

The American Proficiency Institute is the most innovative and widely accepted proficiency testing program available.

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### **API**

The world's choice for proficiency testing.

ISO ACCREDITED PROFICIENCY TESTING PROVIDER\*



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\*By A2LA to ISO/IEC 17043; certificate #3094.01









# PROFICIENCY TESTING FROM API: YOUR ANSWER TO THE GROWING QUESTIONS REGARDING FOOD SAFETY.

Product quality and safety are issues of great concern to the food industry. Laboratory testing, used as a tool to monitor quality and safety, plays an important role in a company's quality assurance program. But how do you monitor the quality of your laboratory's results?

Laboratory results are very dependent on such variables as the method used, equipment, procedures, and the skills and training of the analyst. Proficiency testing provides a documented, independent assessment of a laboratory's ability to produce accurate results.

American Proficiency Institute, a leader in medical laboratory proficiency testing, also offers a proficiency program that meets the unique needs of the food industry. It has been developed in conjunction with food industry leaders and meets the laboratory requirements for PT found in ISO/IEC 17025.

Successful performance in an external proficiency testing program is a key indicator of high laboratory quality and an integral component of laboratory accreditation.

#### WHAT IS PROFICIENCY TESTING?

Proficiency testing (PT) is a type of external quality control to measure a laboratory's accuracy. The practice of testing unknown samples from an outside source provides an additional means to assure quality laboratory testing results.

One of the most common designs for a PT scheme is for the proficiency provider to designate a few dates throughout the year when it will send test samples to all subscribers at the same time.

The samples, whose expected values are unknown to the subscribers, are run by the lab staff who return their results to the proficiency provider.

The results are reviewed to determine whether each participant meets established performance levels, and an evaluation is issued to the subscriber.

The evaluation and accompanying statistical data not only capture the laboratory's current performance, but over time allow lab management to analyze and improve the laboratory's long term performance.

API's proficiency programs are open to any laboratory finding them useful. Both accredited and non-accredited labs are welcome to enroll.

## WHY ENROLL IN A PROFICIENCY TESTING PROGRAM?

- Compare your laboratory's results to those of others performing the same test
- Demonstrate and identify performance trends
- Monitor test performance across all of your company's testing sites
- Replace internal check sample programs
- Provide additional confidence in your laboratory's results
- Fulfill accreditation requirements
- Manage risk through early warning of potential problems
- Educate and train staff
- Check the reasonableness of the laboratory's measurement uncertainty



#### API FEATURES

#### ACCREDITED PROVIDER

API is accredited by the American Association for Laboratory Accreditation (A2LA) to provide proficiency testing for select food microbiology and food chemistry analytes according to the requirements of ISO/IEC 17043:2010. Laboratories wishing to ensure that API's scope of accreditation meets their needs can view our certificate (3094.01) and official scope of accreditation at www.A2LA.org. A2LA accreditation is recognized by laboratory accreditation bodies around the world through an international system of signed agreements. More information is available at A2LA's website, www.A2LA.org.

#### STABLE SAMPLES

API sources the proficiency samples through well-qualified companies with experience providing consistent, high-quality test materials. In addition, samples undergo homogeneity and stability testing to ensure a reliable testing experience and confidence in proficiency results.

Our food microbiology samples contain a mixture of target organisms and relevant competing flora. We have refined the food microbiology proficiency testing process by using lyophilized microorganisms derived from traceable reference cultures. The lyophilization process provides an extremely stable matrix for the microorganisms with little to no organism 'die off.' The growth, biochemical, and serological characteristics of each strain are verified before and after lyophilization. In addition, lyophilized samples allow a laboratory the flexibility to begin analysis at any time within the testing period.

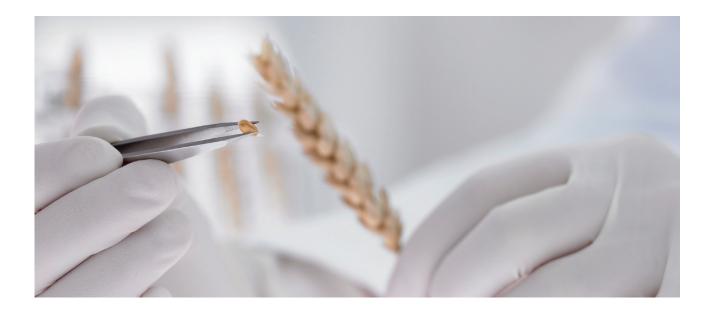
Chemistry samples are packaged in sealed pouches to minimize any environmental effects on the sample between packaging and testing. Dairy and cereal programs consist of powdered / dried food products; meat samples are re-hydrated powdered meat.

#### CUSTOMIZED REPORTING

API reports are customized by participant. With our concise Comparative Evaluation there is no need to look through pages of every result returned. Additional analyte level detail is available at www.foodpt.com under PARTICPANT DATA SUMMARIES. Examples of reports are available on our website under LEARN MORE.

#### MANAGEMENT REPORTS

For companies with more than one testing site, API has developed unique management reports, which summarize the performance of each participating lab. These reports give the quality assurance administrator a snapshot of each laboratory's current performance, long-term performance, and items needing special attention.



#### TECHNICIAN COMPETENCY

This feature offers your laboratory the option of submitting up to five sets of results per enrolled program. The first set is considered lab proficiency; the results submitted will be included in the test event statistics and the evaluation will be within the scope of our accreditation to ISO/IEC 17043\*. The four additional sets of results will be managed entirely on-line; laboratories will submit their results and access their evaluations at www.foodpt.com. Detailed instructions will be provided with the test kit. This option is offered at no additional cost.

#### **OUTSTANDING TECHNICAL SUPPORT**

Our technologists understand the entire proficiency testing process – from samples to statistics. They are experts in analyzing your performance and addressing questions pertaining to your evaluation.

#### CONFIDENTIALITY

API maintains strict confidentiality of each participant's identity and test results. At your request, copies of enrollment or evalution reports can be provided to company management or regulatory bodies.

#### FREE EDUCATIONAL SAMPLES

Participants in the Food Microbiology program have the opportunity to take part in educational exercises at no extra charge. The educational samples are designed to illustrate certain test methods or concepts that are important to the food laboratory. Laboratories that choose to participate in this program receive an educational sample along with their usual test kit. After testing, laboratories are provided with an educational commentary pertaining to the sample, as well as information that allows them to determine their performance.

#### ONLINE SERVICES

API's website offers useful features to help manage your proficiency testing results and evaluations. Laboratories can submit, review, and print their results using our website. Other services include a list of sample contents two weeks after results are due, a printable calendar of test program dates, and email updates with shipping information.

<sup>\*</sup>API's full scope of accreditation to ISO/IEC 17043 is available on our website at www.foodpt.com by clicking on the A2LA Accredited symbol.

#### PROFICIENCY PROGRAMS

API offers a variety of proficiency testing options depending on the nature and scope of your operation. All proficiency programs consist of three shipments per year with two unique samples per shipment for analysis. Laboratories may choose to order one program for the entire year, or may alternate between programs during the year (e.g., if they would like to perform testing with different matrices). Please see the separate order form for program prices and shipment dates.

API strives to offer a wide range of programs and analytes to meet the needs of our participants. However, we cannot guarantee the number of participants in any event. If there are not enough participants to formally evaluate performance, we will provide as much information as possible to help laboratories document their own assessment.



#### MICROBIOLOGY

Each microbiology sample consists of a glass vial containing the lyophilized organism preparation and a food matrix of either non-fat dry milk or powdered meat.<sup>a</sup> Participants are instructed to prepare the sample according to the instructions provided with the kit, and to proceed to test the samples according to the protocol used in their lab to perform these types of tests. Results are submitted to API through the online Paperless Proficiency Testing portal.

The following list shows the tests that are included in each program, the food matrix to be used, and whether the tests are for enumeration, detection, or identification. Laboratories may choose the programs that are the best match for the tests they perform in their facility.

Catalog #	Program / Description	Tests Included	
724	Anaerobic Package – Milk	Enumeration of:	
	(formerly Clostridium – Milk)	Total Anaerobic Count	
	•	Sulfite-reducing bacteria	
		Clostridium sp.	
		Clostridium perfringens	
717	Anaerobic Package – Meat (formerly Clostridium – Meat)	Same as 724, with a powdered meat matrix	
723	HACCP Package <sup>a</sup>	Enumeration of:	
		Aerobic Plate Count	
		Coliforms	
		E. coli	
730	Pathogen Free Package – Milk	Enumeration of:	
		Aerobic Plate Count	
		Coliforms	
		E. coli	
		Enterobacteriaceae	
		Mold	
		Yeast	
731	Pathogen Free Package – Meat	Same as 730, with a powdered meat matrix	
740	Qualitative Package – Milk	E. coli 0157:H7 detection	
		Listeria sp. detection	
		L. monocytogenes detection	
		Listeria sp. identification	
		Salmonella sp. detection	
742	Qualitative Package – Meat	Same as 740, with a powdered meat matrix	

 $<sup>{\</sup>ensuremath{^{\text{a}}}}\xspace$  The Campylobacter, HACCP, and Vibrio programs do not include a food matrix.

Catalog #	Program / Description	Tests Included	
706	Quantitative Package – Milk	Enumeration of: Aerobic Plate Count Bacillus cereus E. coli Enterobacteriaceae Mold Staphylococcus aureus / Coagulase positive Staph (detection or enumeration) Thermotolerant Coliforms Total Coliforms Yeast Yeast & Mold Osmophilic Yeast and Mold	
707	Quantitative Package – Meat	Same as 706, with a powdered meat matrix	
715	Campylobacter <sup>a</sup>	Detection, identification, and/or enumeration of Campylobacter sp.	
721	Cronobacter – Milk only	Detection of <i>Cronobacter</i> sp.	
720	Lactic Acid Bacteria – Milk	Enumeration of lactic acid bacteria	
735	Lactic Acid Bacteria – Meat	Same as 720, with a powdered meat matrix	
766	Listeria – Milk	Detection and/or enumeration of <i>Listeria</i> sp.  Detection and/or enumeration of <i>L. monocytogenes</i> Identification of <i>Listeria</i> sp.	
768	Listeria – Meat	Same as 766, with a powdered meat matrix	
780	Pseudomonas – Milk <sup>c</sup>	Detection and/or enumeration of <i>Pseudomonas</i> sp.	
782	Pseudomonas – Meat <sup>c</sup>	Same as 780, with a powdered meat matrix	
760	Salmonella – Milk	Detection and/or serotype identification of Salmonella sp.	
762	Salmonella – Meat	Same as 760, with a powdered meat matrix	
745	STEC Identification – Milkb	Detection and/or identification of Shiga Toxin producing <i>E. coli</i> ; includes the "Big 6" non-O157:H7 STEC and toxin producing strains of O157:H7	
746	STEC Identification – Meat <sup>b</sup>	Same as 745, with a powdered meat matrix	
737	Vibrioª	Detection and/or identification of Vibrio sp.	

 $<sup>{\</sup>ensuremath{^{\text{a}}}}\xspace$  The Campylobacter, HACCP, and Vibrio programs do not include a food matrix.

<sup>&</sup>lt;sup>b</sup>Special permit and handling fees apply for customers outside the U.S. <sup>c</sup>The Pseudomonas programs are offered only in the third test event each year.

Most proficiency programs are available as "add-on" options as well. If a laboratory is purchasing one of the programs listed previously, additional programs of equal or lesser value may be purchased at a reduced cost for the same event. Catalog numbers for Add-on programs are shown below.

Catalog #	Program	Catalog #	Program
729	Anaerobic Package – Milk (Add-on)	722	Cronobacter – Milk only (Add-on)
718	Anaerobic Package – Meat (Add-on)	728	Lactic Acid Bacteria – Milk (Add-on)
779	HACCP Package (Add-on) <sup>a</sup>	736	Lactic Acid Bacteria – Meat (Add-on)
777	Pathogen Free Package – Milk (Add-on)	767	Listeria – Milk (Add-on)
778	Pathogen Free Package – Meat (Add-on)	769	Listeria – Meat (Add-on)
741	Qualitative Package – Milk (Add-on)	781	Pseudomonas – Milk (Add-on) <sup>c</sup>
743	Qualitative Package – Meat (Add-on)	783	Pseudomonas – Meat (Add-on) <sup>c</sup>
775	Quantitative Package – Milk (Add-on)	761	Salmonella – Milk (Add-on)
776	Quantitative Package – Meat (Add-on)	763	Salmonella – Meat (Add-on)
726	Campylobacter (Add-on) <sup>a</sup>	738	Vibrio (Add-on) <sup>a</sup>

#### NEW WATER MICROBIOLOGY PROGRAM

API is pleased to introduce a **Water Microbiology Package**. Participants can use direct count or MPN methods to enumerate Total Plate Count, Total Coliforms, and/or Total Enterococci in a 100mL water sample.

Please use catalog number 790 for the Water Microbiology Package or 791 to order the package as an Add-on program.

Catalog #	Program	Catalog #	Program
790	Water Microbiology Package**	791	Water Microbiology Package (Add-on) **

<sup>&</sup>lt;sup>a</sup>The Campylobacter, HACCP, and Vibrio programs do not include a food matrix.

<sup>&</sup>lt;sup>c</sup>The Pseudomonas programs are offered only in the third test event each year.

<sup>\*\*</sup>Contains analytes not currently in scope of A2LA accreditation.

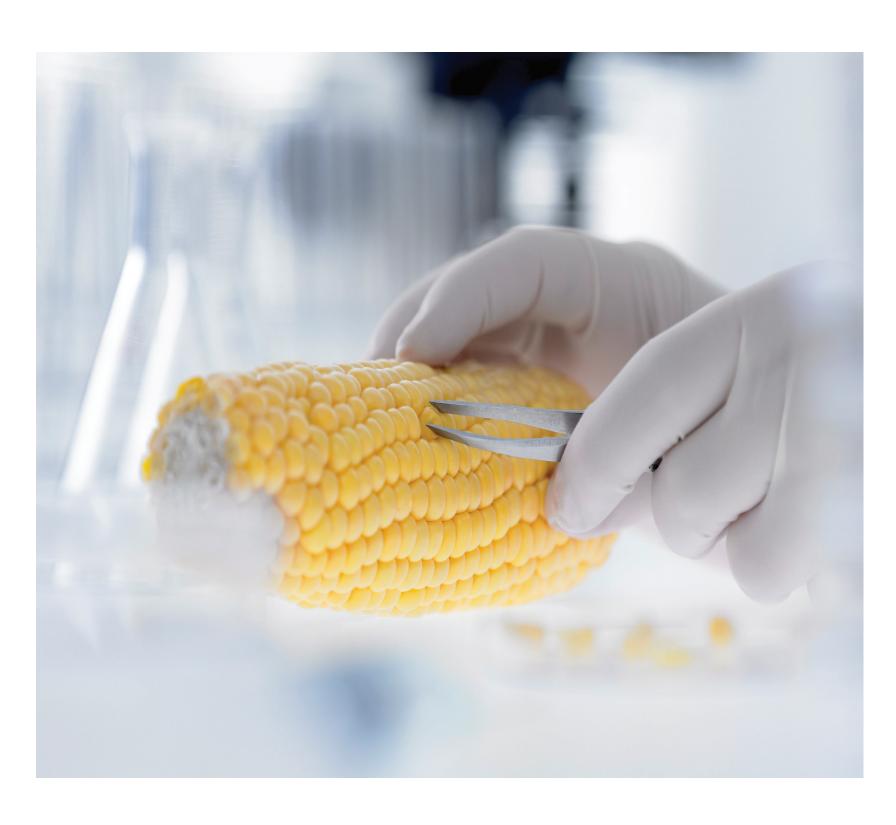
#### **CHEMISTRY**

Each chemistry sample consists of 150 g of the specified matrix. Samples may be tested for a variety of analytes, depending on the matrix selected. Participants are to test the samples according to the protocol used in their laboratory to perform these types of tests, and may test as many or as few analytes as desired. Results are submitted to API through the online Paperless Proficiency Testing portal.

Note: Not all chemistry analytes are included in the scope of API's A2LA accreditation. Call API or refer to our scope document (cert. #3094.01) at www.A2LA.org for the most up to date information on our PT provider accreditation.

750	Cereal Chemistry Two unique samples; typical matrices include ground breakfast or infant cereal	Ash Calcium Copper** Dietary Fiber** Fat (total) Folic Acid** Iron** Magnesium** Moisture Niacin** Phosphorus** Potassium**	Protein Riboflavin** Salt Sodium** Sugars** Thiamin** Vitamin A** Vitamin B6** Vitamin B12** Vitamin C** Vitamin D** Zinc**
751	Meat Chemistry Two unique samples; typical matrices include dried re-hydrated beef, chicken, or turkey	Ash Calcium Cholesterol** Fat (total, sat.**, trans.**) Iron** Magnesium**	Moisture Potassium** Protein Salt Sodium**
752	Dairy Chemistry Two unique samples; typical matrices include dried milk, cheese, or buttermilk powders	Ash Calcium Cholesterol** Dietary Fiber** Fat (total, sat.**, trans.**) Iron** Magnesium**	Moisture Potassium** Protein Salt Sodium** Sugars** Vitamin A**
For addition	al sample volume:	Magnesiam	
755	Cereal Chemistry	Additional 150g	
756	Meat Chemistry	Additional 150g	
757	Dairy Chemistry	Additional 150g	

<sup>\*\*</sup>Not currently in scope of A2LA accreditation.



#### **ENROLLMENT INFORMATION**

- 1. Select the program options you need using this catalog. Use the order form to record your selections, then follow these instructions to complete the form. Orders should be placed four weeks prior to the scheduled shipping date. Make sure you include:
  - a. Shipping address (include mailing address for correspondence)
  - b. Billing information (if different than shipping address)
  - c. Regulatory information
  - d. Payment method
- 2. To order, select one of the options below:
  - a. Fax the order form to us at 855.900.5084
  - b. Phone us toll free at 855.366.3781 ((001) 231.668.9700 outside of the U.S. and Canada)
  - c. Mail the order form to us
  - d. Give the order form to your authorized distributor
  - e. Email the order form to foodtest@foodpt.com
- 3. After processing your order, we will send you an Order Confirmation showing products ordered and pre-set shipping dates.
  - a. Mark your calendar with the shipment dates.
  - b. Inspect your kit immediately upon receipt. Call us within 3 days if any sample is missing or damaged.
  - c. Read the instructions carefully before beginning a test.
  - d. Report results by the due date.
  - e. Keep a copy of any results submitted to API.



#### PARTIAL YEAR ORDERS

API makes every effort to accommodate new orders or order changes throughout the year. We will prorate the prices for orders received after the first shipment.

#### **CANCELLATIONS**

We will credit any charges for unshipped specimens if we receive notification in writing four weeks prior to the next shipment date.

#### INTERNATIONAL AND NON-CONTINENTAL U.S. CUSTOMERS

Additional shipping charges will be added to International and Non-Continental U.S. orders. These orders must be placed a minimum of four weeks prior to the scheduled ship date.

In addition, most countries require import permits or certificates of origin for clearance through customs. Local authorities can tell you if any permits are required for your location. Import permits must be obtained by the laboratory and a copy forwarded to API. See the CATALOG page of our website for more details.

