



CONCEPT LIFE SCIENCES

METHOD STATEMENT NUT013 SUGARS

INTRODUCTION

The performance of this method is validated in accordance with internationally recognised procedures.

This method is only conducted at the following Concept Laboratories: Cambridge

This procedure describes the determination of sugars in foodstuffs

PRINCIPLE

Sugars are determined on a hot water extract of the sample by ion chromatography with pulsed amperometric detection using a gold electrode, with calibration against an internal standard.

PERFORMANCE CHARACTERISTICS

SUBSTANCES DETERMINED

Glucose, fructose, lactose, sucrose and maltose

RANGE OF APPLICATION

0.1 – 20 g / 100 g (may be extended by dilution)

LIMIT OF DETECTION

0.1 g / 100 g

ANALYTICAL QUALITY CONTROL

Analytical quality control is maintained by a number of measures:

- Calibration with authentic standards (with defined minimum performance characteristics)
- Analysis of control samples within each analytical batch, such as independent standards, matrix spikes or reference materials
- Ongoing quality assured by the use of control charts in conjunction with warning and action limits for the QC sample data
- Participation in external proficiency testing and interlaboratory schemes such as FAPAS
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REFERENCES

- Pearson's Chemical Analysis of Foods, 9th Edition, Longman Group UK Limited, 1991, 0-582-40910-1.
- Dionex manuals and application notes