

This practical report is based on an icp practical report as per [experimental details doc 5](#)

Practical Report requirements can be found in the [practical requirements doc 6](#)

This assessment is based on practical data from ICP-OES analysis ([Data for CRM and plant samples – ICP-OES assessment doc 1](#)) of a range of essential and toxic elements in an edible plant that was sampled from ten sites along the roadside.

A certified reference material (CRM), [Strawberry Leaves \(LGC7162\) doc 2](#) (LGC Limited, United Kingdom), which was microwave digested and then analysed, was used for data validation. Thereafter, the plant material was analysed.

The analytical results should be compared to threshold values set by [regulatory authorities such as the FAO/WHO doc 3 \(use EU limits\)](#) to determine the plants safety for human consumption. The plant should be evaluated for nutritional value and potential toxicities by comparing the obtained results for essential elements to [dietary reference intakes and tolerable upper intake levels set by the Food and Nutrition Board, Institute of Medicine, National Academies doc 4](#). Additionally, a health risk assessment must be conducted to determine the non-carcinogenic and carcinogenic risk from [exposure doc 5 - health risk assessment part](#)

Word count: Approximately 3,000 words or 6 pages (single-spaced, Times New Roman, size 12 font) including tables and excluding references.