

AACC International Check Sample and Proficiency Testing Service

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If any of these questions apply to you, look to the AACC International Check Sample and Proficiency Testing Service for answers. Providing a means to meet the needs of our members was one of the foundations of this scientific society. Whether you need to evaluate the precision of your lab technicians, monitor the performance of instrumentation, or provide validation of results with others in the industry, this service is one way to effectively assess and improve your internal quality systems.

The Check Sample and Proficiency Testing Service provides samples for evaluating testing protocols in analytical, physical, and food safety areas, as well as standard reference materials for ongoing monitoring of your lab's precision or for benchmarking. The reports generated provide a means for you to compare your results to those of other labs, track trends, and determine any potential corrective action needed. Subscription to the proficiency testing option, available for some of the analyses, provides a statistical evaluation of your lab's performance.

A variety of chemical analyses are represented depending on the type of check sample chosen within the Analytical Series. Here are some examples:

- Hard wheat flour analyses
 - Moisture, ash, protein, and falling number
- Feed analyses
 - Moisture, ash, protein, crude fat, crude fiber, calcium, and phosphorous
- Sugar analyses (by high performance liquid chromatography)
 - Glucose, fructose, sucrose, maltose, and lactose

Other options are also available depending on the frequency of testing that meets your needs. For example, monthly and bi-monthly options are available for the hard wheat flour analyses.

The Physical Testing Series includes alveograph, farinograph, amylograph, mixograph, and RVA analyses. Samples for evaluation include both hard and soft wheat flours and address different instrumentation needs, e.g., large and small bowl farinograph options.

Can you sleep at night?

Are you sure your lab is generating precise results?

Would you like to be able to compare your results against those of other labs in the industry?

Can you stand by your test results?

And, finally, the Food Safety Series is focused on microbiological analyses. Quarterly and bimonthly options are available with two samples provided each time.

Pricing on all three of these series is based on the sample complexity, nature of analysis, and frequency of distribution. This information is provided on the AACC International website.

Standard reference materials are also available. These include the following:

- A reference food fiber source, which can be provided in bulk quantities for experimental research studies. Certified wheat or oat bran is available that has been enzyme-deactivated. Certificates of analysis are provided with each order;
- A standard hard wheat flour sample with moisture, ash, protein, and falling number values;
- A standard cereal-based product with vitamin and mineral analytical values; and
- Analytical reference standards for beta-glucan and total, insoluble, and soluble dietary fiber.

The most recent addition to the Check Sample Service is Proficiency Testing. This can be added to most of the check sample programs, and it provides a means for obtaining quantitative estimates of your laboratory's precision. An analytical recap, provided to each of the subscribers depending on the testing frequency, is based on z-values. Certificates of excellence are awarded based on predetermined values. As in all analytical reports of results, subscriber confidentiality is maintained.

Enabling this program is an interactive online resource. This provides a means to print worksheets, view testing schedules, enter results, view compiled results online, and print formatted reports. As the Check Sample Service grows, even better offerings in this area are being pursued.

The Check Sample Service is continually seeking ways to meet the needs of the membership and the industry. With technological changes in instrumentation and the development of new methods of analysis, ways of benchmarking and measuring precision of the methodology are needed. Suggestions and input from each AACC International member will help us continue to be a viable and valued service. If your laboratory needs a check sample or reference material that is not currently available, please contact us. If you have any questions regarding the Check Sample Service, please contact Tim Moore, the check sample coordinator, who is located at AACC International headquarters, tmoore@scisoc.org, or +1.651.454.7250.

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