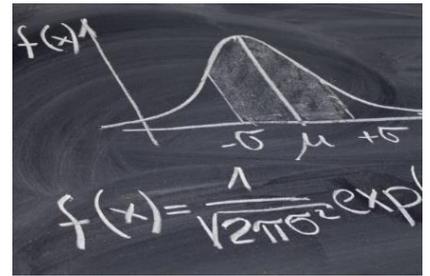


Global Proficiency offers a range of specialist services to assist with interpretation of test data and related information, including: Single-point Measurement Audits, customised ring trials, assessment of bias and accuracy, repeatability and reproducibility, measurement uncertainty, method validation, and design of sampling plans.



## DATA CHEK OBJECTIVE

To assist and support our customers by implementing processes that validate, optimise and verify that procedures, routines and methods used within an organisation are performing to expectations and specifications. From sampling, production, methodology, precision and accuracy to the interpretation of the data gathered from these processes, we have the experience and expertise to help.

## DATA CHEK SERVICE

DataChek is a service provided to laboratories and organisations that need either one-off, or regular data analysis. Global Proficiency will individually tailor statistical analysis to suit the varied and challenging requirements of your organisation. Our services offer an independent, impartial and confidential means of evaluating and interpreting your data. Global Proficiency can also provide individualised training to meet your specific needs, either on-site or via Skype.

We can help with:

- Customising Ring Trials
- Method Validation, Benchmarking & Equivalency
- Laboratory Quality Control
- Statistical Interpretation
- Statistical Sampling Plans
- Achieving regulatory compliance

## WHY GLOBAL PROFICIENCY?

Global Proficiency operates in accordance with international best practice. We are:

- Accredited to ISO/IEC 17043:2010 Conformity Assessment - General Requirements for Proficiency Testing
- Accredited to ISO 17034: General requirements for the competence of Reference Material Producers
- Used by Ministry for Primary Industries New Zealand, as the proficiency provider for the meat and food testing industries

## DATA CHEK EXAMPLES

### Single-point Measurement Audits

DataChek Single-point Measurement Audit (SpMA) is a service provided to laboratories and organisations that have been unable to find a suitable or convenient Proficiency Testing Scheme and need either one-off, customised, or independently scheduled data assessment. DataChek SpMA can be used by most laboratories for most tests if suitable material such as quality control materials, uncertified/certified reference materials or traceable standards can be sourced. Some examples of how DataChek SpMA has been used so-far include residue testing in water using a Certified Reference Material:

- Nitrilotriacetic Acid (NTA)
- Disinfection By-products (HAA, THM, Perchlorate, Bromate, Bromide, Chlorate, Chlorite)
- BTEX (Benzene, Toluene, Xylene)
- Acid Herbicides, Pollution Volatiles, SVOC, ONOP/OC Pesticides
- Rare Earth and less stable Elements, (e.g., Gd, Sm, Nd, U, Sn, W)

### Customised Ring Trials

Ring trials are used by organisations for many different reasons. Global Proficiency have been involved in planning and designing specific, customised ring trials to assist industry groups and organisations to:

- Assess laboratory performance of potential testing partners
- Verify that results obtained are aligned across a specific industry or method
- Ensure that dangerous or toxic compounds can be detected and reported consistently across multiple laboratories. For example, dis-infection residues in dairy products
- Verify that laboratory results align internationally for the export of products such as honey and infant formula.

### Method Validation, Benchmarking and Equivalency

The Global Proficiency team has planned, organised and implemented method validation, benchmarking and equivalency trials to assist industry with the characterisation, optimisation and comparison of recommended methods for fertiliser and infant formula manufacturers. Method characterisation includes:

- Precision characteristics such as within and between laboratory variation (repeatability and reproducibility)
- Analysis of different specification batches and analyte concentrations
- Assessment of statistical differences between methods as a benchmarking tool
- Assessment of any statistical difference between multiple laboratories performing a specific method

### Laboratory Quality Control

There are many aspects and facets to Laboratory Quality Control (QC). Global Proficiency have held workshops and seminars for various customers covering topics such as:

- The Quality System and where QC/QA activities fit
- How to use Quality Control Materials, Reference Materials and proficiency samples to ensure that testing remains within specification limits
- Maintaining Control Charts for accuracy, precision and bias information
- Calculating Measurement Uncertainty
- Using published method precision information such as repeatability and reproducibility standard deviations

### Statistical Interpretation

Global Proficiency has worked with partners who have designed and carried out studies, then provided data for statistical evaluation. This includes organisations who have been contracted by a third party, to laboratories requiring assistance with estimating measurement uncertainty.

### Sampling Plans

Demonstrating product consistency along a production chain or in a manufacturing plant requires a fit-for-purpose sampling plan and understanding how and where variability can be introduced. Global Proficiency has experience in:

- Assessing existing sampling plans
- Designing or recommending sampling plans based on Australian Standards
- Statistical assessment of sampling point data including results outside specification limits
- Establishing variability of test methods

**FOR MORE INFORMATION PLEASE VISIT OUR WEBSITE**

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

**OR EMAIL**

**[enquiries@global-proficiency.com](mailto:enquiries@global-proficiency.com)**