



BioSystems

Sweeten your
routine in the
laboratory

Sugar analysis in foodstuff

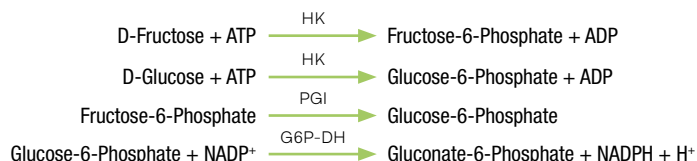
Food & Beverage analysis

Carbohydrate analysis is an essential tool for monitoring different technological processes and their quality, in the detection of adulterations, as well as in the determination of nutritional parameters for their correct labeling.

D-Glucose / D-Fructose

Glucose and **fructose**¹ are monosaccharides naturally present in different food or added as additives. The reagent allows the quantification of sugars separately or together in different food matrices such as juices and beverages, vegetables, meat, dairy or cereal-based products, among others.

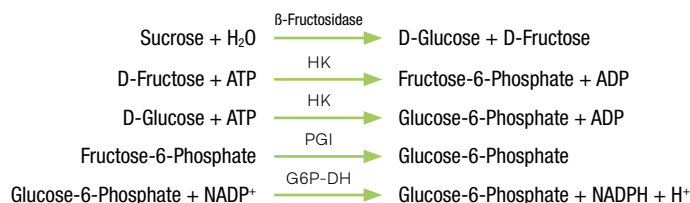
Principle of the spectrophotometric method:



Sucrose / D-Glucose / D-Fructose

Sucrose, **glucose** and **fructose**¹ are simple sugars naturally present in different foods or added as additives. The reagent enables the quantification of sucrose separately or all together in different food matrices such as juices and beverages, vegetables, meat, dairy, or cereal-based products, among others.

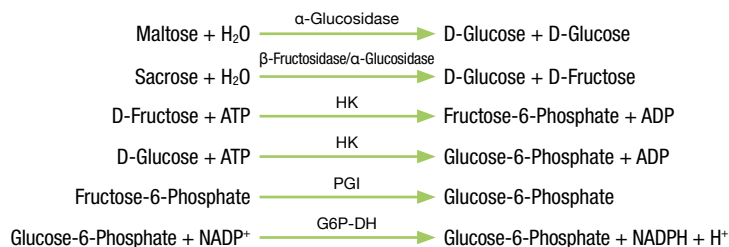
Principle of the spectrophotometric method:



Maltose / Sucrose / D-Glucose / D-Fructose

Maltose, **sucrose**, **glucose** and **fructose**¹ are simple sugars (mono and disaccharides) naturally present in different foods. The reagent allows the quantification of the four sugars in different cereal-based products.

Principle of the spectrophotometric method:



Lactose / D-Galactose

Lactose¹ is a disaccharide sugar, formed by D-glucose and **D-galactose**. Both substances are naturally present in dairy products or can be added externally as additives. They have been validated in juices and beverages, cereal, meat or dairy products. The reagent allows the quantification of sugars separately or the sum of both.

Depending on the application used, the reagent can be also used for lactose-free labeling (except for samples containing lactose-free dairy products).

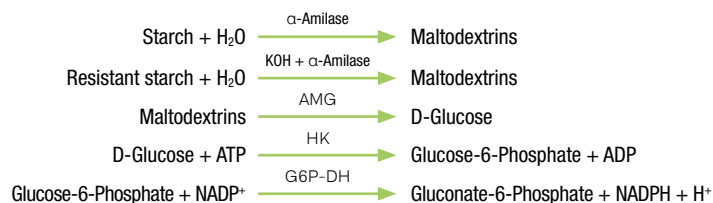
Principle of the spectrophotometric method:



Starch

Starch¹ is a complex carbohydrate formed by glucose polymers. It is the energy source in cereals and potatoes, where is naturally found. Also, its use as a thickener and texturizer is widely spread in the food industry. The reagent allows the quantification of starch, via glucose.

Principle of the spectrophotometric method:



¹Metrological characteristics: for further technical information about the reagents, request the performance report from your supplier. On the instructions for use of each reagent, you will find more information about the matrix extraction processes.



- Random Access Analyzer
- High Sensitivity
- Multiparameter

Enzymatic methods provide fast, affordable, and efficient analyses compared to manual methods or chromatography. The pretreatments have been carefully validated for each matrix, maximizing its extraction. All reagents can be automated.

- Automation and speed.
- Simplicity.
- Low cost.
- Reliable results.
- Validated in several matrices.



Enzymatic/Chemical Reagents	Code
D-Glucose / D-Fructose	12800
Sucrose / D-Glucose / D-Fructose	12819
Maltose / Sucrose / D-Glucose / D-Fructose	12893
Lactose / D-Galactose	12882
Starch	12848





FOODQUALITY
D-GLUCOSE/
D-FRUCTOSE
REF 12800 40 mL

Technical Specifications

Analysis speed	150 tests/hour
Number of rack positions – Y15	4 (samples and/or reagents)
Number of rack positions – Y15c	2 (samples and/or reagents)
Number of samples per rack	24 (multiuse racks)
Number of reagents per rack	10 (20 and 50 mL bottles)
Number of cooled reagents – Y15c	10 (20 mL bottles) and 10 (50 mL bottles)
Maximum number of samples/reagents – Y15	72 samples / 30 reagents
Maximum number of samples/reagents – Y15c	48 samples / 30 reagents
Sample tubes	ø13 mm, ø15 mm (maximum height 100 mm)
Standard vial	ø13 mm
Programmable reagent volume – A / B	10 µL - 600 µL / 10 µL - 200 µL
Programmable sample volume	2 µL - 80 µL
Removable methacrylate rotor	
Number of wells in the rotor	120
Automatic pre- and post-dilutions	
Permissible reaction volumes	180 µL - 800 µL
Measurement range	from -0.05 A to 3.6 A
Filter drum configuration	340, 405, 420, 520, 560, 600, 620, 635, 670 nm
Dimensions	840 x 670 x 615 mm (length x depth x height)
Weight	45 kg

Y15 | Y15c

Random Access Automatic Analyzer

Code: 83106 / 83106C

- 150 test/hour
- Wavelengths: 340, 405, 420, 520, 560, 600, 620, 635, 670 nm
- Preprogrammed methods, validated by the R&D Department
- User-friendly software
- Minimal reagent consumption
- Innovative design
- Cooling system included (only in Y15c)





BioSystems S.A.
Costa Brava 30, 08030 Barcelona (Spain)
t. +34 933 110 000
foodbeverage@biosystems.global
biosystems.es



Management
System
ISO 9001:2015
www.tuv.com
ID 003106896