**Supplemental Table 1:** Reported Appetite and Craving Visual Analog Scale Scores during Weight Loss<sup>1</sup>.

Parameter	Group	Baseline	Week 8	Week 16	Week 24
Hunger	Beef	51.1 ± 2.3	39.9 ± 2.5*	40.2 ± 2.7*	40.3 ± 2.8*
	Non-Beef	$47.8 \pm 2.4$	$40.7 \pm 2.6$ *	$43.0 \pm 2.6$	$41.0 \pm 2.8$ *
	Difference <sup>2</sup>	$3.4 \pm 3.3$	$-0.8 \pm 3.6$	$-2.9 \pm 3.7$	$-0.7 \pm 4.0$
Fullness	Beef	$51.8 \pm 2.2$	$53.9 \pm 2.4$	$51.2 \pm 2.5$	$53.7 \pm 2.6$
	Non-Beef	$52.9 \pm 2.2$	$55.3 \pm 2.4$	$50.6 \pm 2.5$	$53.6 \pm 2.8$
	Difference	$-1.0 \pm 3.1$	$-1.4 \pm 3.4$	$0.6 \pm 3.5$	$0.03 \pm 3.7$
Cravings	Beef	$53.4 \pm 2.5$	42.5 ± 2.7*	$38.6 \pm 2.9$ *	$40.0 \pm 3.0$ *
	Non-Beef	$49.7 \pm 2.6$	$43.1 \pm 2.8$ *	$45.3 \pm 2.8$	$44.3 \pm 3.0$
	Difference	$3.7 \pm 3.6$	$-0.7 \pm 3.9$	$-6.8 \pm 4.0$	$-4.3 \pm 4.3$

<sup>&</sup>lt;sup>1</sup> Values are LSMEANS ± SE from the linear mixed effects model.

A linear mixed effects model (SAS, Proc Mixed) was used to compare hunger, fullness, and craving ratings at baseline, week 8, week 16, and week 24 between Beef and Non-Beef groups. \* indicates a within-group difference in rating at time point vs. baseline (p < 0.05).

 $<sup>^2</sup>$  Between group differences calculated as Beef – Non-Beef. Differences may not exactly reflect values for Beef and Non-Beef due to rounding.

**Supplemental Table 2:** Self-Reported Compliance, Satisfaction, and Deprivation with the Diet Plan<sup>1</sup>.

Parameter	Group	Week 16	Week 24
Compliance	Beef	$3.8 \pm 0.85$	$3.5 \pm 1.0$
	Non-Beef	$4.0 \pm 0.68$	$3.6 \pm 0.95$
	Difference <sup>2</sup>	$-0.16 \pm 0.78$	$-0.11 \pm 1.0$
Satisfaction	Beef	$3.8 \pm 1.0$	$3.7 \pm 1.0$
	Non-Beef	$3.8 \pm 0.89$	$3.6 \pm 1.1$
	Difference	$-0.09 \pm 0.95$	0.11 ± 1.1
Deprivation	Beef	$1.9 \pm 0.82$	$2.0 \pm 0.81$
	Non-Beef	$2.4 \pm 1.0$	$2.4 \pm 1.6$
	Difference	$-0.48 \pm 0.94$ *	$-0.44 \pm 1.0^*$

<sup>&</sup>lt;sup>1</sup> Values are Mean ± SD.

A linear mixed effects model (SAS, Proc Mixed) was used to compare compliance, satisfaction, and deprivation ratings at week 16 and week 24 between Beef and Non-Beef groups. Ratings were completed using a Likert Scale with ratings from 1 (Not at All) to 5 (Extremely). \* indicates a significant (p < 0.05) between-group difference.

<sup>&</sup>lt;sup>2</sup> Between group differences calculated as Beef – Non-Beef. Differences may not exactly reflect values for Beef and Non-Beef due to rounding.