

Goat/Lamb Carcass Sampling

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> Why?

- Care must be taken during the harvest process to minimize microbial contamination of the carcass surface
- Pathogens, which threaten the safety of a product, are known to reside in fecal matter, milk, and ingesta (FMI)
- Within the U.S. FMI is prohibited on any livestock or poultry carcass after being processed (FSIS, PHIS directive 6420.2)
- Routine carcass sampling helps monitor plant hygiene and employee dressing procedures



> How?

- Ideally a system of routine sampling should be determined (ex: at least 1 per week for small facilities or 1 per 1,000 head in large facilities)
- Carcass sampling can be done using sponges or swabs
- Typically recommended to sample multiple areas to represent the carcass surface
 - \rightarrow 100 cm² area (a sterile template can be used to ensure adequate area coverage)
 - \rightarrow See figure 1 for examples of locations on the carcass to sample
 - Leg
 - Midline/flank
 - Foreshank
 - Neck
- Using one side of the swab, make several passes over the designated area, then turn swab over and sweep over the area in the opposite direction
 - → Both sides of the sampling instrument should have passed over the entire area of the template
- Samples should be processed as soon as possible.
 - → A plan should be in place to keep samples cold ($\leq 40^{\circ}$ C) until able to process

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- Purpose
 - The locations suggested above are areas of the carcass most likely to encounter contamination during the dressing process
 - Some *E. coli* (STEC's) are adulterants in non-intact beef because of their risk to food safety. While not adulterants in sheep or goats, care must be taken to minimize microbial contamination
 - Typical carcass surface sampling would include detection of pathogens such as *Escherichia coli*, *Salmonella*, etc.
 - → Different microbiological methods are available to perform microbial analysis on samples depending on key objectives

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