

International trade in dairy products is based on confidence from suppliers, customers and regulatory agencies that test results are equivalent between all laboratories throughout a global supply chain. The DairyChek programme provides independent verification that testing laboratories meet the dairy industry's exacting standards.



PROGRAMME OBJECTIVE

The DairyChek Proficiency Testing scheme has been developed over many years to provide a system for laboratories to validate their testing capability and to benchmark their results among an established network of competent laboratories. The scheme provides independent test verification for more than 120 dairy and nutritional laboratories in 16 countries. The sample types are selected to cover a range of properties representative of internationally traded dairy products.

BENEFITS OF PARTICIPATING IN DAIRYCHEK:

➤ Confidence in Results

Measurement of performance in comparison with other laboratories provides confidence that:

- Precision and Accuracy of test results and test methods are within acceptable limits
- Results from participating laboratories (or groups of laboratories) are equivalent
- In-house methods are equivalent to national or international standard methods

➤ Credibility

Performance can be demonstrated to:

- Customers
- Regulatory Authorities
- Accreditation Agencies

➤ Compliance with

- Laboratory Standards (e.g., ISO 17025)
- Regulatory and market access requirements

➤ Optimising Yields

Low levels of bias in simple tests (e.g., moisture) can add up to significant volumes of lost yield (and value) over time.

➤ Training

Test performance from individual analysts can be monitored and reported over time.

PROGRAMME FEATURES

- Comprehensive range of sample types and tests, covering the major recognised chemistry and microbiological test methods
- Participation by numerous accredited laboratories gives high confidence for inter-lab comparisons
- Separation of data by method (where appropriate)
- High quality and cost-effective reference materials
- Technical direction from an independent Technical Advisory Group ensuring relevance to current industry needs
- Accredited to ISO/IEC 17043: Conformity Assessment - General Requirements for Proficiency Testing and ISO 17034: General requirements for the competence of Reference Material Producers

SAMPLE TYPES

Casein, Caseinate, Whey Protein Concentrate, Whey Powder, Lactose, Milk Protein Concentrate, Nitrate/Nitrite

AVAILABLE TESTS:

CASEIN

Lactic and Mineral Acid

Fat (SBR)
Moisture (102°C Oven)
Ash
Lactose
Free Acidity
pH
Protein (Kjeldahl)
Particle Size (2 passes)

CASEINATE

Sodium & Calcium

Fat (SBR)
Moisture (102°C Oven)
Ash
Lactose
Calcium
pH (5% soln)
Protein (Kjeldahl)

Calcium offered in the March and September sample set

LACTOSE

Edible & Pharmaceutical

pH (10% soln)
Moisture (LOD)
Total Moisture (KF)

BULK DENSITY

Casein, Caseinate, MPC & WPC

Bulk Density (35 taps)
Bulk Density (100 taps) *
*MPC ≤ 70 only

PURITY

Casein, Caseinate, WPC & Lactose

Recovery & Identification

MILK PROTEIN CONCENTRATE

MPC 42, 56, 70, 80, 85 & MPI

Fat (RG / SBR)
Moisture (102°C Oven)
Ash
Lactose**
Insolubility Index 40°C
Titratable Acidity (5% soln) *
WPNI
pH (5% soln)
Protein (Kjeldahl)
*42, 56, 70 only
**80, 85, MPI only

WPNI offered in the April and October sample sets for MPC 80, 85 & MPI (WPNI is offered in all MPC 42, 56 and 70 sample sets)

WHEY PROTEIN CONCENTRATE

Sweet & Acid Whey

Fat (SBR)
Moisture (102°C Oven)
Ash
Lactose
Insolubility Index 24°C
pH (5% soln)
Protein (Kjeldahl)

WHEY POWDER

Fat (RG)
Moisture (102°C Oven)
Ash
pH
Protein (Kjeldahl)
Titratable Acidity
Salt
Insolubility Index 24°C

Global Proficiency also offers other DairyChek proficiency products including **Milk Powders, Fat Product, Cheese** and **Contaminants** – please request a copy of the Programme Description if you are interested.



International trade in dairy products is based on confidence from suppliers, customers and regulatory agencies that test results are equivalent between all laboratories throughout a global supply chain. The DairyChek programme provides independent verification that testing laboratories meet the dairy industry's exacting standards.



PROGRAMME OBJECTIVE

The DairyChek Proficiency Testing scheme has been developed over many years to provide a system for laboratories to validate their testing capability and to benchmark their results among an established network of competent laboratories. The scheme provides independent test verification for more than 120 dairy and nutritional laboratories in 16 countries. The sample types are selected to cover a range of properties representative of internationally traded dairy products.

BENEFITS OF PARTICIPATING IN DAIRYCHEK:

➤ Confidence in Results

Measurement of performance in comparison with other laboratories provides confidence that:

- Precision and Accuracy of test results and test methods are within acceptable limits
- Results from participating laboratories (or groups of laboratories) are equivalent
- In-house methods are equivalent to national or international standard methods

➤ Credibility

Performance can be demonstrated to:

- Customers
- Regulatory Authorities
- Accreditation Agencies

➤ Compliance with

- Laboratory Standards (e.g., ISO 17025)
- Regulatory and market access requirements

➤ Optimising Yields

Low levels of bias in simple tests (e.g., moisture) can add up to significant volumes of lost yield (and value) over time.

➤ Training

Test performance from individual analysts can be monitored and reported over time.

PROGRAMME FEATURES

- Comprehensive range of sample types and tests, covering the major recognised chemistry and microbiological test methods
- Participation by numerous accredited laboratories gives high confidence for inter-lab comparisons
- Separation of data by method (where appropriate)
- High quality and cost-effective reference materials
- Technical direction from an independent Technical Advisory Group ensuring relevance to current industry needs.

- Accredited to ISO/IEC 17043: Conformity Assessment - General Requirements for Proficiency Testing and ISO 17034: General requirements for the competence of Reference Material Producers

SAMPLE TYPES

- Casein (matrix is lactic casein)
- Caseinate (matrix is sodium caseinate)
- Whey Protein Concentrate (matrix is sweet whey)
- Lactose (matrix is edible lactose. Note - one round per year the matrix is pharmaceutical lactose).

Provided as four-sample sets. Samples consist of 4 freeze-dried vials containing microorganisms, each with an accompanying sachet containing the applicable matrix as detailed above to enable the preparation of sample homogenates.

AVAILABLE TESTS - ALL SAMPLE TYPES:

Aerobic Plate Count
Coliforms (Count & Detection)*
E. coli (Count & Detection)*
Enterobacteriaceae (Count, Detection)
Coagulase-positive Staphylococci (Detection)
Yeast & Mould Count
Thermophile Count*
Sulphite-reducing *Clostridia* Spore Count (WPC80 only)

Enterobacteriaceae offered in the **March** sample set

* *Lactose* offers Detection only and no Thermophile Count

ALSO AVAILABLE

Inhibitory Substances: Samples with varying levels of Penicillin G in a milk matrix.

Global Proficiency also offers other DairyChek proficiency products including **Milk Powders, Fat Products, Cheese** and **Contaminants** – please request a copy of the Programme Description if you are interested.

FOR MORE INFORMATION PLEASE VISIT OUR WEBSITE

www.global-proficiency.com

OR EMAIL

enquiries@global-proficiency.com