

The UMass Worcester Prevention Research Center, located at UMass Medical School in Worcester, MA, is a member of the CDC's Prevention Research Center (PRC) network. Our work promotes healthy lifestyles through increased opportunities for physical activity, healthy eating and healthy weight. For more information, visit: www.umassmed.ed/prc

@umwprc

# **Research Brief**

On Edge: The Impact of Race Related Vigilance on Obesity Status in African Americans



### **Overview**

Nearly half (48%) of African-Americans are obese, which is higher than all other racial/ethnic groups. This is important because obesity is linked with poorer health, such as hypertension, type-2 diabetes, and cardiovascular disease. A lot of research has looked for ways to explain why more African-Americans are obese, such as differences in physical activity, food choices, socioeconomic status, and food insecurity. So far, there is no clear explanation.

Race—related vigilance is when people who face discrimination on a routine basis, may "ready themselves" to cope with racism by adopting survival strategies. This study looked to see if there is an association between obesity and race-related vigilance. The study then looked to see if there were gender differences in an association between men and women.

#### **Main Questions**

- Is there an association between obesity and the stress caused by race-related vigilance among African-Americans in the United States?
- If there is an association between obesity and race-related vigilance, are there differences between men and women?



Researchers used the Reactions to Race module of the Behavioral Risk Factor Surveillance Survey (BRFSS) for the years 2002-2010 to explore a potential association between obesity and race-related vigilance among African-Americans. The BRFSS, developed by the US Centers for Disease Control and Prevention, is a survey that health departments through the county administer by telephone to adults.

The study looked at a question from the BRFSS Reactions to Race module: "How often do you think about your race?" (never, < daily, daily, and > daily) and compared the responses to body mass index (BMI) and gender. BMI was calculated from self-reported weight and height as kg/m2. Obesity status was determined by the BMI status of obese ( $\ge$  30 kg/m2) or non-obese (< 30 kg/m2).

The BMI, gender, and responses to the Reactions to Race question of 12,214 African Americans were analyzed.

# **The Bottom Line**

African Americans in the U.S. still experience racial discrimination and racism. Racism is a type of on-going stress. Race-related vigilance, or thinking about one's race frequently, was a risk factor for obesity in African-Americans in this study.

## **Contact**

Lauren Powell, PhD, Department of Quantitative Health Sciences, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, MA, 01655 | Lauren.Powell@umassmed.edu

#### Source

Powell LR, Jesdale WM, Lemon SC. On Edge: the impact of race-related vigilance on obesity status in African-Americans. Obes Sci Pract. 2016;4. doi: 10.1002/osp4.42. Epub 2016 May 26. PMID: 27275395

 $Photo\ sources:\ espressoand cream.com;\ www.twitter.com$ 



# **Spotlight on Results**

- Race-Vigilance: Seventeen percent of respondents reported thinking about their race more than once a day, 14% reported thinking about it daily; 31% reported thinking about it less than once a day, and 39% reported never thinking about their race.
- **Obesity and race-vigilance:** African-Americans who reported thinking about their race more often were more likely to be obese. (Adjusted odds of obesity were 0.91, 95% Cl: 0.72-1.15 among those thinking about their race <daily, 1.09, 95%Cl: 0.81-1.46 among those thinking about their race daily, and 1.37, 95% Cl: 1.07-1.76 among those thinking about their race > daily.)
- **Obesity, race-vigilance and gender:** African-American women who reported thinking about their race daily, were 1.45 times as likely to be classified as obese.

## **Call for Action**

We need to have a better understanding of how the stress of race-related vigilance might play a role in increasing the risk of obesity among African-Americans. Future research on weigh loss interventions should consider race-related vigilance as an important potential stressor for racial/ethnic minorities.

Lauren Powell is partially supported by the National Institutes of Minority Health and Health Disparities, Grant # 5 P60 MD006912. Stephenie Lemon and Lauren Powell are also partially supported by the UMass Worcester Prevention Research Center, funded by the Centers for Disease Control and Prevention, Grant #s 5 U48 DP005031 and 5 U48 DP001933.