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## Letter to the Editor

## Dietary sugar added to coffee and tea in pre-menopausal women



## Keywords:

Coffee  
Tea  
Sugar

Dear Editor,

We have read with great interest the paper "Intakes and sources of dietary sugars and their association with metabolic and inflammatory markers." by O'Connor and coworkers [1] and we found their conclusion of importance with a view to clinical prevention. They found that in their large population-based cohort, higher intakes of sugars from non-alcoholic beverages and sugar added to tea, coffee, or cereal were associated with glycaemia and inflammatory markers, while sugars from foods, regardless of whether they were free or non-free sugars, were not associated.

With reference to the findings reported in the paper, we would like to make the following contribution to the discussion. In a recent analysis performed on 635 healthy pre-menopausal women (age range 45–54 years) we analysed table sugar added to tea, coffee and beverages that included coffee (i.e. cappuccino). Patients were categorized according to quartile of adherence to Mediterranean Diet. Sugar added to beverages was higher in women in the low quartile of adherence to Mediterranean Diet (low Med Score). This group of women had a lower ABI index, a biomarker of asymptomatic atherosclerosis, compared to women with higher Med Score suggesting that sugar added to beverages could be linked with Mediterranean Diet and atherosclerosis. Coffee and tea were similarly distributed among the quartiles of Med Score [2] however sugar added was higher in women drinking tea as compared with women drinking coffee ( $3.6 \pm 1.4$  spoons/day versus  $1.7 \pm 1.5$  spoons/day;  $p < 0.05$ ). Analysis from diet recall had the major limitation of missing data regarding out-of-mealtime drinking.

In addition, we found that the intake of sugar from fruit was higher in women in the highest quartile of Mediterranean Diet. This quartile of Mediterranean lifestyle is characterized by high intake of antioxidants, mainly from fruit and vegetables [3]. In

our women population coffee consumption was high, but was mainly related to espresso coffee and to cappuccino.

In Mediterranean countries, coffee and wine are strong antioxidant sources, on contrary tea is relatively less consumed among women population. Due to the effects of caffeine on cardiovascular system it is possible that the intake of caffeine positively influenced the outcome combined with the reduced intake of sugar added to coffee beverages [3,4]. Consumption of cola soda and energy drinks was small in these women, because of the mean age of population. Energy drinks as well as caffeinated soda cola beverages are more diffuse in young population [5].

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