

Prevalence and Conditions of Mechanical Tenderization and Enhancement of Beef at Independent and Minor Chain Meat Retailers in North Carolina

Hello! I'm a student from NC State conducting research for a summer project. I'm trying to better assess the practices involved in mechanically tenderizing beef products at retail. May I speak to a manager to ask them a few questions about how your establishment handles mechanically tenderized beef? The survey should only take about five minutes.

1. Are you the manager?

Yes or No

One common type of meat tenderization is mechanical tenderization using needles or blades to break-down and penetrate the muscle fibers. Tenderization can also occur when marinade or tenderizing solution is injected into the muscle fibers.

2. Does your establishment mechanically tenderize beef products here? This could include cubing, jaccarding, blade, or needle tenderizing.

Yes or No

3. Does your establishment inject marinade or tenderizing solution into beef products here? This could include needle injection, vacuum tumbling, or marinating before mechanical tenderization.

Yes or No

4. [If answered "Yes" to questions 2 and/or 3] What types of equipment are being used to perform the process/processes you had previously listed? Could you provide me with a list of brands and model numbers?

5. How are these pieces of equipment cleaned and sanitized (process, name or type of cleaner and sanitizer, frequency, etc.)?

6. What types of beef products (type of cut, thickness, etc.) are being processed this way? (Specify what type of products are used for each of the processes above)

7. How long are the products stored before they are mechanically tenderized?

8. At what temperature are the products stored before mechanical tenderization?

9. How long are the products kept after they are mechanically tenderized?

10. At what temperature are the products stored after mechanical tenderization?

11. [If answered "Yes" to question 3] What is the brine/ marinade made up of? Is it commercially sold?

12. Is the brine/ marinade ever reused more than once?

13. At what temperature is the brine/ marinade kept?

14. Would you like us to provide you with information about the safety of the process?

Yes or No