

# Obesity and large waist size linked to higher risk of death in African-American women

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The risk of death increases with higher levels of overweight and obesity among African American women, according to a new study led by researchers from the Slone Epidemiology Center at Boston University. In addition, a larger waist size was associated with a higher risk of death among women who were not obese. The relationship between body size and risk of death was strongest for deaths from cardiovascular disease.

The study, which will be published in the Sept. 8 issue of the [New England Journal of Medicine](#), was led by Deborah Boggs, ScD, a postdoctoral associate at Slone.

Researchers evaluated the relationship of [body mass index](#) (BMI) and [waist size](#) with risk of death over a 13 year period of follow-up in the Black Women's Health Study, an ongoing study of 59,000 [African American women](#) from across the US. The investigators focused on 33,916 women who had never smoked and were free of cardiovascular disease and cancer at the beginning of the study.

The risk of death was 18 percent higher for each 5-unit increase in BMI, and BMI was most strongly linked to deaths from cardiovascular disease. The risk of death from cardiovascular disease was two times higher for [overweight women](#) (BMI of 25 to 29) and three times higher for obese women (BMI of 30 or higher) compared with women with a healthy weight (BMI under 25). The researchers also found that a larger waist size was associated with a higher risk of death among women who were not considered obese; a waist size over 35 inches was associated with a

55 percent higher risk of death.

Whereas BMI gives a good estimate of total body fat, waist size provides a measure of the distribution of body fat, specifically abdominal fat. Prior research suggests that abdominal fat is more metabolically active, plays a role in the development of [insulin resistance](#) and may be particularly detrimental to long-term health. In those who are not obese, waist size may be a better indicator of risk for many health outcomes.

Previous findings have established that risk of death increases with higher BMI levels in white populations, but the limited data available on African Americans indicated that risk of death was increased only at very high levels of BMI.

"The present findings indicate that the risk of death in black women increases with increasing BMI of 25 or higher, similar to the pattern in white populations," said Boggs, the study's lead author. "Our findings highlight the importance for women to maintain a healthy weight and keep extra inches off the waist in order to decrease their risk of death."

Provided by Boston University Medical Center

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