

# Beef Day 2021

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## Temperature during beef product transport impacts subprimal and steak yield

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### Objective

The objective of this study was to determine the impact of ambient temperature during striploin and sirloin transport on moisture loss, color, and tenderness.

### Study Description

Cases of striploins (n = 24) and sirloins (n = 24) were placed on one of two pallets. Each pallet was placed on a refrigerated truck pre-chilled to 28°F or 38°F and product was transported for 12 hours. Subprimal purge loss was measured prior to fabrication into 1-inch thick steaks. Steaks were overwrapped and packaged in modified atmosphere packaging prior to a second transport. Each pallet was placed on a refrigerated truck set at 28°F or 38°F and transported for 12 hours. Steaks were utilized for the evaluation of color stability, cook loss, purge loss, and Warner-Bratzler shear force.

### Take Home Points

The consistent increase in purge loss of sirloins transported at elevated temperatures has the potential to be detrimental to the bottom line for any meat processor. However, data indicate varied responses to temperature differences based on subprimal. Thus, a universal recommendation for all meat products is not possible. Therefore, further investigation into the impacts of transportation temperatures on various meat products is vital to the optimization of the meat supply chain.

### Acknowledgements

Funded in part by The Beef Checkoff. Salaries and research support provided by state and federal funds appropriated to South Dakota State University.

