Evolution of the Sensory Science Discipline: Redux
● 10 years ago wrote an article for Food Technology

● This presentation will cover the main points of the article and update the information where appropriate.
What is a profession?

a. engaged in one of the learned professions

b. characterized by or conforming to the technical or ethical standards of a profession

c. Participating for gain or livelihood in an activity or field of endeavor often engaged in by amateurs

• It should have these components
  1. A common set of educational components
  2. An agreed upon set of methods
  3. A method of communication among members of profession
  4. Appropriate ethical standards

• Will present information with these criteria in mind
Early Research Activity

- Early sensory activity primarily the work of psychologists and physiologists aimed at the basic understanding of the senses.

- Statisticians contributed methods of design and analyses.

- This work took place primarily within research laboratories and published in appropriate discipline journals.
Practical Application

- First practical application what was originally called organoleptic research took place in commodity groups such as dairy and meat. Methods were developed independently.

- These were usually to measure simple preference for agricultural products and in some instances thresholds.
• Another interdisciplinary area which made early contributions was Home Economics

• USDA regional laboratories conducted research primarily in the area of quality control

• Food industry used expert panels for tea, coffee and alcoholic beverages
• Early acceptance type testing was conducted in industry within market research using simple methods of evaluation, both lab and in house.

• First organized descriptive method developed by Arthur D. Little called Flavor Profile

• Difference tests for quality control used in alcohol beverage industry.
Role of Quartermaster Food and Container Institute

- Late 40’s early 50’s assembled psychologists and food technologists in Acceptance Branch
- Studied basic taste, odor, appetite and hunger and developed the 9 point hedonic scale
- Contribution of contract research program
- Transfer to Natick Lab of acceptance activities
Was sensory evaluation a profession at the time?

- No!
- No journals dedicated to area
- No professional organizations
- Little in university education
- No books
- Much of the training in area was through apprenticeship
- What existed was in commodity departments and Home Economics
• Early courses in sensory taught at Kansas State and University of Illinois

• Mid 60’s program at UC Davis developed a more comprehensive non-commodity program at both undergraduate and graduate level

• Since then, Oregon State, University of Minnesota, Kansas State, University of Missouri and Cornell have programs

• UC Davis Extension Certificate program
Organizations

- IFT Sensory Evaluation Division formed in 60’s as well as ASTM E-8 Sensory Evaluation of Products and Material
- IFT first had just sessions dedicated to area then symposia as well as posters
- ASTM developed first manuals of procedures.
- Monell Chemical Senses Center
- Others more specialized groups formed: chemical senses, food choice associates, Sensometrics
Communication

- Books: Principles by Pangborn, Amerine & Roessler
- Sensory Evaluation applied texts:
  - Stone and Sidel
  - Meilgand, Civille, and Carr
  - Lawless and Heymann
  - Moskowitz
  - Resurreccion
  - Sensory newsletter from IFT division
  - Sensory E letter
Journals and Conferences

- Journal of Food Science
- Food Technology
- Journal of Sensory Studies
- Appetite
- Journal of Food Quality and Acceptance
- Pangborn Conference
- Sensometrics
Sensory Outside the U.S.

- Work primarily in academic institutions
- Tilgner in Poland
- Roland Harper in U.K.
- Sik in Sweden
- Matforsk in Norway
- Koster in Netherlands
- Booth in U.K.
- University of Copenhagen
- Institute of Food Research, U.K.
- European Sensory Network
Role of Vendors

- Developed methods in areas of descriptive, discriminative and affect.
- Contributed to the area of relating product attributes to liking.
- Conducted workshops which were and still are to a lesser degree basic education for industry.
Main Themes at Present

- Non-Food-exp. personal case, autos, cleaning products
- Food Service
- Role of context in evaluation
- New scaling procedures and affect
- Multivariate analyses which relate attributes to liking.
- Role of emotion in product evaluation
- Growth of qualitative methods such as focus groups
- Involvement in market research type activity
- Front end research – Insight
- Iron Mongery
Are We A Profession Yet?

- Common educational component
- Agreed upon methods
- Method of communicating among members
- Appropriate ethical standards