

## Analysis of Food Sugars in Prepared Foods Using ACQUITY UPLC BEH Amide Columns

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Waters Corporation

This is an Application Brief and does not contain a detailed Experimental section.

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### Abstract

This application brief describes the analysis of food sugars in prepared food using ACQUITY UPLC BEH Amide Columns.

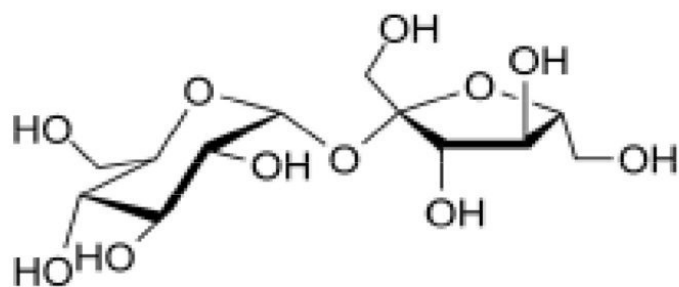
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### Introduction

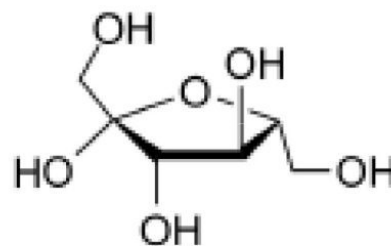
Compounds used for this study includes:

1. p-Toluamide
  2. Fructose
  3. Glucose
  4. Sucrose
  5. Maltose
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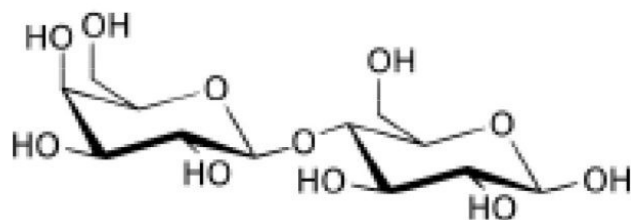
6. Lactose



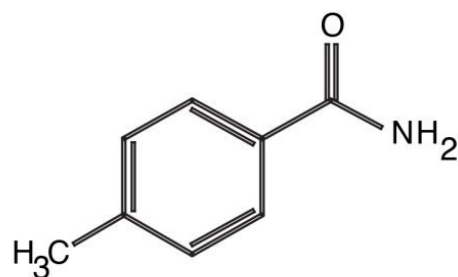
Sucrose



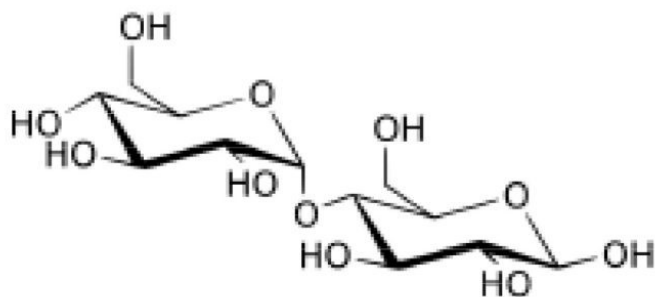
Fructose



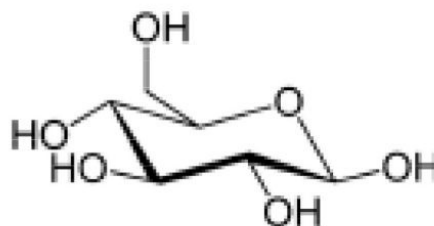
Lactose



p-Toluamide  
(unretained compound)



Maltose



Glucose

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## Experimental

### Chromatographic Conditions

Column:	ACQUITY UPLC BEH Amide 2.1 x 50 mm, 1.7 $\mu$ m
Part number:	186004800
Mobile phase A:	80/20 acetone/H <sub>2</sub> O with 0.05% triethylamine [TEA]
Mobile phase B:	30/70 acetone/H <sub>2</sub> O with 0.05% triethylamine [TEA]
Flow rate:	0.15 mL/min
Flow profile:	95% A/5% B (77.5% acetone with 0.05% TEA)
Injection volume:	0.7 $\mu$ L (PLNO)
Sample concentration:	Standards at 1 mg/mL each
Sample diluent:	50/50 MeCN/H <sub>2</sub> O
Column temperature:	85 °C
Strong needle wash:	20/80 MeCN/H <sub>2</sub> O (800 $\mu$ L)
Weak needle wash:	75/25 MeCN/H <sub>2</sub> O (500 $\mu$ L)
Seal wash:	50/50 MeCN/H <sub>2</sub> O

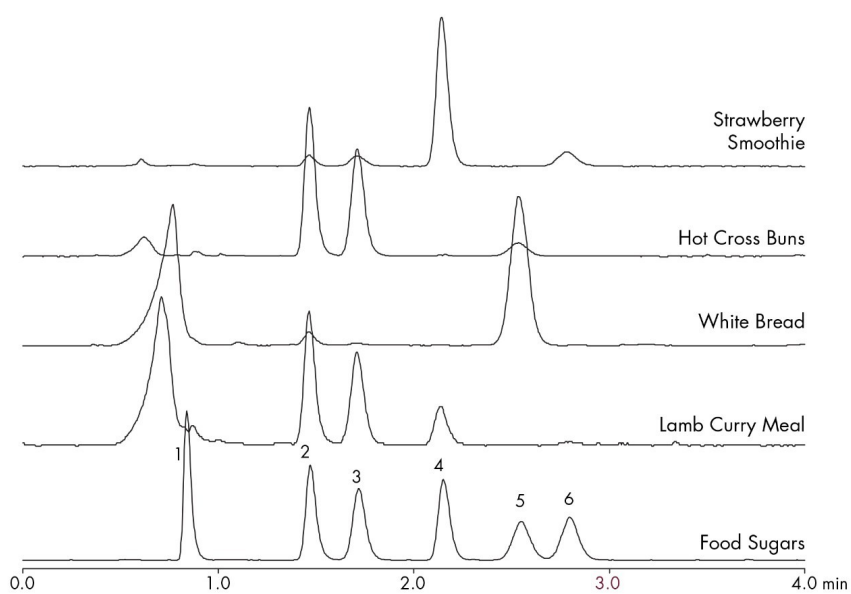
Instrument: Waters ACQUITY UPLC with ELSD

## ELSD Conditions

Gain:	200
Pressure:	40 psi
Drift tube temperature:	40 °C
Nebulizer:	Cooling
Data rate:	10 pps
Filter time constant:	Normal

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## Results and Discussion



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## Featured Products

ACQUITY UPLC ELS Detector <<https://www.waters.com/514219>>

WA60115, October 2009

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