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LETTER TO THE EDITOR

Is Pomegranate Juice Readily Available and Useful for the Management of Hypertension and the Improvement of Cardiovascular Health?

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DEAR EDITOR,

We read with interest the recent editorial by Tziomalos *et al.* on the potential benefit of pomegranate juice (PJ) in the management of hypertension and cardiovascular risk [1]. The authors conclude that PJ may be useful in the treatment of hypertensives, especially those with a high burden of oxidative stress.

Although data on PJ seem promising no solid evidence exists to support its routine use by these patients. Certain issues that should be taken into account include:

- Price and availability. PJ is rather expensive and may not be available worldwide.
- 2) Quantity and calorie intake. The suggested volume of intake varies among studies (150-240 mL) [2,3]. Calorie intake has to be considered in this regard. Recently it was shown that fruit juice compared with whole fruit consumption might be related with higher risk of type 2 diabetes [4].
- 3) The studies showing a beneficial effect of PJ on cardiovascular risk factors included a small number of participants, were mostly not double blinded and evaluated only surrogate end-points.
- 4) The effect of PJ on blood pressure is rather small.
- 5) The long term effects of PJ are unknown. The use of antioxidants, such as alpha-tocopherol and beta-carotene, was associated with unpredictable off-target effects, such as increased lung and pancreas cancer in male smokers [5].
- 6) Antioxidant vitamin supplementation has not reduced rates of cardiovascular events in any study [6].

As the authors acknowledge future studies will provide valuable data to establish public health recommendations on the use of polyphenols and PJ. For now other well

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established lifestyle interventions should be endorsed. These include a Mediterranean type diet [7], body weight control, smoking cessation and increased physical activity [8].

CONFLICT OF INTEREST

The author(s) confirm that this article content has no conflicts of interest.

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