Detailed milk compositional analysis by FTIR

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The use of Fourier transform infrared (FTIR) spectroscopy for milk analysis is widespread. In the last 10 years the ability to use much wider range of the available spectral information that is routinely gathered has conferred the ability to create calibrations that are able to measure milk composition to a much greater level of detail than previously. While commercial vendors have developed calibrations with a wider and deeper range of applications suitable for routine use much more work has been carried out by national herd testing organisations and milk processors globally. These users seek to infer advantages to both national breeding programmes and match raw milk quality to the ability to make specific higher value products. They also wish to ensure that the calibration developed can be applied broadly across multiple locations and instruments. This presentation will review some of these recent developments and also highlight some of the challenges that must be recognised and overcome if detailed milk composition is to be routinely and usefully measured by FTIR.

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