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**Title:**

New Approaches for LC/MS Determination of Vitamins

**Abstract:**

There has been much research into the analysis of vitamins and it is quite well accepted that the older traditional microbial methods can be time-consuming and sometimes inaccurate. This talk will discuss how advances to analytical technology can help improve the process of testing for vitamins.

During this talk, the use of ultra pressure liquid chromatography (UPLC) in this application area will be demonstrated. Using UPLC it has been found that the time of analysis can be reduced significantly to runtimes of less than ten minutes. Also found during this research is that improved chromatographic resolution was obtained.

The research investigates the use of a multi-analyte approach so that many vitamins can be analysed in one run. The selectivity of MS and MS/MS helps in the identification and quantification of vitamins which is especially important when looking at these compounds in the presence of complex matrix and this data is shown.