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Coffee and Heart Failure: a further potential beneficial effect of coffee / Mattioli, A.V., Farinetti, A.. - In: NMCD. NUTRITION METABOLISM AND CARDIOVASCULAR DISEASES. - ISSN 0939-4753. - 33:12(2023), pp. 2529-2530. [10.1016/j.numecd.2023.09.003]

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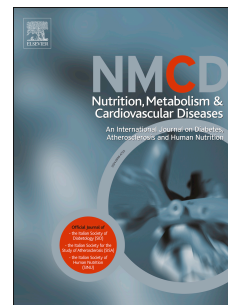
24/06/2026 23:33

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PII: S0939-4753(23)00345-9

DOI: <https://doi.org/10.1016/j.numecd.2023.09.003>

Reference: NUMECD 3423

To appear in: *Nutrition, Metabolism and Cardiovascular Diseases*

Received Date: 13 August 2023

Accepted Date: 4 September 2023

Please cite this article as: Mattioli AV, Farinetti A, Coffee and Heart Failure: a further potential beneficial effect of coffee, *Nutrition, Metabolism and Cardiovascular Diseases*, <https://doi.org/10.1016/j.numecd.2023.09.003>.

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Coffee and Heart Failure: a further potential beneficial effect of coffee

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Word count: 470

Ref: 10

Authors disclosure: no disclosure

Funding: This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

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Abstract

The present letter to editor comments the manuscript “Han Q, Chu J, Hu W, et al. Association between coffee and incident heart failure: A prospective cohort study from the UK Biobank [published online ahead of print, 2023 Jul 11]. *Nutr Metab Cardiovasc Dis.* 2023;S0939-4753(23)00280-6. doi:10.1016/j.numecd.2023.07.011

Key words: coffee, women, heart failure.

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Dear Editor,

We have read with great interest the article “Association between coffee and incident heart failure: A prospective cohort study from the UK Biobank” by Han Q and coworkers and we found it of relevance with a view to caffeinated beverages consumption. [1] Authors found that moderate coffee intake could reduce the risk of heart failure (HF), but excessive coffee intake has no such effect. Furthermore, different types of coffee have different effects on HF incidence and ground coffee can greatest reduces the risk of HF.

We find this manuscript of great interest and would like to provide contribute to the discussion.

In recent times attention has focused on the early identification of heart failure risk factors including diet and components of specific diets. Coffee is undoubtedly the most popular drink among adults in various Western and non-Western countries. [2,3] It is clear that the impact of such a widespread and habitually consumed drink must be evaluated when analyzing the different components of the diet. [4] Numerous population-based studies have examined the health effects of coffee. [3,5,6] However, few studies have focused on heart failure.

We therefore thank Han Q. and coworkers for their contribution by noting some specific aspects. [1]

The first observation is related to the type of coffee in the study.

Many regions of Northern Europe use filtered coffee, however in other countries (i.e. in the Mediterranean area) espresso coffees is more popular. Espresso has a lower caffeine content and do not pass through the filter. The passage through the filter determines the extraction of some active ingredients contained in the coffee which have actions on the

microbiota and health. Furthermore, habits change in different countries, in Mediterranean countries coffee is taken in relation to the meal, thus influencing absorption and effect on the gut. [4,7]

The second point we would like to stress is related to sex differences. It is now established that there are differences between the 2 sexes in the absorption of macro and micro nutrients and in their bioavailability. [8]

These gender-specific aspects cannot be overlooked when addressing the effects of coffee on human health. Further studies on this topic are required to preserve women's health and not create confusion between the effects that can be found in the 2 sexes.

Most studies come to the conclusion that moderate coffee consumption appears to have favorable effects on health and at least has no negative effects on human health.

Specifically, the response to U-shape highlighted by the authors has also been previously described in relation to the effects of coffee on blood pressure.[2] This aspect suggests that a moderate dose of coffee has favorable effects compared to low or no consumption and high doses High doses of caffeine as occurs in energy drinks seems to be pro-arrhythmic and to favor hypertensive peak. [9,10]

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