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## Letters to the Editor

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### Reply to P Scarborough et al

*Patty W Siri-Tarino*

Dear Sir:

We agree with Scarborough et al that it is appropriate to consider the possibility that inclusion of serum cholesterol concentrations in multiple regression models may attenuate the relation of saturated fat to cardiovascular disease (CVD) in observational cohort studies. However, using data from the subset of studies in our meta-analysis in which the models did not include blood cholesterol concentration [9 coronary heart disease (CHD) studies and 6 stroke studies;  $n = 291,126$ ], the results did not differ significantly from those that we reported for all 21 studies ( $n = 347,747$ ) (1). The calculated relative risk estimates and 95% CIs for saturated fat intake in the subset were 1.13 (0.96, 1.33) for CHD, 0.84 (0.63, 1.10) for stroke, and 1.02 (0.86, 1.19) for total CVD. This secondary analysis suggests that the overall results from the meta-analysis are robust and are not affected by different analytic strategies. They corroborate a recent pooled analysis of 11 American and European cohort studies ( $n = 344,696$  persons) that showed that replacement of saturated fat by carbohydrate was not associated with decreased risk of CHD; on the contrary, such a replacement was associated with a slightly increased risk of CHD (2).

QS is supported by a Postdoctoral Fellowship from Unilever Corporate Research. FBH's work is supported by NIH grant HL60712. RMK receives research support from the National Dairy Council, National Cattleman's Beef Association, and the Robert & Veronica Atkins Foundation. PWS-T, QS, and FBH declared no conflicts of interest.

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### REFERENCES

1. Siri-Tarino PW, Sun Q, Hu FB, Krauss RM. Meta-analysis of prospective cohort studies evaluating the association of saturated fat with cardiovascular disease. *Am J Clin Nutr* 2010;91:535–46.
2. Jakobsen MU, O'Reilly EJ, Heitmann BL, et al. Major types of dietary fat and risk of coronary heart disease: a pooled analysis of 11 cohort studies. *Am J Clin Nutr* 2009;89:1425–32.

doi: 10.3945/ajcn.2010.29752.