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A novel strategy based on in-syringe dispersive liquid-liquid
microextraction for the determination of nickel in chocolate samples

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ABSTRACT:

In this work, a novel approach was developed to perform dispersive liquid-liquid microextraction using a rapid pressure variation to disperse the extraction solvent in an aqueous medium. A glass syringe was used to produce an environment subject to a rapid pressure difference. The element used as a model was nickel and the approach was called pressure variation in-syringe dispersive liquid-liquid microextraction (PV-IS-DLLME). The extraction solvent used was 1-butyl-3-methylimidazolium hexafluorophosphate, and ammonium pyrrolidine dithiocarbamate was the complexing reagent. The variables pH, solvent volume, amount of complexing agent, extraction time and syringe volume were studied by a factorial 2^{5-1} fractional design. All variables were significant. However, the two least significant, amount of complexing agent

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