



### **EDITORIAL**

## Alcohol: Good for your heart, not for your health

## Alcohol: Bueno para tú corazón, no para tu salud

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In the last decades, obesity, alcohol and tobacco have become the main three etiologic agents of non-transmissible diseases in developed countries. Six deaths every minute are attributable to a harmful use of alcohol<sup>(1)</sup>. Due to this, research regarding the relationship between the formers and health have been gaining importance in the recent scientific literature.

Alcohol has been associated with diabetes, cancer and cardiovascular diseases, even though the results were not always what the scientific community expected. Alcohol consumption is very common across the globe, with different drinking patterns depending of the geographical area, since food and drinking behaviours are heavily influenced by culture. Lifestyle may also influence the preference for alcoholic beverages<sup>(2)</sup>. One of the first research studies, which brought up the possible beneficial relationship between a moderate alcohol consumption and cardiovascular health, was an article published in *The Lancet* in 1992. The results of this research were lately known as "the French paradox" since other studies could not get the same results in other countries<sup>(3-5)</sup>. Also, Casani et al. and Padro et al. showed the cardioprotective characteristics of alcohol for mural thrombosis in a porcine model and the benefits of beer drinking in obese population, respectively<sup>(6,7)</sup>.

Many studies show a J-shaped curve for mortality related to alcohol consumption. The research performed by Kunzmann et al. dicplay that this benefit was still relevant even after adjusting for cancer risk. A healthy consumption considered less than one alcoholic drink per day<sup>(8)</sup>. Supporting this body of evidence, many meta-analysis exhibit a cardioprotective effect of alcohol<sup>(8-11)</sup>.

Beside these promising results, it is important to note that all observations may be biased by the design and characteristics of the study. This was shown by Stockwell et al. who demonstrated that a lower alcohol consumption did not stated any benefits compared to abstention or occasional drinking<sup>(12)</sup>. Another meta-analysis published in *The Lancet* this year showed that, even though alcohol consumption had a protective effect over diabetes and ischaemic heart disease, it was offset when the overall health risks were taken into account<sup>(13)</sup>. In the latter meta-analysis, alcohol consumption was related to health loss. The only dose that was not associated with health loss was 0.

Alcohol drinking is also related to cancer, especially with breast cancer<sup>(2)</sup>. Considering cancer, would it still be a good idea to recommend moderate alcohol drinking due to its cardioprotective effects if it increases the risk of cancer?

As mentioned above, alcohol consumption is widely spread and lifestyle habits could be difficult to change. In Spain, older adults drink alcohol even when having several drugs a day for their conditions, despite the risk of mixing drugs and alcohol<sup>(14)</sup>.

When it comes to giving recommendation on whether drinking is beneficial or not the scenario is uncertain. Drinking has become a ritual across the world and there are very few countries that do not link their traditions and social interactions to alcohol, hence trying to eradicate the practice is very problematic. Furthermore, the debate whether a moderate alcohol drinking pattern may be beneficial or not is not conclusive.

In the end, it is still necessary to figure out if alcohol is good for cardiovascular health.

# Bibliography

WHO. Global status report on alcohol and health 2018 [Internet]. 2018 [cited 2018 Oct 5]. Available from:

http://www.who.int/substance\_abuse/publications/global\_alcohol\_report/en/

- Scholz A, Navarrete-Muñoz EM, Garcia de la Hera M, Gimenez-Monzo D, Gonzalez-Palacios S, Valera-Gran D, et al. Alcohol consumption and Mediterranean Diet adherence among health science students in Spain: the DiSA-UMH Study. Gac Sanit [Internet]. 2016 Mar 1 [cited 2018 Oct 5];30(2):126–32. Available from: https://www.sciencedirect.com/science/article/pii/S021391111500237X
- 3. Renaud S, de Lorgeril M. Wine, alcohol, platelets, and the French paradox for coronary heart disease. Lancet. 1992;339(8808):1523–6.
- Artaud-Wild SM, Connor SL, Sexton G, Connor WE. Differences in coronary mortality can be explained by differences in cholesterol and saturated fat intakes in 40 countries but not in France and Finland. A paradox. Circulation. 1993;88(6):2771–9.

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- Marques-Vidal P, Montaye M, Arveiler D, Evans A, Bingham A, Ruidavets J-B, et al. Alcohol consumption and cardiovascular disease: differential effects in France and Northern Ireland. The PRIME study. Eur J Cardiovasc Prev Rehabil. 2004;11(4):336– 43.
- Casani L, Segales E, Vilahur G, de Luna AB, Badimon L. Moderate Daily Intake of Red Wine Inhibits Mural Thrombosis and Monocyte Tissue Factor Expression in an Experimental Porcine Model. Circulation [Internet]. 2004 [cited 2018 Oct 3];110(4):460– 5. Available from:

https://www.ahajournals.org/doi/10.1161/01.CIR.0000136027.98303.4D

- Padro T, Muñoz-García N, Vilahur G, Chagas P, Deyà A, Antonijoan R, et al. Moderate Beer Intake and Cardiovascular Health in Overweight Individuals. Nutrients [Internet].
  2018 [cited 2018 Oct 3];10(9):1237. Available from: http://www.mdpi.com/2072-6643/10/9/1237
- Kunzmann AT, Coleman HG, Huang W-Y, Berndt SI. The association of lifetime alcohol use with mortality and cancer risk in older adults: A cohort study. PLOS Med [Internet]. 2018;15(6):e1002585. Available from: https://doi.org/10.1371/journal.pmed.1002585
- O'Keefe JH, Bhatti SK, Bajwa A, DiNicolantonio JJ, Lavie CJ. Alcohol and Cardiovascular Health: The Dose Makes the Poison...or the Remedy. Mayo Clin Proc [Internet]. 2014 [cited 2018 Sep 27];89(3):382–93. Available from: http://linkinghub.elsevier.com/retrieve/pii/S0025619613010021
- A DC, Costanzo S, Bagnardi V, Donati M, Iacoviello L, G de G. Alcohol dosing and total mortality in men and women: An updated meta-analysis of 34 prospective studies. Arch Intern Med [Internet]. 2006;166(22):2437–45. Available from: http://dx.doi.org/10.1001/archinte.166.22.2437
- Ronksley PE, Brien SE, Turner BJ, Mukamal KJ, Ghali WA. Association of alcohol consumption with selected cardiovascular disease outcomes: a systematic review and meta-analysis. BMJ [Internet]. 2011;342:d671. Available from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3043109/
- Stockwell T, Zhao J, Panwar S, Roemer A, Naimi T, Chikritzhs T. Do "Moderate" Drinkers Have Reduced Mortality Risk? A Systematic Review and Meta-Analysis of Alcohol Consumption and All-Cause Mortality. J Stud Alcohol Drugs [Internet]. 2016;77(2):185–98. Available from:
  - http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4803651/
- Griswold MG, Fullman N, Hawley C, Arian N, Zimsen SRM, Tymeson HD, et al. Alcohol use and burden for 195 countries and territories, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. Lancet [Internet]. 2018;392(10152):1015–35. Available from: https://doi.org/10.1016/S0140-

6736(18)31310-2

14. San Mauro Martin I, Nava Mateo J, Ortiz Rincón J, Villanueva Nieto M, Ávila Díaz E, Sanz Rojo S, et al. Prevalence of alcohol and medication use among elderly individuals in Spain. Drugs and Alcohol Today [Internet]. 2018;18(3):198–204. Available from: https://www.emeraldinsight.com/doi/10.1108/DAT-11-2017-0060