

# BEEF IS AS EFFECTIVE AS CHICKEN AS PART OF A HEALTHY DIET TO MANAGE CHOLESTEROL

A meta-analysis of randomized controlled trials that compare the lipid effects of beef versus poultry and/or fish consumption.  
Maki et al. Journal of Clinical Lipidology, 2012

## Objective

Evaluate the effects of beef, independent of other red and processed meats, compared with poultry and/or fish consumption, on lipoprotein lipids.

## Study Design and Setting

A meta-analysis of randomized, controlled, clinical trials (RCTs). RCTs published from 1950 to 2010 were considered for inclusion. Studies were included if they reported fasting lipoprotein lipid changes after beef and poultry/fish consumption by subjects free of chronic disease. A total of 124 RCTs were identified, and 8 studies involving 406 subjects met the pre-specified entry criteria and were included in the analysis.

## Results

Relative to the baseline diet, mean  $\pm$  standard error changes (in mg/dL) after beef versus poultry/fish consumption, respectively, were:

- $-8.1 \pm 2.8$  vs.  $-6.2 \pm 3.1$  for total cholesterol (P = .630)
- $-8.2 \pm 4.2$  vs.  $-8.9 \pm 4.4$  for low-density lipoprotein cholesterol (P = .905)
- $-2.3 \pm 1.0$  vs.  $-1.9 \pm 0.8$  for high-density lipoprotein cholesterol (P = .762)
- $-8.1 \pm 3.6$  vs.  $-12.9 \pm 4.0$  mg/dL for triacylglycerols (P = .367)



## CONCLUSIONS

- Changes in the fasting lipid profile were not significantly different with beef consumption compared with those with poultry and/or fish consumption.
- Inclusion of lean beef in the diet increases the variety of available food choices, which may improve long-term adherence with dietary recommendations for lipid management.