

# Australian Eggs weighs in on US study linking eggs with increased heart disease risk

Publication: 19 March 2019

Reading time: 4 minutes



In response to a new study published in the Journal of the American Medical Association (JAMA) over the weekend (1) and the associated media coverage that has appeared both globally and locally, Australian Eggs urges caution in how the study findings should be interpreted by Australian consumers.

“While the research published in JAMA showed a link between egg consumption and a small absolute increase in likelihood of cardiovascular disease event risk (1.1%) in adults in the United States, it is important to note that the study was observational only,” said Sydney-based General Practitioner, Dr Ginni Mansberg.

“This means the researchers are looking for certain patterns in the study population, but can’t demonstrate specific cause and effect. As such, no clear conclusions can be drawn from looking at this single piece of research in isolation,” Dr Mansberg said.

Findings from other research in this area, which include populations outside the United States, do not indicate

a clear link between egg intake and cardiovascular disease (CVD) risk. (2,3,4) Furthermore some observational studies have actually suggested the opposite, with a recent study of half a million Chinese adults finding that egg intake was associated with a lower risk of CVD. (5)

The authors of the new US study (Zhong et al, 2019)<sup>1</sup> themselves point out that applying the results of their work to non-US populations requires caution due to the different food environment and disease patterns unique to the American population. Importantly, Australia's peak health bodies, including the National Health and Medical Research Council and the Heart Foundation of Australia, have confirmed that eating eggs daily is not associated with an increased risk of heart disease. (6, 7)

"Although this latest study provides some interesting insights and results, it is important that we, as healthcare professionals, are able to set the record straight," said Dr Mansberg.

"Eggs are a nutrient dense whole food and should be consumed as part of a healthy, balanced diet, that is consistent with the recommendations outlined in the Australian Dietary Guidelines," Dr Mansberg concluded.

ENDS

Full press release is available [here](#).

### **Study summary (1)**

This study pooled results from six US studies that had been done previously, and which assessed the association between egg and cholesterol intake and the development of heart disease, stroke and heart failure (together known as cardiovascular disease), as well as death from all causes over a period of 17.5 years (1985 to 2016).

People were asked what they ate at the beginning of the studies and then they were tracked to see if they developed heart disease or not, and to see if they died or not. Those people who developed heart disease or who died during the following period, were then assessed for how many eggs and how much cholesterol they ate (based on what they reported they were eating at the start of the study).

### **Main findings (1)**

People who ate more eggs were found to have a 6 per cent increased risk of a cardiovascular disease event which equates to a 1.11 per cent absolute risk difference. While statistically significant this is only a modest increase.

When the results were adjusted, it was found that the association was between cholesterol intake and cardiovascular risk. The link between eggs and cardiovascular disease was no longer significant.

For consumer-friendly information about [eggs and cholesterol click here](#).

### **References**

1. Zhong VW, et al. Associations of Dietary Cholesterol or Egg Consumption With Incident Cardiovascular Disease and Mortality. JAMA 2019;321(11):1081-1095.
2. Bechthold A, et al. Food groups and risk of coronary heart disease, stroke and heart failure: A systematic review and doseresponse meta-analysis of prospective studies. Crit Rev Food Sci Nutr, 1-20 (2017).

3. Alexander DD, et al. Meta-analysis of Egg Consumption and Risk of Coronary Heart Disease and Stroke. *J Am Coll Nutr* 35, 704-716 (2016).
4. Shin JY, Xun P, Nakamura Y & He K. Egg consumption in relation to risk of cardiovascular disease and diabetes: a systematic review and meta-analysis. *Am J Clin Nutr* 98, 146-159 (2013).
5. Qin, C., et al. Associations of egg consumption with cardiovascular disease in a cohort study of 0.5 million Chinese adults. *Heart* [Epub ahead of print](2018).
6. Heart Foundation of Australia. Eggs. Available at: <https://www.heartfoundation.org.au/healthy-eating/food-and-nutrition/proteinfoods/eggs> [Accessed 18 March 2019].
7. National Health and Medical Research Council. Australian Dietary Guidelines. (ed. National Health and Medical Research Council) (NHMRC, Canberra, ACT, Australia, 2013).

### **Media enquiries**

Frances Jewell, Marketing & Communications Manager at Australian Eggs on (02) 9409 6909 or [frances.jewell@australianeggs.org.au](mailto:frances.jewell@australianeggs.org.au)