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**Simultaneous determination and speciation analysis of arsenic and chromium in iron supplements used for iron-deficiency anemia treatment by HPLC-ICP-MS**

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**ABSTRACT**

This work proposes the use of high performance liquid chromatography coupled to inductively coupled plasma mass spectrometry (HPLC-ICP-MS) for simultaneous speciation of arsenic and chromium in iron supplements used for the treatment of anemia. The sample preparation procedure recommended for the total determination of arsenic and chromium was established using acid digestion in a microwave assisted oven. For speciation analysis, however, the microwave-assisted extraction procedure involved the use of water as extraction

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