

## Evaluation of Sample Preparation Methods for Beverages and Condiments for Analysis by TXRF and AAS

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Preparation methods, like microwave assisted digestion or using a controlled heating block, are common for samples containing a complex matrix. We are examining these methods as potential candidate for common beverages and condiments. The proposed procedure should be reliable and versatile enough to be adaptable to other samples containing high organic matrices. It is expected that microwave and heating block digestion will be more reliable than open vessel digestion as both operate in a closed system under a controlled chemical environment. Both methods will be assessed carefully with respect to accuracy, repeatability and reproducibility and will be tested on the above mentioned types of samples. Analysis of these samples will be done by using total reflection x-ray fluorescence spectrometry (TXRF) as a multi-element method and atomic absorption spectrometry (AAS) for selected elements such as lead and copper.