Calci um/Cholesterol Relations in Women

To the Editor:

We believe that Speich, in her most recent Letter (1), has drawn unwarranted inferences from a flawed study. We have studied chemistry profile correlations for the past 17 years and have a large data base for analysis (2).

Speich compares young diabetic women, early middle-aged control women, and late middle-aged women with acute myocardial infarction. Twenty-four years have passed since one of us practiced medicine in France, but if one can assume that these patients were French, one can be confident that the blood plasma test would show the highest group mean for total cholesterol in the oldest group and the lowest total cholesterol in the youngest group if the disease(s) of the patients were not affecting the cholesterol as much as the age-related factors (such as cumulative excess caloric intake for a given level of activity).

Because large groups of patients generally reach their peak mean value for total protein and total calcium in blood in their twenties, with slow decline thereafter, one would expect the result she obtained if there were no disease effect exceeding the age-related changes.

Her three comparable groups among males failed to show any significant correlation of calcium and cholesterol. Why? We assume it was because:

1. Her male subjects with acute myocardial infarction were younger than her female subjects with myocardial infarction.
2. The mean age of male controls minus the mean age of male myocardial infarction patients was significantly less than the 25.6 years found in the women (typically, men have their first infarct about seven years earlier than women).
3. Being younger, her male infarct patients had lower values for cholesterol and higher values for calcium than the women, so these values were close to the values obtained for the controls.

References


William G. Gillespy
Frederick W. Terry

1000 S. Mercer St.
New Castle, PA 16101

This Letter was referred to Dr. Speich, who responded that the main object of her Letter was only to try to explain the negative correlation between PI-Ca and total cholesterol in insulin-dependent diabetic women relative to atherosclerosis, which appears early in the life of diabetics, and that the Letter carefully insisted that the results raised questions not resolved in that study.