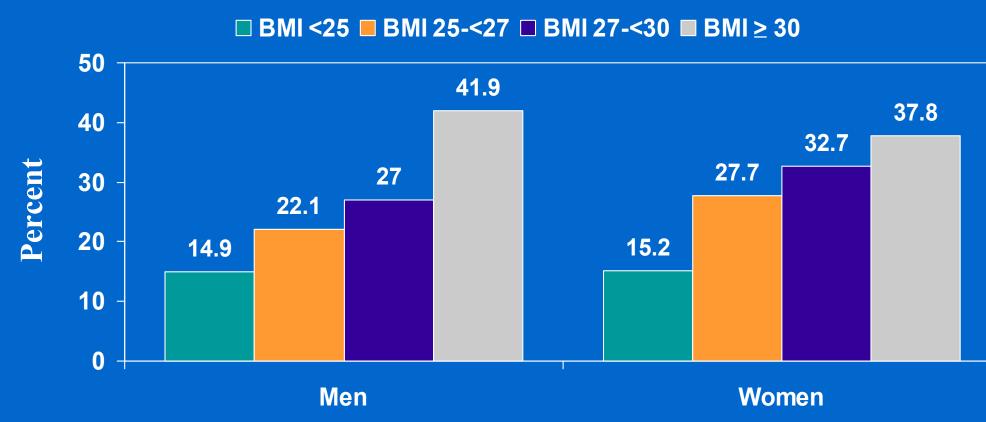
# NHANES III Prevalence of Hypertension\* According to BMI



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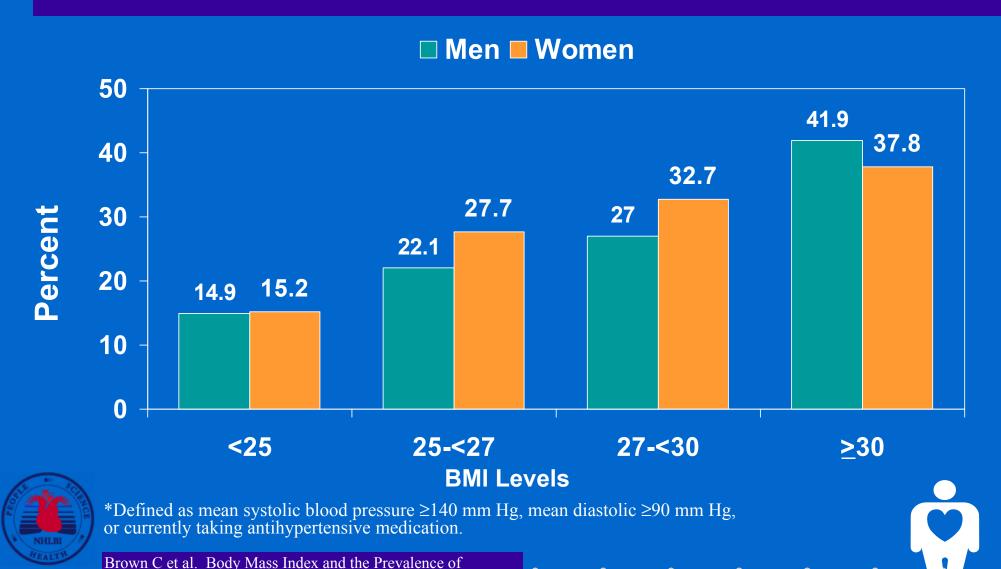


\*Defined as mean systolic blood pressure ≥140 mm Hg, mean diastolic ≥90 mm Hg, or currently taking antihypertensive medication.

Brown C et al. Body Mass Index and the Prevalence of Hypertension and Dyslipidemia. Obes Res. 2000;8:605-619.



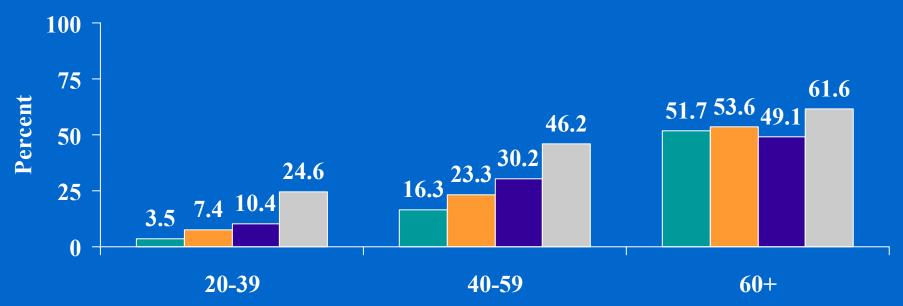
### Prevalence of Hypertension\* According to BMI by Sex



Hypertension and Dyslipidemia. Obes Res. 2000;8:605-619.

# NHANES III Prevalence of Hypertension\* According to Sex, Age, and BMI





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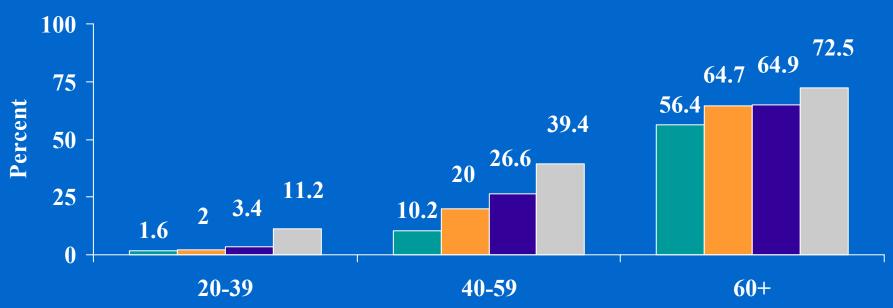
\*Defined as mean systolic blood pressure ≥140mm Hg, mean diastolic ≥90 mm Hg, or currently taking antihypertensive medication.



# NHANES III Prevalence of Hypertension\* According to Sex, Age, and BMI

#### Women

**□** BMI <25 **■** BMI 25-<27 **■** BMI 27-<30 **■** BMI ≥30

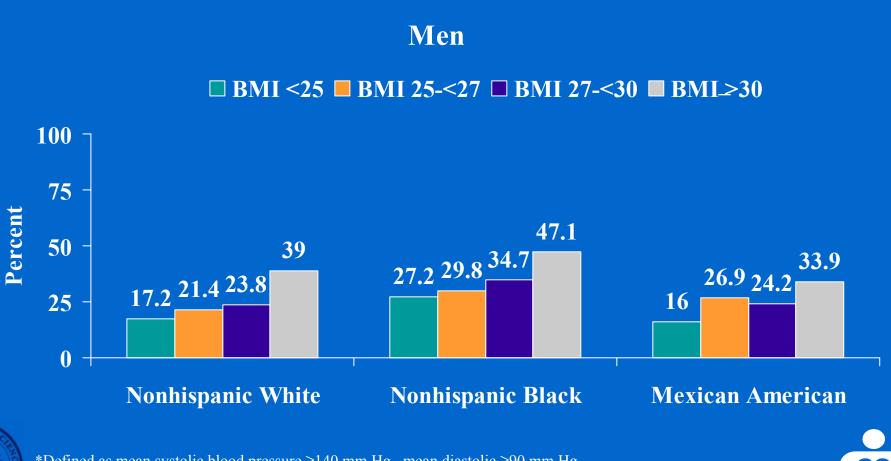




\*Defined as mean systolic blood pressure ≥140 mm Hg, mean diastolic ≥90 mm Hg, or currently taking antihypertensive medication.



## NHANES III Age-Adjusted Prevalence of Hypertension\* According to Sex, Race/Ethnicity, and BMI

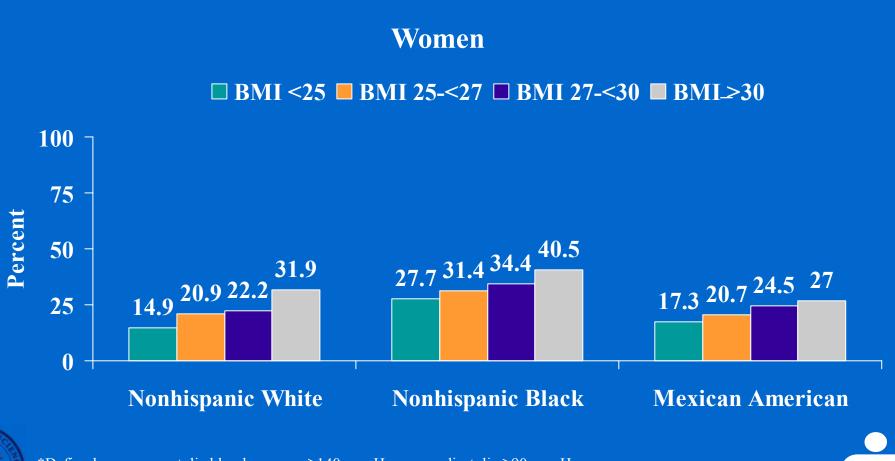




\*Defined as mean systolic blood pressure ≥140 mm Hg, mean diastolic ≥90 mm Hg, or currently taking antihypertensive medication.

Brown C et al. Body Mass Index and the Prevalence of Hypertension and Dyslipidemia. Obes Res. 2000; 8:605-619.

# NHANES III Age-Adjusted Prevalence of Hypertension\* According to Sex, Race/Ethnicity, and BMI



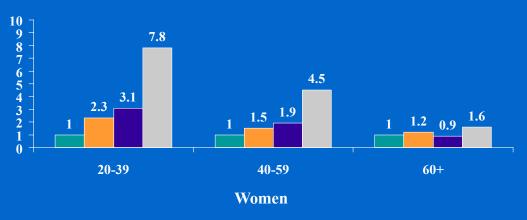


\*Defined as mean systolic blood pressure ≥140 mm Hg, mean diastolic ≥90 mm Hg, or currently taking antihypertensive medication.

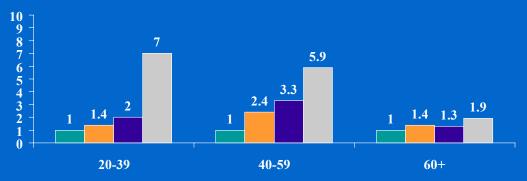
Brown C et al. Body Mass Index and the Prevalence of Hypertension and Dyslipidemia. Obes Res. 2000; 8:605-619.

## NHANES III Odds Ratio for Hypertension\* According to Sex, Age, and BMI





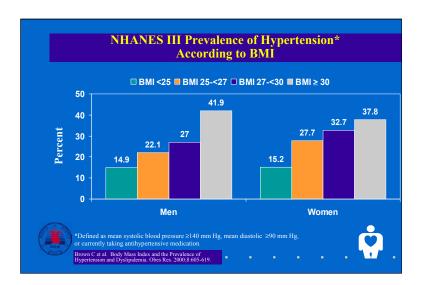






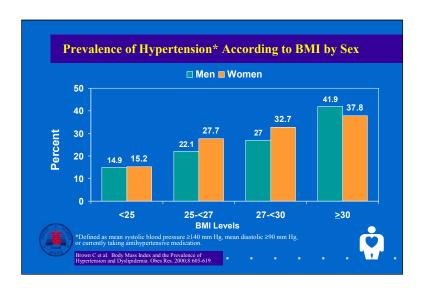
\*Defined as mean systolic blood pressure ≥140 mm Hg, mean diastolic ≥90 mm Hg, or currently taking antihypertensive medication.





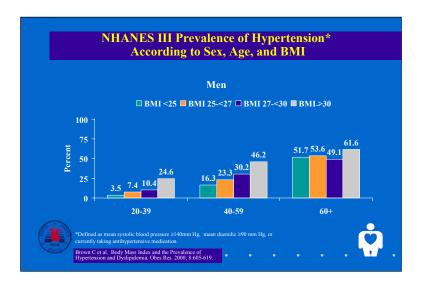
Data from NHANES III show that the prevalence of high blood pressure increases progressively with higher levels of BMI in men and women.

- The prevalence of high blood pressure in adults with BMI ≥30 is 41.9 percent for men and 37.8 percent for women, respectively, compared with 14.9 percent for men and 15.2 percent for women with BMI ≤25.
- Other studies, such as the large international Intersalt study, carried out in more than 10,000 men and women also reported a 10 kg (22 lb) higher body weight to be associated with a 3 mm Hg systolic and 2.3 mm Hg diastolic change in blood pressure.
- These differences in blood pressure, as shown in the Intersalt study, translate into a 12 percent increased risk for CHD and 24 percent increased risk for stroke.



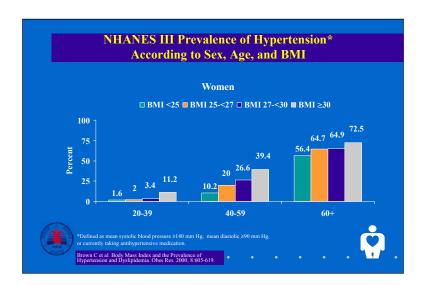
The relationship of the prevalence of high blood pressure (defined as mean systolic blood pressure  $\geq$ 140 mm Hg, mean diastolic blood pressure  $\geq$ 90 mm Hg, or currently taking antihypertensive medication) to BMI according to sex is shown on this slide.

- The prevalence of high blood pressure in adults with BMI ≥30 is 41.9 percent for men and 37.8 percent for women, respectively, compared with 14.9 percent for men and 15.2 percent for women with BMI <25.
- High blood pressure increases progressively with higher levels of BMI in men and women.



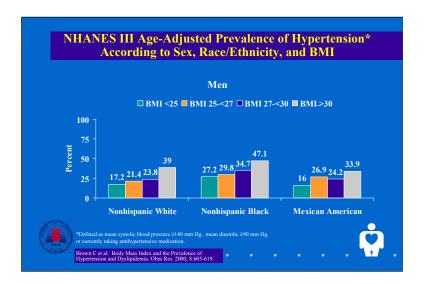
Data from NHANES III show that the prevalence of high blood pressure in men generally increases with age at all levels of BMI.

- The increase in high blood pressure with increasing BMI was greater in the two younger age groups.
- Among men ages 20–39 years, the prevalence of high blood pressure was seven times higher in the BMI ≥30 category, compared with the BMI <25 category.
- Among older men (60+ years), there is a less steep increase in the prevalence of high blood pressure with increasing BMI.



Data from NHANES III show that that the prevalence of high blood pressure increases with age among women at all levels of BMI.

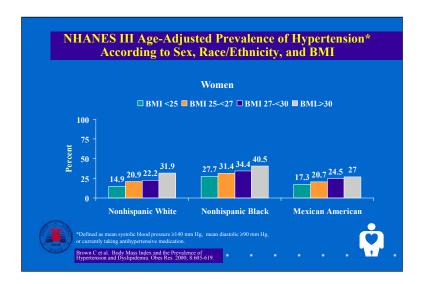
- The increase in the prevalence of high blood pressure was steepest in the younger age groups.
- Among women <60 years with a BMI ≥27, the prevalence of high blood pressure is 2–4 times greater, compared to women with a BMI <25.
- Among older women (60+ years), the prevalence of high blood pressure is generally higher in the overweight and obese categories (BMI >25).



Data from NHANES III show that there is a similar trend of increasing prevalence of high blood pressure with rising BMI levels among white, black, and Mexican-American men.

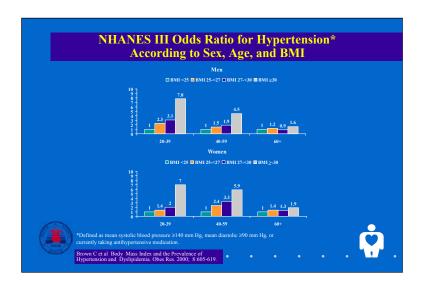
High blood pressure is defined as mean systolic blood pressure  $\geq$ 140 mm Hg, mean diastolic  $\geq$ 90 mm Hg, or currently taking antihypertensive medication.

• The age-adjusted prevalence of high blood pressure is greatest among black men at every level of BMI.



Data from NHANES III show that there is a similar trend of increasing prevalence of high blood pressure with rising BMI levels among white, black, and Mexican-American women. High blood pressure is defined as mean systolic blood pressure ≥140 mm Hg, mean diastolic ≥90 mm Hg, or currently taking antihypertensive medication.

 The age-adjusted prevalence of high blood pressure is greatest among black women at every level of BMI.



The odds ratios for high blood pressure in men and women, adjusted for race/ethnicity, education, and current smoking habits are shown for age-specific groups. The odds for developing high blood pressure with increasing BMI are greater for younger ages.

High blood pressure is defined as mean systolic blood pressure  $\geq$ 140 mm Hg, mean diastolic  $\geq$ 90 mm Hg, or currently taking antihypertensive medication.