



Diagnostic Solutions
for Food & Beverage Manufacturers

Rapid Results
Validated Methods
Straight From The Experts

Diagnostic Products for Quality Management in Food and Beverages



Processed Food
& Beverages



Cereals /
Dietary Fiber



Dairy & Infant
Formula



Wine



Malting, Brewing
& Distilling



The Challenge

Maintaining consistently high quality products and manufacturing standards for the dynamic, highly regulated food industry, whilst balancing product consistency, safety and innovation.

The Solution

Rapid, accurate, robust and automatable enzyme-based analytical solutions to meet customer's needs and requirements

Our customer focused solutions address:

- consumer demand for evidence based nutritional information
- manufacturer requirements for regulatory compliance for accurate food labelling
- manufacturer needs for product consistency and quality



What are you Testing for in your Sample?

Whether testing for fiber content in food, or lactose levels in milk - we have a diagnostic solution for you.

Megazyme product categories include:

Assay Kits

Enzymes

Carbohydrates

Enzyme
Substrates

Suitability for All Types of Assay Formats

Our standard kits are designed to be used with a spectrophotometer and automated analysis is possible with the majority of our kits. The flexibility of either spectrophotometer or automated analysis is appealing to manufacturers of different sizes with diverse sample volume analysis needs.



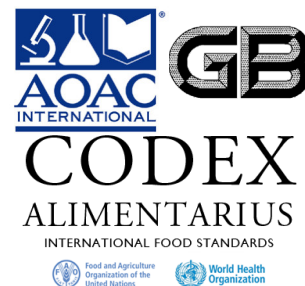
The Megazyme Advantage

Results that are fast, accurate, and reliable.

- Over 30 years of ground-breaking innovation in analytical methods
- Diagnostic products for a wide range of analytical needs
- Products of the highest quality
- Officially validated methods
- Excellent in-house technical support

Validated Methods

Internationally renowned methods, many of which were originally developed by our own scientists. Validations from AOAC, CODEX and compatibility with validated methods from ASBC, EBC, OIV & other governing bodies, guarantee trusted analytical results.



Processed Food



As a global leader in the measurement of dietary fiber, starch, enzymes, polysaccharides and sugars, Megazyme has a strong track record of innovation and customer engagement in the food and cereal industries.

We offer a range of solutions for the following analytes:

Dietary Fiber

**Starch & Available
Carbohydrates**

**Polysaccharides &
Fiber Components**

Sugars & Alcohols

Organic Acids

Enzyme Activities

Our Focus

Serving analysts around the world, we understand the need for high-quality, cost-effective products that deliver reliable results.

Our product range for the processed food industry includes products to measure:

- dietary fiber and fiber components (e.g. fructan, cereal β -glucan and resistant starch)
- starch and carbohydrate content in food products
- active ingredients in nutritional supplements and nutraceuticals (e.g. β -glucan derived from mushrooms and yeasts)
- sugars including glucose and lactose
- key organic acids for food and beverage manufacturing (e.g. lactic acid and malic acid)
- enzymes involved in cereal processing



Beverage



Maltsters, brewers, distillers, winemakers, juice and other beverage manufacturers can all benefit from the wide range of Megazyme's product offerings and technical expertise. Our diagnostic products, often unique, allow for raw material analysis, process manufacturing control and correct labelling to ensure product quality and consistency for manufacturers of all sizes.

We offer a range of solutions for the following analytes:

Malt & Adjunct Enzyme Activities	Sugars	Organic Acids
Fermentation Analytes (YAN)	Ethanol	Sulfites & Aldehydes

Our Focus

Allowing beverage manufacturers to accurately monitor key analytes from raw materials to end-products. A wide range of our products are compatible with Official methods from various beverage associations (e.g. EBC, ASBC, OIV, etc.) and allow compliance with existing legislation mandated in these highly regulated industries.

Our range for the beverage industry includes products to measure:

- sugar content including fructose, glucose, maltose and sucrose
- yeast assimilable nitrogen, ammonia, ethanol and other important analytes for fermentation process control
- organic acids including malic, lactic, tartaric and acetic acid to monitor the manufacturing process
- key enzymes for the malting and brewing industry (e.g. β -amylase, α -amylase, limit-dextrinase, β -glucanase and xylanase)
- ethanol content including in those beverages to be labelled as alcohol-free products
- sulfite content in wine with the possibility of measuring either free or total sulfite content



Dairy and Infant Formula

Our products for the dairy and infant formula industries are used in quality control processes all over the world. Manufacturers rely on our assay kits and reagents to ensure product quality and to meet regulatory and labelling requirements.

Our latest product, the Megazyme Lactose Assay Kit (K-LOLAC) has been accepted as an Official Final Action Method: **AOAC 2020.08**. It is the *first* enzymatic method for the measurement of lactose in low-lactose and lactose-free products validated by a multi-laboratory evaluation.

We offer a range of solutions for the following analytes:

Lactose	Lactic Acid	Fructan/FOS
Polydextrose	D-Glucose	Urea/Ammonia

Our Focus

Supporting dairy and infant formula manufacturers with the most accurate products on the market to measure:

- lactose in dairy samples, including milk-based products that are to be marketed as ‘low-lactose’ or ‘lactose-free’ due to consumer dietary requirements
- dietary fiber components such as FOS and polydextrose, used in a wide range of food products
- lactic acid and other compounds formed during fermentation/maturation
- urea and other key nutritional markers for dairy herds

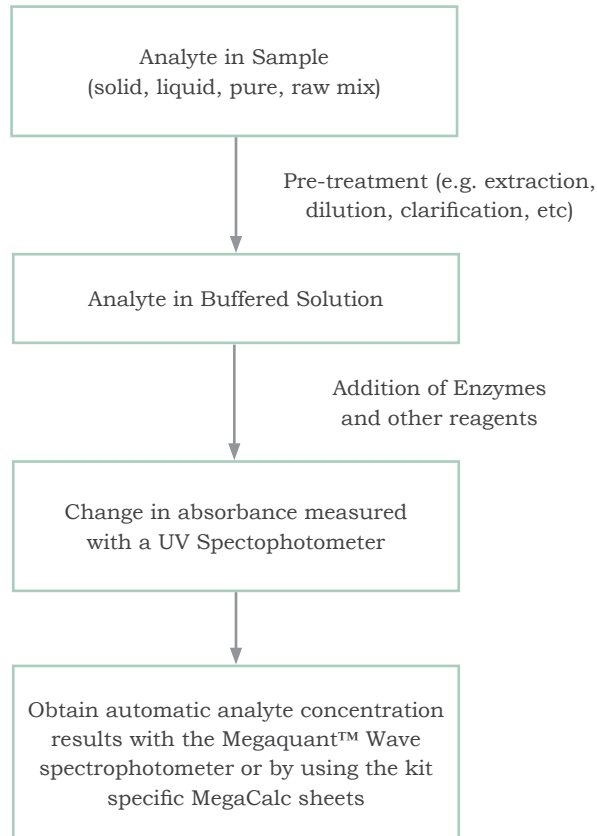


ENZYMATIC ASSAY KITS

For the measurement of key analytes in food and beverages



Example Workflow



Please refer to the relevant validation materials for full details on the validated sugars and acids protocol.

Commonly Used Methods In The Food & Beverage Industry

Analyte	Products Available	Official Methods <small>(for an extensive list visit megazyme.com)</small>
Dietary Fiber Whether measuring total dietary fiber or a specific dietary fiber component, we have you covered	Total Dietary Fiber (K-TDFR) Enzymes such as amyloglucosidase (E-AMGDF), α-amylase (E-BLAAM) & protease (E-BSPRT) are also available as standalone products	AOAC 985.29 AOAC 991.43 GB Standard 5009.88-2014
	Integrated Total Dietary Fiber (K-INTDF)	AOAC 2009.01 AOAC 2011.25
	Rapid Integrated Total Dietary Fiber (K-RINTDF)	AOAC 2017.16 Codex Alimentarius Type I
Starch Kits for the measurement of total starch, digestible and resistant starch, starch damage and starch components such as amylose & amylopectin	Total Starch (K-TSTA)	AOAC 996.11
	Resistant Starch (K-RSTAR)	Codex Alimentarius Type II AOAC 2002.02
	Damaged Starch (K-SDAM) Amylose/Amylopectin (K-AMYL)	
Fructan & FOS We provide the only reagents available worldwide specifically for the measurement of fructan	Fructan (K-FRUC)	AOAC 999.03 AOAC 2016.14 Codex Alimentarius Type III
	Enzymes such as Sucrase (E-SUCR) & Fructanase (E-FRMXLQ & E-FRMXPD) are also available as standalone products to match some Fructan & FOS official methods	GB Standard 5009.255-2016
β-Glucan We have developed assay kits for the measurement of β-glucans in all samples	β-Glucan Cereal (Mixed linkage) (K-BGLU)	AOAC 992.28 AOAC 995.16 Codex Alimentarius Type II
	Mushroom & Yeast β-glucan (K-YBGL) Yeast β-glucan - Enzymatic method (K-EBHLG)	
Lactose Our lactose kits support the dairy industry with the most sensitive & accurate products on the market	Lactose (K-LOLAC)	AOAC 2020.08
	Lactose/Galactose (K-LACGAR)	AOAC 2006.06
Sugars & Organic Acids Our wide range of products allow food & beverage manufacturers to accurately monitor key analytes from raw material to end product. Liquid-ready assay kits and automatable formats are available to suit all sample analysis throughput needs.	Fructose (K-FRUGL) Glucose (K-GLUC) Maltose (K-MASUG) Sucrose (K-SUFRG) Malic Acid (K-LMAL) Lactic Acid (K-DLATE) Acetic Acid (K-ACET)	Most of our assay kit products are based on methods that have been accepted by official analytical bodies overseeing the wine, brewing, juice & dairy manufacturing industries.



Contact your local sales representative for further details

