

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

- Skim Milk Powder\*†
- Whole Milk Powder\*†

\* including micronutrients

- Butter Milk Powder

† including vitamins A, C, D

## AVAILABLE TESTS:

### WHOLE MILK POWDER (WMP)

Fat (RG)  
Moisture (102°C Oven)  
Moisture (KF)  
Moisture (Reference Dryer)  
pH  
WPNI  
Ash  
Free Fat - % in powder  
Titratable Acidity  
Insolubility Index 24°C  
Protein (Kjeldahl)  
Protein (Combustion)

*Protein Combustion offered in the June and October sample set*

### SKIM MILK POWDER (SMP)

Fat (RG)  
Moisture (102°C Oven)  
Moisture (Reference Dryer)  
pH  
WPNI  
Titratable Acidity  
Insolubility Index 24°C  
Protein (Kjeldahl)

### BUTTER MILK POWDER (BMP)

Fat (RG)  
Moisture (102°C Oven)  
Moisture (Reference Dryer)  
Titratable Acidity  
Insolubility Index 24°C  
Protein (Kjeldahl)

### BULK DENSITY

Bulk Density (100 taps)

## MICRONUTRIENTS

Calcium  
Chloride  
Copper  
Iodine  
Iron  
Magnesium  
Manganese  
Phosphorus  
Potassium  
Sodium  
Zinc

*Iodine offered in the February sample set*

## VITAMINS

Vitamin A  
Vitamin C  
Vitamin D

*Vitamin D offered in the February and August sample set*

## INSTANTISED WMP

### Functional Properties

Coffee Sediment  
Cold SDP  
Sediment 85  
Dispersibility (Grade 1-7)  
Wettability

## PURITY & SCORCHED PARTICLES

Recovery & Identification  
Scorched Particles (Grade A-D)

*Scorched Particles added to the April and October sample set*

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

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## 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)
- Cost-effective quality control materials
- Technical direction from an independent Technical Advisory Group ensuring relevance to current industry needs.

- Accredited to ISO/IEC 17043:2010 Conformity Assessment - General Requirements for Proficiency Testing and ISO 17034: General requirements for the competence of Reference Material Producers

## SAMPLE TYPES

**Milk Powder:** Provided as a six-sample set. Samples consist of 6 freeze-dried vials containing microorganisms, with sachets of whole milk and skim milk powder to enable the preparation of a simulated powder sample homogenate.

## AVAILABLE TESTS:

### MILK POWDER (MP)

Aerobic Plate Count  
*Bacillus cereus* Count  
*Clostridium perfringens* (Count, Detection)  
 Coliforms (Count, Detection, MPN)  
*E. coli* (Count, Detection, MPN)  
*Enterobacteriaceae* (Count, Detection)  
 Coagulase-positive Staphylococci (Count, Detection)  
 Yeast & Mould Count  
 Mesophilic Aerobic Spore Count  
 Sulphite-reducing *Clostridia* Spore (SRC) Count  
 Thermophilic Aerobic Spore Count (100°C)  
 Thermophiles Count

*Coliforms MPN* and *E. coli MPN* offered in the **August** sample set

*Clostridium perfringens* detection offered in the **February** sample set

### Notes:

- For *Cr. sakazakii* testing please refer to our PathoGens programme

## ALSO AVAILABLE

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

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**FOR MORE INFORMATION PLEASE VISIT OUR WEBSITE**

[www.global-proficiency.com](http://www.global-proficiency.com)

**OR EMAIL**

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