

# Product Quality Research & Technical Services

Checkoff Program Roadmap through FY 2020



*Research Goal: Utilize science to solve complex issues associated with product quality and consistency, and improve the unique taste attributes of beef that drive it's demand.*

## Palatability & Consistency Research

## Technical Services

### Flavor

Identified as a high-level research priority through 2020 with the goal of understanding flavor complexity and optimizing flavor consistency. Achieved through a targeted research model.

### Considerations:

- Key flavor attributes and sensory evaluation
- Precursor compounds
- Industry steps pre- and post-harvest [i.e., feeding, aging (traditional- and long-aging, wet and dry), cooking methods, degree of doneness, etc.]
- Cuts beyond middle meats and different beef types or quality levels
- Positive and negative/off flavors

### Tenderness & Juiciness

Explore beef tenderness and juiciness attributes and how they develop and change across products because of pre-and post-harvest industry steps. Research goal is to improve consistency of these attributes. Achieved through RFP model.

### Considerations:

- Industry steps pre- and post-harvest [i.e., feeding, aging (traditional- and long-aging, wet and dry) cooking methods, degree of doneness, etc.]
- Cuts beyond middle meats and different beef types or quality levels
- Marbling
- Carcass and cut size increases

Disseminate science-based research results to key industry stakeholders via creation and distribution of technical materials and tools. Monitor ongoing meat science research, trends, information gaps and research needs.

Serve as key resource for expertise and education on the beef carcass, muscles and cuts, fabrication methods (traditional and novel) and beef technologies such as aging, packaging, nomenclature, cut substitutions, etc.

### Audience Examples:

- Scientific community
- Packers & processors
- Other Checkoff programs
- State and channel partners

*Technical Services Goal: Serve the industry through expertise and leadership on beef carcass muscles, cuts, product attributes and fabrication solutions.*