

Question 24 (4 marks)

Assess the impact of atomic absorption spectroscopy (AAS) on the scientific understanding of the effects of trace elements.

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AAS can measure minute concentrations of metallic elements in a sample. Trace elements are elements that are needed in small amounts for the efficient functioning of a living organism. The presence of these trace elements went unnoticed until scientists began using AAS to test soils and other substances, as ~~the~~ the concentration of these elements were too low to be detected by previous processes. AAS has not only shown that these trace elements are present in living organisms but has also shown that they are essential for the well-being of the organism, and has been continuously used to determine ~~how~~^{why} these trace elements are beneficial and what they do in the organism.