



**Fig. S1** Effect of TDU temperature (A), TDU heating time (B), gas flow rate (C), gas pressure (D), PTV cooling temperature (E), PTV heating temperature (F) and PTV liner filling (G) on the response of each analyte.

**Table 1S** Slopes<sup>a</sup> of standard additions calibration graphs for three edible oils

Compound	Slope (mL $\mu\text{g}^{-1}$ )
	Sunflower
Benzene	20.5 $\pm$ 1.5
Toluene	9.8 $\pm$ 0.9
Ethylbenzene	8.7 $\pm$ 0.9
m-Xylene / p-Xylene	19.6 $\pm$ 1.9
o-Xylene	5.4 $\pm$ 0.6

<sup>a</sup> Mean value  $\pm$  standard deviation (n= 6)