Letter to the Editor

Letter by Oda Regarding Article “Relationships Between Indices of Obesity and Its Cardiovascular Comorbidities in a Chinese Population”

To the Editor:

Li et al reported that a body mass index (BMI) cut-point of 24 kg/m² and a waist circumference (WC) cut-point of 85 cm for men and 80 cm for women might be appropriate as markers for cardiovascular risk and serve as public health action thresholds in Shanghai residents. But they also acknowledged that all cut-points are arbitrary and no threshold for BMI or WC can be determined whereby values below the threshold confer no increased risk of cardiovascular disease and values above confer a uniform increased risk. They defined dyslipidemia as having total cholesterol ≥200 mg/dl, low-density lipoprotein-cholesterol ≥130 mg/dl, or high-density lipoprotein (HDL)-cholesterol <35 mg/dl, respectively.1 However, in the data used by Li et al, mean HDL-cholesterol concentrations were 56.4 mg/dl, 53.0 mg/dl, 49.0 mg/dl, 46.0 mg/dl, 43.7 mg/dl, and 43.8 mg/dl by BMI category of <21, 21–<23, 23–<25, 25–<27, 27–<29, and ≥29, respectively, and those for women were 57.5 mg/dl, 53.9 mg/dl, 50.7 mg/dl, 49.3 mg/dl, 47.3 mg/dl, and 46.2 mg/dl by BMI category of <21, 21–<23, 23–<25, 25–<27, 27–<29, and ≥29, respectively.2 In their data, mean HDL-cholesterol concentrations for men were 56.0 mg/dl, 54.8 mg/dl, 51.9 mg/dl, 50.0 mg/dl, 47.6 mg/dl, and 46.6 mg/dl by BMI category of <21, 21–<23, 23–<25, 25–<27, 27–<29, and ≥29, respectively, and those for women were 61.8 mg/dl, 58.7 mg/dl, 57.0 mg/dl, 55.0 mg/dl, 56.0 mg/dl, and 54.8 mg/dl by BMI category of <21, 21–<23, 23–<25, 25–<27, 27–<29, and ≥29, respectively.3 However, in the data used by Li et al, mean HDL-cholesterol concentrations for men were 56.0 mg/dl, 54.8 mg/dl, 51.9 mg/dl, 50.0 mg/dl, 47.6 mg/dl, and 46.6 mg/dl by BMI category of <21, 21–<23, 23–<25, 25–<27, 27–<29, and ≥29, respectively.4 However, in the data used by Li et al, mean HDL-cholesterol concentrations for men were 56.0 mg/dl, 54.8 mg/dl, 51.9 mg/dl, 50.0 mg/dl, 47.6 mg/dl, and 46.6 mg/dl by BMI category of <21, 21–<23, 23–<25, 25–<27, 27–<29, and ≥29, respectively.5 Therefore, HDL-cholesterol concentrations are different between men and women among Shanghai residents and the cut-point should be separately determined by gender. Cut-points of anthropometric parameters of obesity are controversial worldwide and the Association for Weight Management and Obesity Prevention, the Obesity Society, the American Society for Nutrition, and the American Diabetes Association issued a consensus statement concerning WC in which they said that there is no standard method for measuring WC and there is not yet a compelling body of evidence demonstrating that WC provides clinically meaningful information, and that further studies are needed to establish the most appropriate WC cut-points, which will be complex because they are likely influenced by sex, race/ethnicity, age, BMI, and other factors.6 I proposed to replace WC by high-sensitivity C-reactive protein (hs-CRP) as a marker of adipose tissue disease7 among 5 NCEP components of metabolic syndrome, not for diagnosing individual persons as having metabolic syndrome at present, but for the study of criteria for diagnosing this syndrome and recommend WC, BMI, or other anthropometric markers of obesity as rough convenient tools for screening of more proximal risk factors for diabetes and cardiovascular disease.8 hs-CRP ≥0.65 mg/L was proposed as a component of metabolic syndrome or adipose tissue disease9 and this cut-point may also be appropriate as a risk factor for cardiovascular disease,10 coronary spasm11 and NASH.12

References


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