

## AMSA Cookery and Sensory Guidelines

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An overview of the revision of "Research Guidelines for Cookery, Sensory Evaluation" and "Instrumental Textural Evaluation of Fresh Meat" was presented by Brad Berry, chairman of the AMSA committee to revise "Guidelines for Cookery and Sensory Evaluation of Meat," published in 1978. Brad presented background as to why the 1978 Guidelines were developed. In 1991, the AMSA Board appointed a committee to revise the 1978 Guidelines. The charge was to include poultry as well as processed meat. However, the committee requested that processed meat not be included but rather be a separate set of Guidelines. The Board acknowledged that request.

The main goals in rewriting the Guidelines are:

1. To provide greater control and standardization in meat cookery research.
2. To allow for research creativity in cookery and sensory evaluation by writing guidelines that will standardize routine cookery and sensory evaluation utilized in research, but not constrain creativity in research.
3. To generate research information that can translate into consumer usage.
4. To facilitate interpretation and comparison of research findings from different research studies.

In addition to reciprocatation and input obtained during the reciprocatation sessions on the Guidelines, Brad set up a display in the educational exhibit area. A questionnaire was available to those who stopped at the educational exhibit and chose to provide input for the committee.

### Philosophies Considered

Two general philosophies were presented regarding how rigid the Guidelines should be. One philosophy is that they should neither be rigid nor very specific because numerous references are provided in them for researchers to utilize in order to obtain specific procedures. The other philosophy is that the Guidelines should be quite rigid and serve as a "procedural manual" for research cookery and sensory evaluation. The first philosophy was favored by a majority of the committee and is the philosophy that is predominant in the revised Guidelines. One suggestion that received considerable sup-

port was to provide a "check-list" for researchers to follow in order to get data published in scientific journals. This could be a middle-ground compromise between the two philosophies dealing with how rigid or standardized the Guidelines should be. Examples could include rate of temperature increase and cooking time, which could be more important than whether meat was cooked in an oven or on a broiler.

In re-writing the Guidelines, considerable attention was given to reviewing the literature and checking with other societies on current or proposed cookery and sensory guidelines in order to avoid duplication. Consequently, numerous references are provided in the Guidelines. Specific procedures, in many instances, have *not* been included because of the numerous references available.

### Color Standards

After presenting the philosophical approach used in re-writing the Guidelines, considerable reciprocatation focused on some specific aspects in them. In regard to color standards for degree of doneness, new color photographs have been obtained and will be included in the revision. There was some discussion regarding the usefulness of color standards for degree of doneness since endpoint temperature should have more effect on sensory traits than apparent degree of doneness. There was general consensus that a color scale with word descriptors should be included and to provide 'qualifiers,' conditions or internal temperature ranges where these colors would be expected to appear. The summation of the discussion was that color photograph standards should be included in the Guidelines.

### Cookery Methods

Other reciprocatation focused around recommended cookery methods since the latest draft of the Guidelines specifically recommended use of Farberware grills for broiling. Data were presented by Kansas State University that showed extreme temperature variation among different locations and Farberware grills. Brad presented data that showed a 50°C temperature decline in Farberware grills over a 4-year period. Researchers from Iowa State, Florida and Georgia also reported high variability among Farberware grills. From this discussion, and the fact that no other brands of equipment are included, it was decided not to recommend Farberware grills. Instead, recommendations need to be included on the precision of temperature control of the cookery method or equipment used. Furthermore, it was decided to eliminate braising as a cookery method.

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Reciprocal Meat Conference Proceedings, Volume 47, 1994.

### Decision on Poultry

The inclusion of poultry in the revised Guidelines was another major reciprocation topic. The revised Guidelines include procedures for chicken breasts only. Communications have occurred with the NC 183 committee working with poultry meat and it was learned that several members thought our Guidelines were too rigid and that, in some cases, they did not agree with some of our recommendations. This committee recommended that we delete poultry from our Guidelines. Reciprocation at the RMC generally supported this recommendation. Therefore, recommendations dealing with poultry meat will be deleted; however, references for cookery and sensory evaluation of poultry should be included.

### Coring Method

Another reciprocation topic was coring method for shear force or other instrumental textural measurements. There was some consensus that either coring parallel with muscle fibers or perpendicular to the steak or chop surface can be used in studies where only one particular cut or location within a muscle is being used. However, in studies where various muscles or muscle locations are being studied, and a variety of experi-

mental factors can impose variability, then *parallel* coring should be used. In regard to cooling and shearing, it was decided that either cooling to room temperature (24° to 28°C) or chilling to 2° to 5°C before coring will be acceptable.

### Conclusions

Another suggestion that received considerable support was to include a 'checklist' or 'cookbook' format at the end of the Guidelines for use by technicians and/or new graduate students. The new Guidelines also will include cookery, sensory evaluation and tenderness evaluation methods for ground beef patties.

Other reciprocation included recommendations on thickness of cuts, length of aging time before processing, endpoint temperature, thawing method, etc. Specifics will be worked out by the AMSA Committee to revise the Guidelines.

This workshop was very timely and helpful because the AMSA Committee was close to developing the final draft of the "*Research Guidelines for Cookery, Sensory Evaluation and Instrumental Textural Evaluation of Fresh Meat*." The reciprocation and input were very beneficial in providing direction for modification and refinement of the Guidelines.