Individual and consensus sensory methods are useful tools for the trained sensory panels to evaluate intensities of attributes.

### Objective

To determine the relationship between trained descriptive attributes between individual and consensus descriptive sensory evaluation methods.

### Methods

**Experimental Design:**
- 16 treatments with 3 replicates
- 4 meat sources (chuck, regular, sirloin, and round)
- 2 fat percentages (10 and 20%)
- 2 grind treatments (6.44 mm grind and bowl chopped)
- Subprimals for each treatment were, course ground, and verified for fat content.
- Patties were formed using a patty maker with a 2.54 cm plate.

**Expert Descriptive Flavor and Texture Attribute Panel:**
- Panelists evaluated the samples individually and then, discussed the attributes and intensities to come to a consensus.
- Flavor and texture descriptive attributes defined by Adhikari et al. (2011) and AMSA (2016).
- 0 = none; 15 = extremely intense.
- References available; distilled and sparkling water and salt-less saltine crackers as palate cleansers.

**Statistical Analysis:**
- Trained panel descriptive flavor and texture attributes for consensus and individual descriptive sensory methods were analyzed using the GLM procedure in SAS)\ with a predetermined alpha of 5%.

### Results

- Beef identity flavor was rated higher \((P < 0.05)\) by individual panel method than when the consensus method was used.
- Liver-like, buttery, heated oil, smoky charcoal, warmed over, burnt, musty earthy/hummus, and petroleum-like flavor attributes, and sweet basic taste were rated higher \((P < 0.05)\) for consensus panel method than the individual panel method.
- Texture attributes were not affected.
- Sour basic taste and cardboard flavor attributes displayed a panel type by fat percentage interaction.
- Patties with 20% fat did not differ in sour basic tastes; however, 10% fat patties were higher \((P < 0.05)\) in sour basic taste when the consensus panel method was used.
- Patties with 10% and 20% fat were rated higher \((P < 0.05)\) in cardboard flavor when consensus method was used.

### Conclusions

Intensity scores for minor sensory attributes were higher when sensory data were determined using consensus sensory technique in ground beef patties.

### References
