These data are courtesy of Dr John Schorling, Department of Medicine, University of Virginia School of Medicine.

The data contains information on 403 subjects from 1046 subjects who were interviewed in a study to understand the prevalence of obesity, diabetes, and other cardiovascular risk factors in central Virginia for African Americans. According to Dr John Hong, Diabetes Mellitus Type II (adult onset diabetes) is associated most strongly with obesity. The waist/hip ratio may be a predictor in diabetes and heart disease. DM II is also associated with hypertension - they may both be part of "Syndrome X". The 403 subjects were the ones who were actually screened for diabetes. Glycosylated hemoglobin > 7.0 is usually taken as a positive diagnosis of diabetes.

A data frame with 403 rows and 22 variables (See "Note"):

Id:Subject id

Chol:Total cholesterol

stab.glu: Stabilized glucose

hdl;High density lipoprotein

ratio: Cholesterol/hdl ratio

glyhb: Glycosylated hemoglobin

location: A factor with levels Buckingham and Louisa

age: Age (years)

gender: Gender, male or female

height: Height (inches)

weight: Weight (pounds)

frame: A factor with levels small, medium and large

bp.1s: First systolic blood pressure

bp.1d: First diastolic blood pressure

bp.2s: Second systolic blood pressure

bp.2d: Second diastolic blood pressure

waist:Waist (inches)

hip: Hip (inches)

time.ppn:Postprandial time when labs were drawn in minutes

bmi:Body mass index

dtest:An indicator whether glyhb is greater than 7 or not

whr:Waist to hip ratio

The last three variables (bmi, dtest, whr) were created. For bmi, following [formula](http://www.cdc.gov/healthyweight/assessing/bmi/childrens_bmi/childrens_bmi_formula.html) was used:

*bmi = 703 \* (weight\_lbs) / (height\_inches)^2*