

# BEEF WISE STUDY: BEEF'S ROLE IN WEIGHT IMPROVEMENT, SATISFACTION AND ENERGY

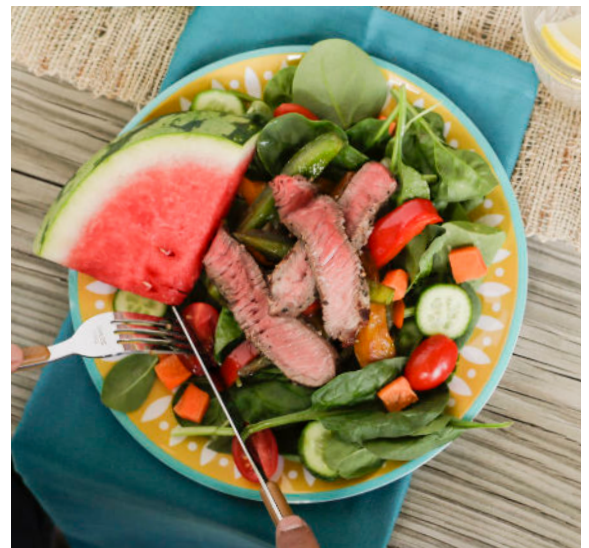
Equivalent reductions in body weight during the Beef WISE Study  
Sayer et al. Obesity Science & Practice, 2017- Vol 3

## OBJECTIVE

To determine the impact of consuming lean beef as part of a high protein (HP) weight-reducing diet on changes in body weight, body composition, and cardiometabolic health.

## STUDY DESIGN AND SETTING

A 16-week randomized, equivalence trial. Subjects were randomly assigned to consume either a HP diet with  $\geq 4$  weekly servings of lean beef (B) or a HP diet restricted in all red meats (NB).



## PARTICIPANTS

Overweight or obese (BMI  $\geq 27.0$  kg/m<sup>2</sup>) men and women (18-50 yrs.) were recruited.

### Additional inclusion criteria:

- Weight stable ( $\pm 3$  kg in previous 3 months)
- Able to progress to 70 min per day of moderate intensity exercise

### Exclusion criteria:

- Pregnant or trying to become pregnant
- Diabetes
- LDL cholesterol  $> 160$  mg/dL
- Triglycerides  $> 400$  mg/dL
- Untreated or unstable hypothyroidism
- Medication use that could cause weight loss or gain
- Vegetarian or vegan
- Current eating disorder

## RESULTS

- Body weight was reduced by  $7.8 \pm 5.9\%$  in B and  $7.7 \pm 5.5\%$  in NB.
- Fat mass was reduced in both groups (B:  $8.0 \pm 0.6$  kg, NB:  $8.6 \pm 0.6$  kg).
- Lean mass was not reduced in either group.
- Improvements in markers of cardiometabolic health (total cholesterol, low-density lipoprotein cholesterol, triglycerides, blood pressure) were not different between B and NB.

## CONCLUSIONS

- Consuming lean beef within the context of a HP weight-reducing diet resulted in equivalent reductions in body weight and no difference in improvements of body composition and cardiometabolic health compared to a HP that was restricted in red meats.
- Results of the study demonstrate that HP diets, either rich or restricted in red meat intakes, are effective for decreasing body weight (especially body fat) and improving cardiometabolic health.