



QUALITY CONTROL MATERIAL STATEMENT OF MEASUREMENT

Catalogue code:	PT-FC-770-QC
This Quality Control material is a Surplus sample from Proficiency Testing round:	FC278
Test:	Nutritional analysis - Cereal
Matrix:	Cereal based food
Weight/Volume:	100g
Storage on receipt:	Refrigerated 2-8°C
This statement of measurement is applicable until:	17 December 2019

Sample Instructions

1. All test materials are supplied in a ready-to-use format.
2. Test materials may have settled during transit. Please ensure test materials are thoroughly mixed prior to any sub-sampling or any analysis is performed.

Analyte	Assigned value	Units	Satisfactory range $ z \leq 2$	Number of data points
Energy	1763	KJ/100g	1587 to 1939	32
Fat (Soxhlet)	4.49	%	1.35 to 7.63	11
Fat (Acid hydrolysis & Soxhlet)	9.40	%	8.96 to 9.84	30
Carbohydrate (Total)	71.92	%	68.3 to 75.54	29
Carbohydrate (Available)	67.59	%	66.16 to 69.02	6
Total sugars	33.73	%	20.24 to 47.22	30
Total dietary fibre	4.26	%	3.13 to 5.38	28
Protein	13.42	%	12.82 to 14.02	51
Salt (from Sodium)	0.25	% (as NaCl)	0.19 to 0.31	11
Salt (from Chloride)	0.48	% (as NaCl)	0.35 to 0.61	24
Sodium	0.10	%	0.00 to 0.02	27
Ash	2.56	%	2.36 to 2.76	50
Moisture (Other)	3.25	%	1.96 to 4.53	9
Moisture (130°C)	3.85	%	2.70 to 5.00	16
Moisture (100-105°C)	2.76	%	1.76 to 3.76	32
Phosphate	0.88	% PO ₄	0.77 to 0.99	10
Magnesium	505.7	mg/kg	447.6 to 563.8	15
Potassium	5965	mg/kg	4862 to 7067	16
Zinc	31.73	mg/kg	22.53 to 40.93	18



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Notes

Energy is expressed as either kcal/100g or kJ/100g using one of the following calculations (factors shown are for kJ):

(17 x protein) + (37 x fat) + (17 x total carbohydrate)

(17 x protein) + (37 x fat) + (17 x available carbohydrate*) + (8 x total dietary fibre)

*Total carbohydrate – total dietary fibre

Salt is expressed as:

Salt (% NaCl) = sodium x 2.5

Salt (% NaCl) = chloride x 1.65

Protein = Nitrogen x 6.25

Total Carbohydrates = 100 - (fat + protein + moisture + ash)

Available Carbohydrates = 100 - (fat + protein + moisture + ash + dietary fibre)

Value/ Acceptance Limits

- The indicative assigned value is not a certified reference value. It is suitable for use by laboratories as a fit-for-purpose internal quality control measure.
- The assigned value has been derived from the consensus of laboratories taking part in this proficiency test, using a variety of methods.
- The PT satisfactory range is the concentration range within the limits of ± 2 z-scores.
- In order to ensure the provision of reliable Quality Control materials, Proficiency Testing samples that are eligible for QC are decided on a case by case basis. Each individual analyte is assessed and only those which meet the performance criteria are displayed on the Statement of Measurement.

Homogeneity/Stability

- All QC materials are considered sufficiently homogeneous for use, where measured the calculated sampling variance is smaller than a critical value calculated according to the procedure described in ISO 13528 (2015).
- Stability of the QC material has been established for the scope of the proficiency test from previous experience, expert advice and published literature.
- LGC advises that the QC material is used within the expiry date.

Safety Information



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- All test materials are supplied on the understanding that the purchaser has suitably competent and qualified personnel to handle them safely.
- Test materials must only be opened in the laboratory by qualified personnel.
- LGC Ltd. cannot accept responsibility for any event resulting from the mishandling of reference materials.
- If on receipt and testing of the QC material you find any damage to the package, labelling or any other exceptional circumstances, please contact us immediately. Please do not open the sample, but store at the recommended temperature until advice has been provided.