

## **QFCS** – Food chemistry proficiency scheme

All kinds of foods are available worldwide and all year round. Technology now allows suppliers to harvest, preserve and distribute within a short period of time.

Food quality, consumer satisfaction and government regulations are all issues that need to be taken when producing food. The food we eat can contain potentially harmful chemicals, some naturally occurring, some as contaminants absorbed from soil and water.

Testing these end-use products in the laboratory is fundamental for food safety and stability.

Our QFCS scheme is specifically designed to promote the quality and comparability in the measurement of a range of analytes in food products. A wide mixture of tests in food matrices is available for laboratories that perform nutritional and proximate analysis, pesticides, vitamins, water activity, metals, aflatoxins and additives analyses.

Consistent good performance will allow laboratories to show, with confidence, the quality of their results to third parties.



## Scheme operation

Our QFCS scheme year operates from January to December and test materials are despatched four times per annum. Round despatch dates and reporting deadlines are available on our current QFCS application form, and further information can be found in our QFCS scheme description. These documents can be downloaded from our website <a href="https://www.lgcstandards.com">www.lgcstandards.com</a>

Test material	Analytes
Additives.	Preservatives Benzoic acid, Sorbic acid, Sulfur dioxide. Sweeteners Acesulfame K, Aspartame, Saccharin. Colours Allura red, Brilliant blue, Indigo carmine, Ponceau 4R, Sunset yellow, Tartrazine.
Bread or cake.	Nutritional analysis Acidity, Ash, Fat, Moisture, Protein, Total dietary fibre. Vitamins and minerals Vitamins B1, B2, B3, Calcium, Chloride, Iron, Sodium.
Cereal based food.	Nutritional analysis Ash, Carbohydrate (total and available), Energy, Fat, Moisture, Phosphate, Protein, Salt, Sodium, Total dietary fibre, Total sugars.  Vitamins and minerals Vitamins A, B1, B2, B3, B5, B6, B9, B12, C, D, Iron.
*Cereal grain, *Dried fruit, *Edible oil, *Green tea.	Metals Arsenic, Cadmium, Lead, Mercury, (Selenium - green tea only).
*Edible oil/fat.	Chemical Anisidine value, Colour, FAMES, Free fatty acids, Iodine value, Peroxide value, Saponification value (acid number), Unsaponifiable matter, Water.
Mixed fat spread.	Nutritional analysis Omega 3, Omega 6, pH, Salt, Mono-unsaturates, Poly-unsaturates, Saturates, Total trans fatty acids, Vitamins A, D, Water.
Flour.	Allergen *Gluten Nutritional analysis Ash, Calcium, Fat, Iron, Moisture, Protein.
Food.	Water activity.
Food 'pre-prepared' products.	Nutritional analysis Ash, Carbohydrate (total and available), Cholesterol, Energy, Fat, Moisture, Phosphate, Protein, Salt, Mono-unsaturates, Poly-unsaturates, Saturates, Sodium, Total dietary fibre, Total sugars, Total trans fatty acids.
Fruit/vegetable, *Green tea.	Pesticides Fungicides, Herbicides, Organochlorine, Organophosphorus, Synthetic pyrethroids, (Triazines - fruit/vegetable only).
*Nuts.	Aflatoxins Aflatoxins B1, B2, G1, G2, Total Aflatoxins.
*Tomato paste/puree.	Nutritional analysis Ash, Brix, pH, Salt, Total solids.

<sup>\*</sup>Not included in our scope of accreditation.

For further information contact LGC Standards:

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