



Letter to the Editor

Estimated dietary polyphenol intake and major food sources

Carnauba *et al.* estimated dietary polyphenol intake in subjects aged ≥ 10 years and determined the major dietary contributors in the Brazilian population⁽¹⁾. The median and 25–75th percentile of polyphenol intake were 364.3 and 200.9–1008 mg/d, and the median and 25–75th percentile of polyphenol intake were 204 and 111.4–542.1 mg/4184 kJ/d. Non-alcoholic beverages and fruits were the major polyphenol suppliers, and coffee and orange juice were the main individual food contributors to polyphenol intake. I have some concerns about their study.

First, Zamora-Ros *et al.* estimated dietary intakes of polyphenols and identified their main food sources in Mexican female teachers aged ≥ 25 years, including urban and rural areas⁽²⁾. Median polyphenol intake was the highest in Baja California (750 mg/d) and the lowest in Yucatan (536 mg/d). Coffee and fruits were the most important food sources of phenolic acids and flavonoids, respectively. They pointed out that there was a large heterogeneity in intakes of individual polyphenols among Mexican women, which might be existed in other ethnic individuals. Sex, age and other socio-economic status should be specified for estimating dietary intakes of polyphenols.

Second, Huang *et al.* estimated dietary polyphenol intake among USA adults aged ≥ 20 years and also examined 10-year trends⁽³⁾. The mean intake of dietary polyphenols was 884.1 mg/4184 kJ/d, and the mean daily polyphenol intake did not change significantly over time. Foods and beverages contributed 99.8% of polyphenol intake, with coffee (39.6%), beans (9.8%) and tea (7.6%). Miranda *et al.* estimated the intake of polyphenols and the major dietary contributors in adults and elderly adults of Sao Paulo⁽⁴⁾. The mean intake of polyphenols was 377.5 mg/d, and intakes were relatively higher in the elderly adults, individuals with lower educational level and current smokers. The main dietary contributors for total polyphenols were coffee (70.5%), citrus fruits (4.6%) and tropical fruits (3.4%), and coffee provided 266.2 mg/d of polyphenols. There is an ethnic difference in the amount of polyphenol intakes, and difference in the major dietary contributors of polyphenol should be considered for the estimation.

Finally, Knaze *et al.* presented food composition database for estimating polyphenol intakes in adults from 10 European

countries⁽⁵⁾. There is a variation for estimating polyphenol intakes, and an efficient procedure is indispensable for the estimation. Furthermore, food contributions to the different class of polyphenol intake have been reported^(1–4), which might contribute to the efficacy of disease prevention. Anyway, estimated dietary polyphenol intake can be used for the risk assessment of chronic diseases.

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doi:10.1017/S0007114521000428

Acknowledgements

The author has indicated no financial support.
 There is no conflict of interest in this study.

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