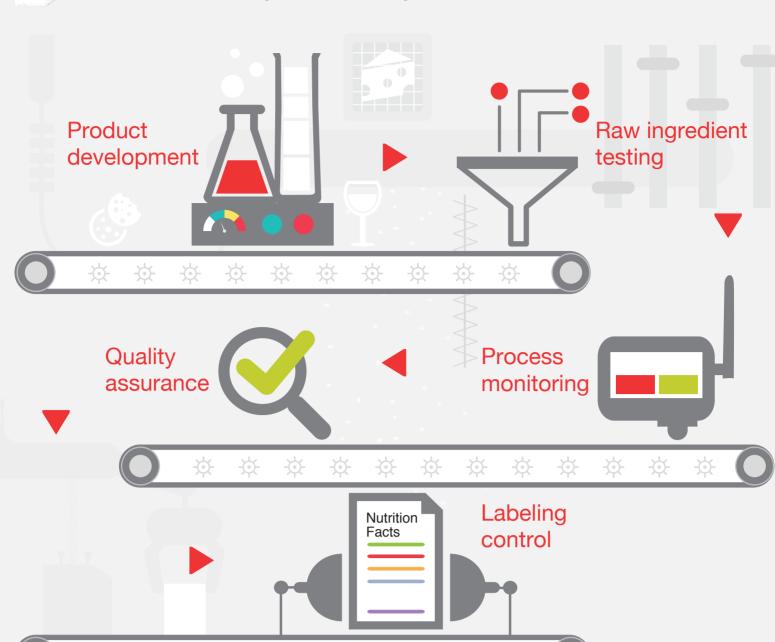
Sweet enough

Why it's important to test carbohydrate levels in foods and beverages and how to do it accurately

What is carbohydrate analysis used for?



Why is carbohydrate analysis performed?



Understanding health-related issues such as obesity, diabetes or cardiovascular diseases



Constituent testing for new product development



Compliance with Food Quality **Standards**



Legal requirements for accurate food labeling

The current challenges in carbohydrate testing



Regulatory compliance

Challenge:

Ensuring regulatory compliance

Solution: Better method reproducibility and validated protocols are required to meet standards of

regulatory bodies such as the FDA, ACAC, ISO and Chinese FDA



Sample complexity

Challenge:

Performing sample derivitization is time consuming

Solution: Companies and food standards agencies are moving towards methods that provide direct,

selective and sensitive determination without sample derivitization



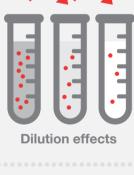
Process complexity

Challenge: There is frequently no dedicated instrument for routine analysis. Available systems are

complex to operate

Dedicated instruments that are easy to use

Solution:



The large dilutions required for food and beverage samples can be in the tens of thousands

Challenge:

and impact the downstream accuracy of results



Need for speed

Minimizing errors associated with improved sample preparation techniques

Challenge:

Solution:

Increasing pressure to decrease turnaround time from sample to results

The ideal solution

Solution: Increasing throughput capabilities of instruments, workflows and associated protocols

for simple sugar analysis The Thermo Scientific™ Integrion™ HPIC™ dedicated analyzer completely metal-free, all PEEK™ flow path

- Direct detection of monosaccharides and disaccharides using electrochemical analysis without
- sample derivatization • Better sensitivity and system robustness using a
 - Better method reproducibility using Automated Eluent Generation™ technology
 - Minimize the need for large or serial sample dilutions with an optimized detector and injection volumes
 - Faster run times without compromising data quality using high pressure IC (HPIC)

Thermo Fisher Scientific Inc. 81 Wyman Street, Waltham, MA USA 02451