

Online Appendix A

Measurements of Phenotypes

All blood assays except CRP were performed at the NHLBI FHS Central Biochemistry laboratory at Fairview-University Medical Center at the University of Minnesota. Triglycerides were measured using enzymatic methods (1). HDL-C levels were measured after dextran-magnesium precipitation (2). Serum insulin was measured by radioimmunoassay (Coat-A-Count, Diagnostic Products Corporation, Los Angeles, CA). An enzymatic (glucose-oxidase) method (Kodak Ektachem 700 Analyzer, Rochester, NY) was used to measure serum glucose. Serum uric acid was measured by using the Ortho Clinical Diagnostics (Rochester, NY) Vitros thinfilm clinical analyzer method (3). Plasma PAI-1 antigen was measured using ELISA (4). WBC was measured by a Coulter STKS hematology analyzer (Coulter Electronics Inc., Hialeah, FL) with standard impedance counting techniques. Serum CRP level was measured using a high sensitivity ELISA calibrated with WHO reference material (5) at the Laboratory for Clinical Biochemistry Research at the University of Vermont.

Information on cigarette smoking, alcohol intake, diet, physical activity, and medication use were obtained by a standardized interview during the clinic visit. The number of cigarettes smoked per day was obtained for current smokers. The average number of drinks of beers, spirits, and wine consumed per week over the past twelve months was recorded, and total alcohol was computed as the sum of the three beverage-specific alcohol contents (6). Frequency and duration of strenuous, moderate, and light physical activity during the previous year were estimated from a physical exercise questionnaire. A physical activity score in METs minutes per week was calculated by assuming MET values of 8, 4, and 1.5 for strenuous, moderate and light activities. Sedentary behavior was measured by average hours of watching TV per day. Dietary

information was collected through a staff-administered semi-quantitative food frequency questionnaire (7). From the food frequency questionnaire, intake of specific nutrients was calculated by multiplying the frequency of consumption of an item by its nutrient content. Composition values for nutrients were obtained from the Harvard University Food Consumption Database derived from the U.S. Department of Agriculture sources and manufacture information (8).

Anthropometric measurements were made with the participant wearing a scrub suit or examination gown and no shoes. Body weight was recorded to the nearest pound using a balance scale. Waist circumferences were measured at the level of the umbilicus. Blood pressure was taken as the average of the second and third of three measurements made with a random-zero sphygmomanometer. Coronary heart disease was defined by self-reported history of myocardial infarction, angioplasty, or coronary bypass surgery.

References

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