

Choosing the best method for the job: NIR or MIR (FTIR)?

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Near-infrared (NIR) and mid-infrared (MIR) spectroscopy are standard rapid methods for analyzing milk and dairy products. MIR is often referred to as FTIR (Fourier Transform Infrared). Both methods are versatile and can measure all main constituents, such as fat protein and solids/moisture. But there are differences between the methods, making them more suitable for some applications than others.

The presentation will elaborate the strengths and weaknesses of the methods. For example, sample viscosity and homogeneity put specific demands on the method, while the required components to be measured (e.g., main or low concentration constituents) pulls in another direction. This leads to a guideline for choosing the best method for a given sample type and measured component.

To show the difference in practice, the result of a meta study comparing the performance of the two methods for measuring fat, protein and lactose in milk, will be presented. The meta study is based on 41 published scientific studies.

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