

## Lipoprotein Effects of Substituting Beef Protein for Carbohydrate

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### Synopsis:

The primary aim of this study is to test the hypothesis that replacing dietary carbohydrate with protein, using beef as the primary source of protein, will have beneficial effects on components of atherogenic dyslipidemia and postprandial lipoprotein response and that these effects will be independent of saturated fat intake. As a secondary aim, we will test the hypothesis that these dietary changes will stimulate lipoprotein lipase activity and repress stearoyl CoA desaturase activity in adipose tissue. Finally, we will test the effect of replacing carbohydrate with beef protein on postprandial inflammatory status by monitoring expression of inflammatory genes in circulating monocytes in fasted and fed states following each of three dietary interventions.