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## Sensitive determination of phthalates in edible oils enabled through elimination of phthalate background from HPLC–MS/MS

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Diesters of phthalic acid (phthalates) are high production volume chemicals known for their endocrine-disrupting properties. Phthatlate control in various types of matrix may be quite complicated by omnipresent phthalate contamination. Chemicals, laboratory equipment or GC instrumentation typically introduce considerable levels of phthalates into the analytical process. Unfortunately, the role of phthalate contamination in HPLC remains unclear. For this reason, we attempted to identify and eliminate any possible blank difficulties encountered during analysis of 6 individual phthalates (DEP, DBP, DiBP, BBP, DEHP, DnOP) and 2 phthalate isomeric mixtures (DiNP and DiDP) in edible oils by HPLC–MS/MS. Several sources of phthalate contamination trap, a HPLC column, generating a retention delay of mobile phase phthalates. LOQs ranging between 5.5 and 110 µg/kg reflect satisfactory blank management and good sensitivity of the employed instrumentation.

## Biography

Adam Vavrouš has graduated in 2010 from University of Chemistry and Technology, Prague. Since 2011, he has been employed as an Analytical Chemist/ Researcher at National Institute of Public Health. In 2012, he started PhD study at Charles University in Prague.

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