

Letter to the Editor

Resveratrol, a new biomarker of moderate wine intake?

In a recent study published in the *British Journal of Nutrition*, Spencer *et al.* ⁽¹⁾ reviewed the strengths and the limitations of the biomarkers of dietary polyphenol intake, since nutritional biomarkers may be a better measure of dietary exposure than self-reported dietary data. These authors identified the criteria that must be considered in the development of such biomarkers as the following: (i) robust methodology; (ii) sensitivity; (iii) specificity; (iv) bioavailability. Different polyphenols were reviewed as potential biomarkers by the authors; we suggest that resveratrol should also be considered. We analysed resveratrol metabolites as potential biomarkers of wine consumption in two randomised cross-over trials and a cohort study ⁽²⁾. Using a cut-off of 90 nmol/g, we were able to use urinary total resveratrol metabolite concentration to differentiate wine consumers from abstainers with a sensitivity of 72% (60–84%) and a specificity of 94% (87–100%). In these trials, urinary resveratrol was specific, as wine has been reported as the most important source of dietary resveratrol (98.4%) ⁽³⁾, has an adequate half-life and provided a good correlation between these measured values and the dietary data reported (r 0.654; P < 0.001). In addition, there is a robust analytical technique ^(4,5) using LC-MS-MS to determine urinary resveratrol metabolites and their pharmacokinetic parameters have been recently studied by Boocock *et al.* ⁽⁶⁾.

Taking these points into consideration, we want to propose urinary resveratrol metabolites as a biomarker of grape product consumption; this would be a new nutritional biomarker which accomplish and fulfil the criteria of Spencer *et al.* ⁽¹⁾.

We declare no conflict of interest.

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