

American

Association

Science

Meat

### Introduction

- Sous vide (SV) is a highly repeatable form of cooking
- Sous vide is increasing in popularity
- Steak thickness variability between retail and research settings
- Marbling score differences throughout the retail case
- Sous vide potential in sensory and tenderness research
- Little information on the effects of SV cookery and SV hold time on the impact of objective tenderness compared to clam shell cooking

### **Objective**

Evaluate the use of SV, hold times, steak thickness, and marbling score on the impact of longissimus lumborum (LL) objective tenderness when compared to clam shell cooking



Meat Science and Technology Center College of Agricultural & Environmental Sciences UNIVERSITY OF GEORGIA



#### Sous vide cookery and hold times compared to clam shell cook of objective tenderness

Sarah Anne DeVane<sup>1</sup>, Savannah Brannen<sup>1</sup>, and Alexander St <sup>1</sup>University of Georgia, Department of Animal and Dairy Science

telzlen	on the impact	TAP HERE TO RETURN TO KIOSK MENU	AMSA75TH ROCAL
	Abstract # 68		
	Results		
<s 1-<="" td=""><th><ul> <li>No interaction</li> <li>100% of stern the ± 2°C range steaks fell in</li> <li>Thick1 stean (P &lt; 0.001; 1)</li> <li>SV90 steaks SV30, SV0,</li> <li>Thick1 stean Figure 3b)</li> <li>SV0 steaks</li> </ul></th><th>ons or main effects for eaks from SV0, SV30, inge for Temp2 and Tento range (Figure 1) ks had an increased p Figure 2) s took the longest to c and CS (<math>P = 0.004</math>; <u>F</u> ks took longer to cook had less cook loss that</th><th>thaw loss (<math>P \ge 0.202</math> SV60, and SV90 fell i emp3 while 0% of CS oull time for all method cook followed by SV60 igure 3a) than Thick2 (<math>P \le 0.00</math> an all other methods (</th></s>	<ul> <li>No interaction</li> <li>100% of stern the ± 2°C range steaks fell in</li> <li>Thick1 stean (P &lt; 0.001; 1)</li> <li>SV90 steaks SV30, SV0,</li> <li>Thick1 stean Figure 3b)</li> <li>SV0 steaks</li> </ul>	ons or main effects for eaks from SV0, SV30, inge for Temp2 and Tento range (Figure 1) ks had an increased p Figure 2) s took the longest to c and CS ( $P = 0.004$ ; <u>F</u> ks took longer to cook had less cook loss that	thaw loss ( $P \ge 0.202$ SV60, and SV90 fell i emp3 while 0% of CS oull time for all method cook followed by SV60 igure 3a) than Thick2 ( $P \le 0.00$ an all other methods (
to g	<ul> <li>0.001; <u>Figure 4a</u>)</li> <li>Slight steaks had greater cook loss than Small steaks ( 0.001; <u>Figure 4b</u>)</li> </ul>		
5°C as	<ul> <li>CS and SVC lower WBSF <u>5</u>)</li> </ul>	) steaks had similar W <sup>-</sup> than SV30, SV60, a	/BSF( <i>P</i> < 0.001) and nd SV90 <i>(P</i> ≤ 0.05; <u>Fi</u>
d for	Conclusion		
d for	<ul> <li>Cooking stea like CS</li> <li>Holding stea increased sh</li> </ul>	ks SV to 71°C can pr ks at 72.5°C for an ad ear force; however, al	oduce tenderness val Iditional 30, 60, 90 mir I samples were below



### 0 min below 3.9 kg

#### s values

# )5; <u>Figure</u>

- eaks (P =
- nods (P <
- ≤ 0.008;
- SV60,
- ethods
- 0.202) fell into f CS
- RMC

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# of objective tenderness





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