



# Stool analysis with NIR Spectroscopy

Fast and easy determination of fat, nitrogen, water, dry matter, and calories in human feces

## HIGHLIGHTS

- All-in-one solution for fat, nitrogen, water, dry matter, and calories analysis
- Measuring out of the box
- Reliable results from day one
- Straightforward and intuitive operation
- No chemicals or reagents required

# A dedicated solution for stool analysis

Metrohm offers a turnkey solution for fast and reliable analysis of human feces. The measurement device consists of a DS2500 Solid near-infrared analyzer with pre-calibrations based on a large collection of stool samples from different countries.\*

Analyses of stool samples with conventional methods are time intensive and create a significant workload.

A pre-calibrated D2500 Solid near-infrared analyzer allows medical biology laboratories to tackle this challenge.

This turnkey solution allows users with and without laboratory experience to perform reproducible stool measurements and to obtain accurate results in less than a minute. As a true workhorse the design of the DS2500 Solid near-infrared analyzer features high robustness (IP54 certification) and reliable results.



Parameter	Range	SECV	R <sup>2</sup>
Calories	11.2 – 255 Kcal	13.9	0.941
Dry matter	2.7 – 37.7wt%	1.985	0.956
Lipids	0.09 – 16.6wt%	1.03	0.918
Moisture	63.3 – 97.3wt%	2.4	0.921
Nitrogen	0.01 – 2.30wt%	0.26	0.799

wt% weight percentage  
SECV Standard error of cross validation  
R<sup>2</sup> Coefficient of determination

## Reliable results from day one

The robust pre-calibrations allow precise and accurate determination of key parameters in human feces. The Metrohm solution can be used directly without any prior method development.

## Trust in our expertise

Pre-calibrations are prediction models based on numerous samples collected from multiple countries. By using these solutions, you can benefit immediately from the experience Metrohm has gained with those applications.



## EASY TO USE

- Turnkey solution
- Measure at the push of a button
- No expertise required



## COST-MINIMIZING

- No solvents, no reagents
- No waste disposal



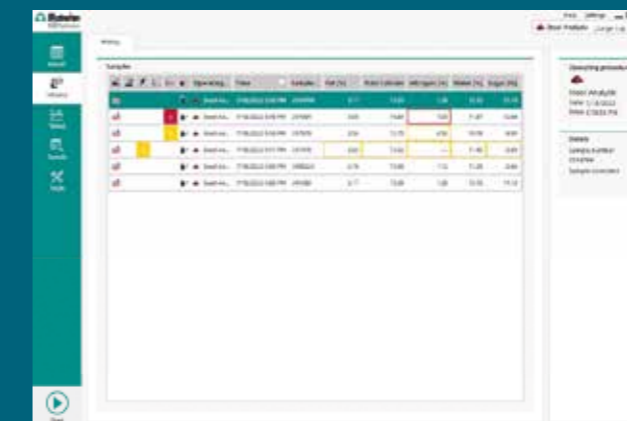
## FAST

- No sample preparation required
- Analysis results within one minute



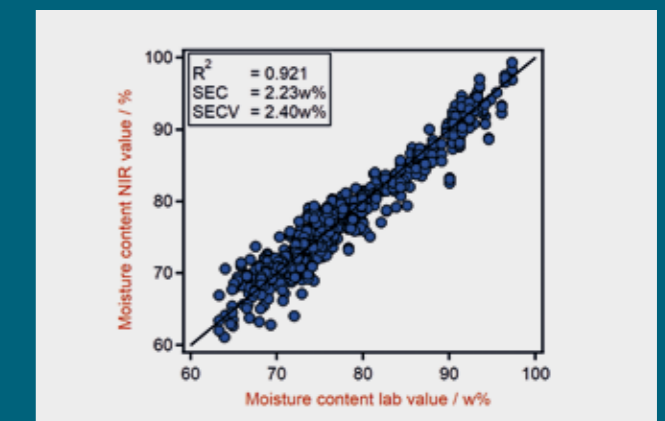
## CLEAN

- Non-destructive, chemical-free method
- Minimum of impact on health and environment



## Straightforward and intuitive operation

Metrohm solutions are controlled by Vision Air software. Vision Air provides two environments tailored to different user needs: Vision Air Routine for secure daily operation by untrained operators and Vision Air Manager for full control of data and instrument configuration by experienced users. For daily routine analysis measurements can be started with a simple mouse click.



## Customized service and support

Metrohm supports users by updating the default pre-calibration on demand with customer specific samples. This improves the performance of the method and/or extends it to new applications.

\*This device and the presented solution is not a medical device and is for research use only

## ORDERING INFORMATION

Pre-calibration	
66072314	Pre-calibration for the analysis of human stool

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Required hardware	
2.922.0010	DS2500 Solid Analyzer

Required software	
6.6072.201	Vision Air

Recommended standard	
6.7450.000	NIRS reflection standard, set of 2

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