

Letter to the editor – Reply

Response: Banana is not a food source of delphinidi(di)ns in the EPIC study

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We thank Dr Drossard for her interest and comments concerning our recent paper⁽¹⁾. We fully agree with Drossard *et al.*⁽²⁾ regarding the incorrect delphinidin value of bananas (7.39 mg/100 g) in the USDA database⁽³⁾. Phenol-Explorer⁽⁴⁾ does not use this value (which comes from Harnly *et al.*⁽⁵⁾) due to its poor quality and provides no further delphinidin data for bananas. Kitdamrongsont *et al.*⁽⁶⁾ analysed the anthocyanidin content in some varieties of wild bananas in Thailand and clearly showed that red, pink, blue and purple bananas contain delphinidins, but not the yellow or green-yellow varieties. Indeed, anthocyanidins are common plant pigments (red, blue, violet), and so logically foods without these colours may not contain anthocyanidins. Therefore, the delphinidin content in yellow and green-yellow bananas should be zero. In our study, we did not use the USDA value, but rather we used the content of delphinidins in banana as zero based on the above reasons⁽⁶⁾. Therefore, banana does not appear in the food composition table on anthocyanidins of the most abundant raw food sources (annex Table 1). In the table of food sources (Table 4), banana is included in the group of 'Other and mixed fruits' because it was not shown to be a relevant contributor of anthocyanidins. However, in our text, there is a mistake when describing the food sources of delphinidins by region where banana is listed as one of the main contributors by error. Therefore, for the southern countries the richest food sources of delphinidins should be wine, grapes and fruiting vegetables, mainly aubergine, whereas for the central and northern countries the main contributors should be non-alcoholic beverages, berries and wine. In conclusion, banana is not a food source of delphinidins in the European Prospective Investigation into Cancer and Nutrition (EPIC) study because Europeans mainly consume yellow bananas, which have not yet been shown to contain delphinidins.

The authors have no conflicts of interest.

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