

# Measuring Obesity and Cardiovascular Risk in Caribbean Adults

## Why is this study needed?

Around 30% of deaths in the Caribbean are caused by cardiovascular disease. Obesity, which is a risk factor for cardiovascular disease, is present in almost 25% of the Caribbean population. However, this estimate is based on body mass index (BMI) measurement. The BMI is not always an accurate measurement for people in non-white racial groups. The researchers wanted to understand how to measure obesity in the Caribbean population so that cardiovascular risk can be more accurately diagnosed.

## Who was involved?

The study team used data from the ECHORN Cohort Study. The ECHORN Cohort Study follows approximately 3,000 adults who are 40 years of age or older and who have lived in the U.S. Virgin Islands, Puerto Rico, Barbados, or Trinidad for at least 10 years.



## Study methods and results:

- Measures of obesity such as waist-to-height ratio and waist-to-hip ratio are more strongly associated with cardiovascular risk than waist circumference or BMI.
- A large proportion of individuals without elevated BMI levels still had elevated cardiovascular risk.
- Waist-to-hip ratio can be used as a marker of cardiovascular risk in both men and women, but waist-to-height ratio is more useful for men.

## Future Impact:

*This study shows that measurements of a person's waist-to-height ratio and waist-to-hip ratio more accurately assesses cardiovascular risk in Caribbean adults. The study also shows that using the BMI alone as a measurement tool is not an effective way of assessing cardiovascular risk. Integrating these ratio measurements into health assessments is important for screening patients, offering counseling, and planning treatment.*

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