Shenghui Wu et al., J Obes Weight Loss Ther 2016, 6:9(Suppl)
http://dx.doi.org/10.4172/2165-7904.C1.042

Metabolic health has greater impact on diabetes than simple overweight/obese in Mexican-Americans

Shenghui Wu[1], **Susan P Fisher-Hoch**[2], **Belinda Reninger**[2], **Kristina Vatcheva**[2] and **Joseph B McCormick**[2]
[1]University of Texas Health Science Center at San Antonio-Laredo Campus, USA
[2]University of Texas Health Science Center-Houston, USA

The risk of type 2 diabetes associated with overweight/obesity appears to be influenced by the co-existence of other metabolic abnormalities. We compared the risk for diabetes in each of 4 categories of metabolic health and BMI. Participants were drawn from the Cameron County Hispanic Cohort, a randomly selected Mexican American cohort in Texas on the US-Mexico border. Subjects were divided into 4 phenotypes according to metabolic health and BMI: metabolically healthy normal weight, metabolically healthy overweight/obese, metabolically unhealthy normal weight and metabolically unhealthy overweight/obese. Metabolic health was defined as having less than 2 metabolic abnormalities. Overweight/obese status was assessed by BMI higher than 25 kg/m^2. Diabetes was defined by the 2010 ADA definition or by being on a diabetic medication. Among 3,247 participants, 878 were diagnosed with diabetes. The odds ratio for diabetes risk was 2.25 in the metabolically healthy overweight/obese phenotype (95% CI 1.34, 3.79), 3.78 (95% CI 1.57, 9.09) in the metabolically unhealthy normal weight phenotype and 5.39 (95% CI 3.16, 9.20) in metabolically unhealthy overweight/obese phenotype after adjusting for confounding factors compared with the metabolically healthy normal weight phenotype. Cubic spline modeling showed that the risk of diabetes with age was higher in the metabolically unhealthy than the metabolically healthy phenotype regardless of overweight/obesity status. Metabolically unhealthy subjects showed significantly increased risk for diabetes compared with metabolically healthy subjects, regardless of their weight. Greater focus on metabolic health appears to be a more effective target for prevention and control of diabetes than emphasis on weight loss alone.

Biography

Shenghui Wu has completed her PhD from the Chinese University of Hong Kong, MD from the Southeast University and Post-doctoral training from the Vanderbilt University School of Medicine. She is an Assistant Professor of University of Texas Health Science Center at San Antonio, Department of Epidemiology & Biostatistics. She has published more than 40 papers in reputed journals and has been serving as an Editorial Board Member.

wus@uthscsa.edu

Notes: