributable to an unhealthy lifestyle.<sup>8</sup>

The report concludes that recent research supports the view that moderate coffee consumption at approximately 3 - 5 cups per day may have a protective effect against CVD mortality risk. The mechanisms of action behind the associations are unclear, however areas of interest for future research include the anti-inflammatory and antioxidant properties of coffee, and the known association between coffee consumption and type 2 diabetes risk reduction as CVD mortality is typically higher in this group. It is important to note that results differ between varying populations; it is suggested that 2 cups of coffee per day may offer the greatest protection in a Japanese population, whilst 3 cups may provide the greatest protection in UK and US populations.

Prof. Doutor António Vaz Carneiro of the Faculdade de Medicina da Universidade de Lisboa commented: "It is important to acknowledge factors which might have a protective effect against CVD mortality. Moderate coffee consumption could play a significant role in reducing CVD mortality risk which would impact health outcomes and healthcare spending across Europe."

The session report details the key scientific research presented by Assoc. Prof. Esther Lopez-Garcia, Prof. Alicja Wolk, and Prof. Carlo La Vecchia during a session titled: Coffee and CVD Mortality Risk, which took place on 14th May in Lisbon, Portugal.

### **More information: References:**

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