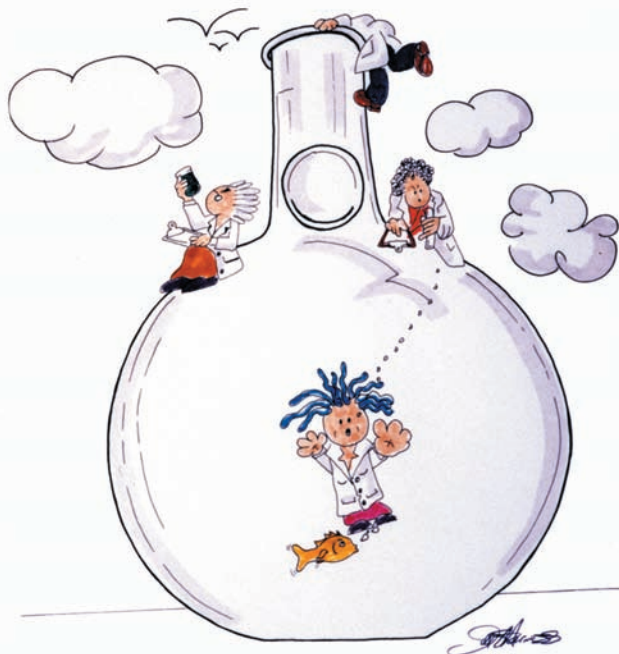


## AACC International Approved Methods of Analysis—Highlights of the 2009 Meetings of the Codex Committee for Methods of Analysis and Sampling

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First, I am thrilled to announce the news. A new “edition” of the *AACC International Approved Methods of Analysis* is in the final stages of preparation for release. Our 22 technical committees have been working for nearly two years to achieve this challenging goal. A few are doing the last minute polishing of the new methods, while others are adding enhancements to our tried and true methods.

More information about the new edition will be coming soon. The Approved Methods technical committees have been “thinking outside the book” and we are very excited that the new eleventh edition will be delivered online and updated monthly as new methods and enhancements are added by our committees. (Note: Individual methods can each be printed in pdf form.) The new online-only edition will allow our committees to provide helpful “background information” and continually enhance all of the methods. They are adding calculators, photos, and videos, among other enhancements, and I’m positive the new edition will be our best ever. As we’ve worked through this process, we have often commented that there are some AACC Intl. members who may be able to help us do much more of this work as we go forward. Please do not hesitate to let us know if you can help in this process, especially if you have teaching materials on a particular

method or if in the past you have organized a collaborative trial for an approved method.

It is important to make sure our official methods are relevant to our membership and to make all of our members aware that there are opportunities to contribute to the approved methods. Please make sure your colleagues in science know of these opportunities. I know that analytical methods are not always the most exciting topic for morning coffee or tea breaks, but you are our best (and most trusted) supporters and promoters. And these methods are key to providing good-quality, safe food products to our colleagues, friends, and relatives.

### AACC International’s Contributions on a Global Level

In the past, the AACC Intl. methods group played an active role on the committees of Codex Alimentarius. “The Codex Alimentarius Commission was created in 1963 by FAO and WHO to develop food standards, guidelines, and related texts, such as codes of practice under the Joint FAO/WHO Food Standards Programme. The main purposes of this Programme are protecting health of the consumers and ensuring fair trade practices in the food trade and promoting coordination of all food standards work undertaken by international governmental and nongovernmental organizations” (1). “The methods are primarily intended as international methods for the verification of provisions in Codex standards. They should be used for reference, in calibration of methods in use or introduced for routine examination and control purposes” (1).

In particular, we attended the Codex Committee on Cereals, Pulses, and Legumes. This committee, with a U.S.-based secretariat, was very active until 1995, when all of the work that could be done in standards and guidelines for cereals and pulses was completed. AACC Intl. approved methods are listed in some of the standards from this committee. We all know that much has happened in these industries in the last 10 years and at first glance it might seem a problem to have “no committee”; however, the trend in Codex has been toward horizontal food issues and there are alternate routes within Codex to update the cereals and pulses guidance, standards documents, and methods and we’ll be looking into some of these in the future.

Today, our members’ concerns and our sciences have broadened and expanded across the food supply chain and we have interests in the work of the labeling, biotechnology, nutrition, and dietary fibre committees and task forces, among others. In addition, the other committees covering food contaminants and pesticide residues also have an impact on our members’ interests.

Supporting most of these committees is the Codex Committee for Methods of Analysis and Sampling (CCMAS). This committee ensures that methods to support the guidance and standards documents are fit for purpose and meet acceptable performance criteria. In addition, the committee works to consider parameters that affect the application of the methods.

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### Insight from the Recent Codex Meetings

In March 2009, AACC Intl. representatives joined the CCMAS and associated meetings in Hungary. The first of these meetings was the Interagency Meeting. This was a gathering of the collection of standards and methods approval organizations, including the International Organization for Standardization (ISO), Association of Analytical Communities (AOAC), AOCS, ICC, and the Nordic Committee on Food Analysis (NMKL), among others, who work to validate methods, guidelines, and standards. The meeting covered the “proposed agenda items” for the main CCMAS meeting and other related issues.

One key discussion centered on a new collection of accepted analytical definitions, presented prior to its approval in CCMAS. It will be available courtesy of the Bureau International des Poids et Mesures (BIPM) on their website ([www.bipm.org](http://www.bipm.org)). Also, at this meeting, AACC Intl. accepted the invitation we received a few years back to join the discussions and to have an ongoing position within this advisory group.

Another satellite meeting was a MoniQA (funded by EC, organized by ICC) and IAM members (AOCS, BIPM, ICC, NMKL) -sponsored workshop covering background and explanatory information pertinent to the key CCMAS agenda items, the criteria approach for method approval, and the contributions of measurement uncertainty (both analytical and sampling) relevant to methods used for trade (2).

At the CCMAS meeting, the Criteria Approach was approved and will provide options for new applications or matrices for a method that can be approved by CCMAS, following consideration of the collaborative information available meeting the AOAC, International Union of Pure and Applied Chemistry (IUPAC), or ISO guidelines, (as followed by AACC Intl.) and allowing for situations in which a collaborative trial would be difficult to perform or hard to justify given the existing data/other information available. The guidelines allow for experts to review the supporting documentation and make a decision whether to approve a method or the application into the Codex system.

The adoption of the Criteria Approach will necessitate the availability of collaborative trial data that is often not available in traditional print formats. Usually, information collected in the international trials is presented only by the final results with the associated statistics. In the future, the AACC Intl. technical committees will have methods in a fully online version.

We are all familiar with “Measurement Uncertainty,” although in some application areas it is more easily accepted than others. Much of the past work in CCMAS has focused on small molecules as the analytes of interest. The criteria for acceptable method performance were developed around these molecules. In these methods and standards, the published range of analytical results is accepted without question. However, in other methods, such as testing for larger molecules in food, for example—the indicators of the products of modern biotechnology, i.e., GMOs (DNA sequences or protein molecules)—the performance results are different. In these cases, the level of variability reported in

international collaborative trials is always a larger number and often greater than some government food regulations permit.

The guidance document for biotechnology methods was also discussed on the CCMAS agenda. Codex follows a consensus process and this can result in documents often “resting” in the step process until there is general agreement to move them forward. The biotechnology document has been “resting” for a number of years.

Prior to the 2009 CCMAS meetings, a proposal to broaden the scope of the biotechnology document was circulated. Early discussions suggested that a majority of delegations were most concerned about moving the document forward in a timely manner. Japan offered a new structure for the document, bringing it into line with other Codex documents. Some delegations were quite insistent that the scope should not change.

Codex works on the principle that it does not repeat work done by other recognized organizations and, by considered discussions, stays current with the work of these organizations. The ISO Technical Committee 34 has recently formed a new technical subcommittee, Sub Committee 16, and broadened the scope of work on large molecules. For example, the broadened ISO scope of PCR DNA for varietal identification and product authentication could fall into the same scope as PCR DNA for the products of modern biotechnology.

The proposal to broaden the scope in CCMAS would be consistent with this development and, after a lively discussion, there was mostly a consensus position at the meeting. The working group to advance the document with an expanded scope will be chaired by the United Kingdom, Germany, and Argentina. The report for the CCMAS meeting will be available on the Codex website.

The AACC Intl. Approved Methods Technical Committee will continue to monitor the Codex Alimentarius activities. If you have particular expertise and interests in the areas of Codex food guidelines and standards, please make sure we know about them.

### Call for Edith Christensen Award Nominees

Finally, I want to draw your attention to the Edith Christensen Award for outstanding contributions to AACC International approved methods. To date, we have three awardees, the third to be announced at this year’s annual meeting in Baltimore.

Several among you have commented that you would like to nominate someone for this award. There will be an official call for nominations later this year, but it’s never too early. If you believe that there is a deserving candidate, please consider nominating them now. It is helpful to have informative nominations for the candidates. Start the process and we will help you gather the important information.

### References

1. Published online at [www.codexalimentarius.net](http://www.codexalimentarius.net).
2. Published online at [www.moniqa.org/balatton2009](http://www.moniqa.org/balatton2009).