

# Cardiovascular Risk Profile of Egyptians

**By:**

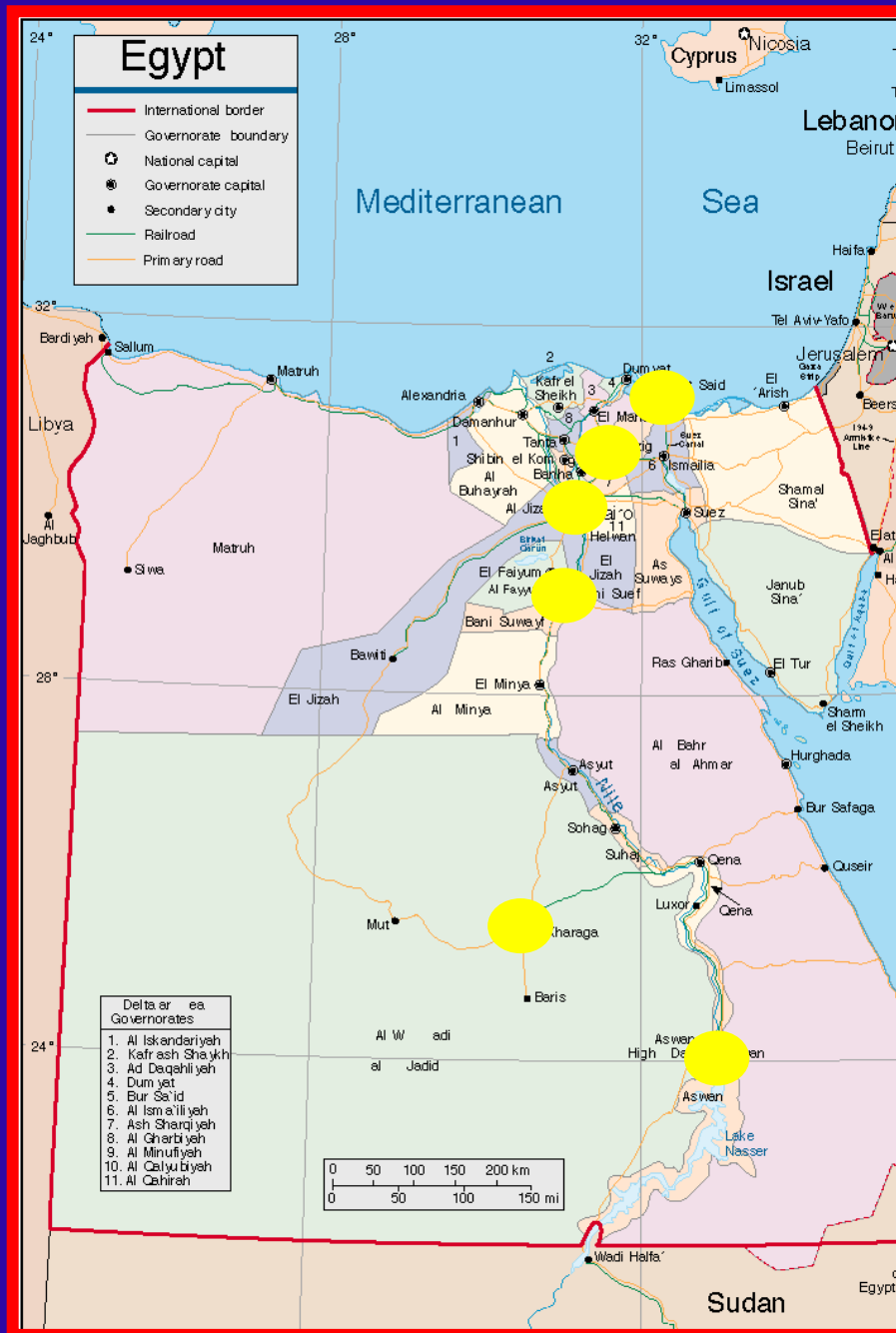
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# The National Egyptian Hypertension Project (NHP)

- Multi-stage National Survey. 1991-1993
- Phase I: all participants.
  - BP. Pulse. Demographics
- Phase II: All HT + 50% Gender-matched NT
  - BP. Pulse. BMI. W/H ratio
  - Lab
  - ECG
  - Echo
  - Fundus



# Six Governorates

1. Cairo
2. Port said
3. Elsharkeya
- 4&5. Upper Egypt :  
Banisuef/ Luxor
6. Frontier Elwahat

6733 participants

## *Cardiovascular Risk Profile*

1. Hypercholesterolemia ( $\geq 240$  mg/dl)
2. Obesity ( $\geq 30$  Kg/m<sup>2</sup>)
3. Cigarette Smoking (current)
4. Diabetes Mellitus (FBS  $\geq 126$  or pps  $\geq 200$  mg/dl)
5. Hypertriglyceridemia ( $> 200$  mg/dl)
6. HDL Cholesterol ( $< 35$  mg/dl)
7. LDL Cholesterol ( $\geq 160$  mg/dl)
8. Waist / Hip Ratio ( $\geq 0.85$ ;  $\geq 0.95$ )
9. Pulse Rate ( $\geq 90$  beats / min)

# OBESITY

## DEFINITIONS

Body Mass Index	WHO Classification	Popular Description
< 18.5 Kg/m <sup>2</sup>	underweight	thin
18.5-24.9 Kg/m <sup>2</sup>	-	healthy, normal
25.0-29.9 Kg/m <sup>2</sup>	grade 1 overweight	overweight
30.0-39.9 Kg/m <sup>2</sup>	grade 2 overweight	obesity
> 40 Kg/m <sup>2</sup>	grade 3 overweight	morbid obesity

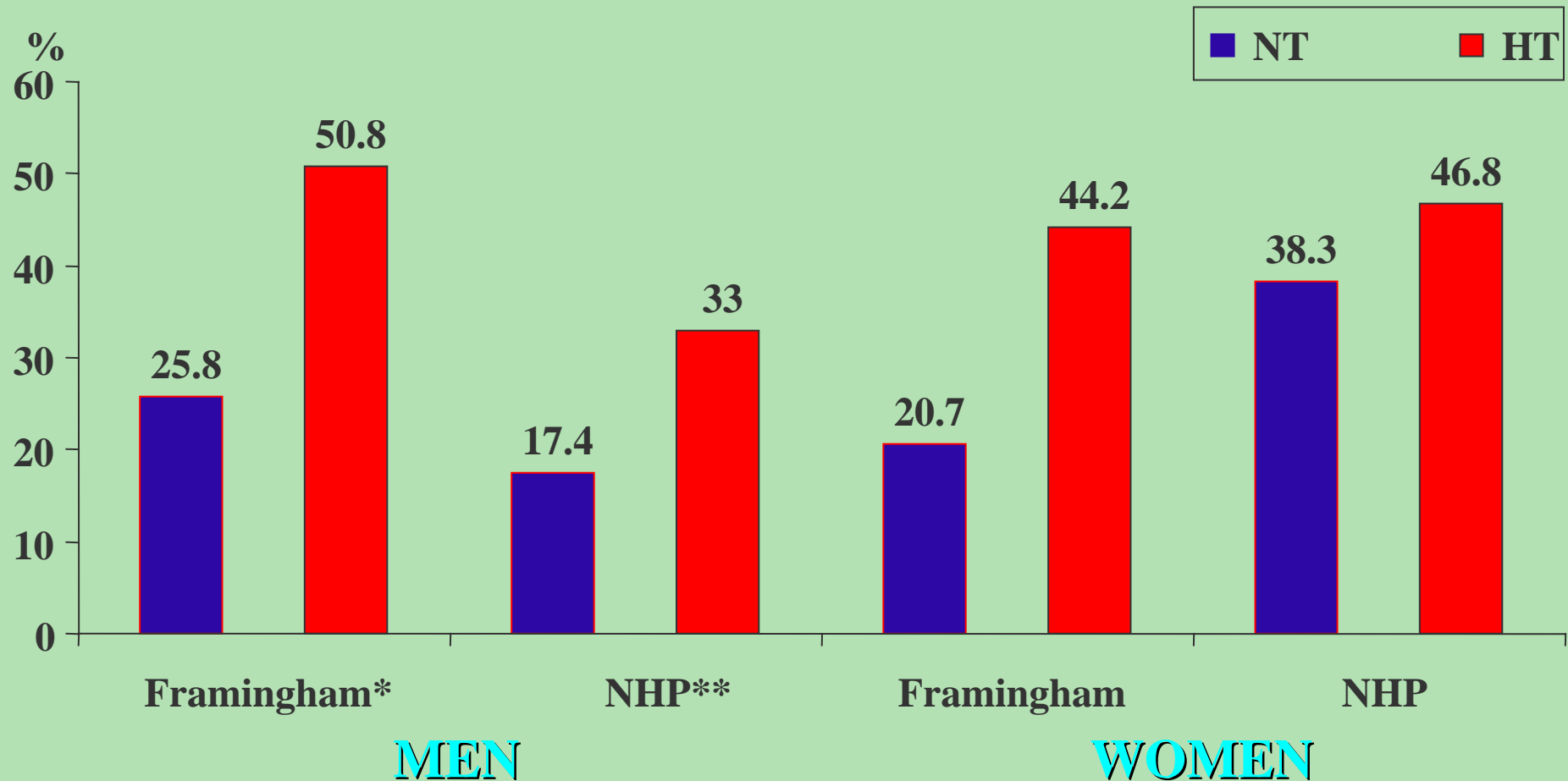
Source : WHO Technical Report Series, 1995.

# Prevalence of Cardiovascular Risk Factors

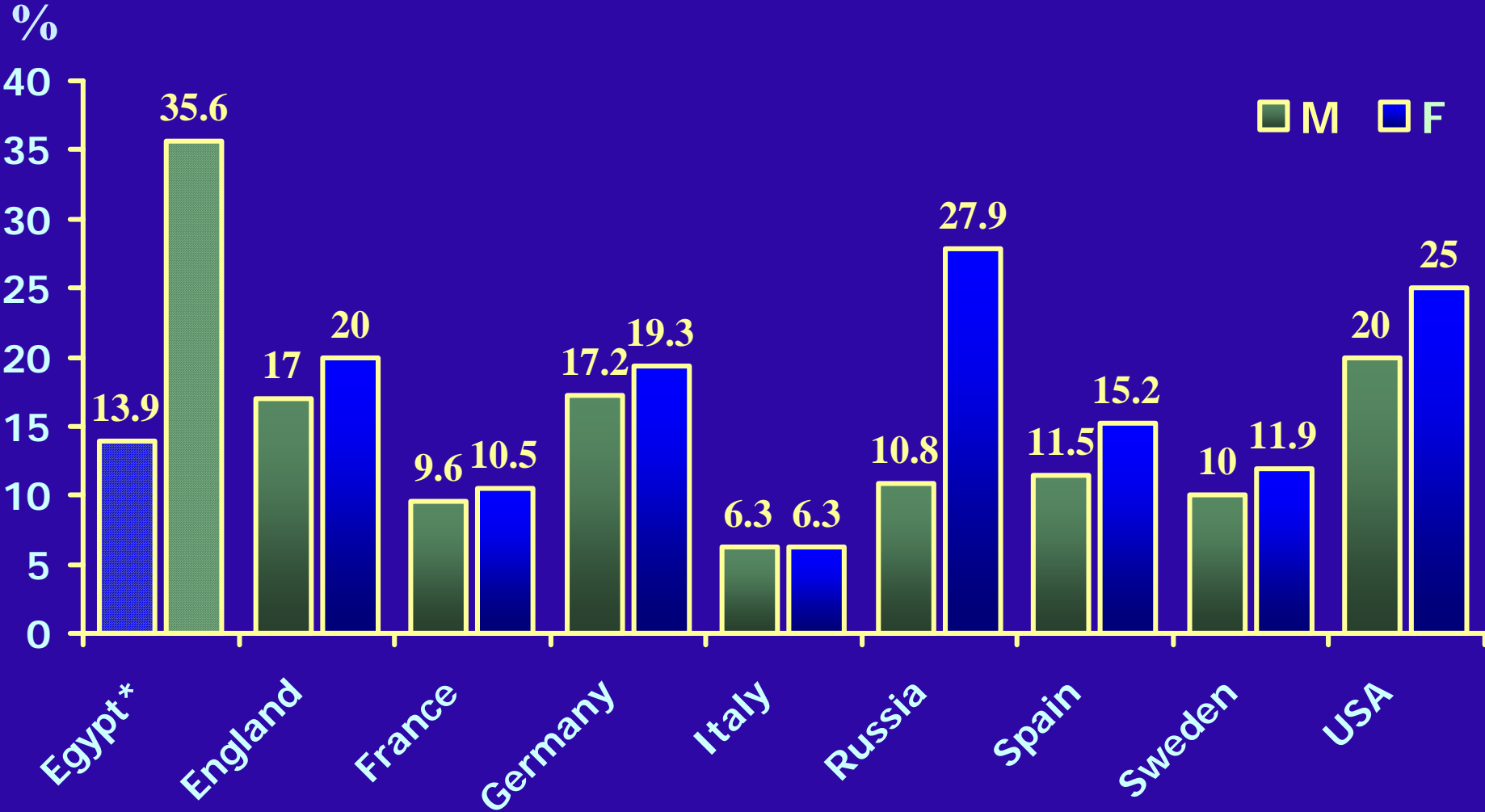
## Obesity\*

\* Framingham criteria Metropolitan relative weight

NHP Criteria: BMI  $\geq 30$  Kg/m<sup>2</sup>



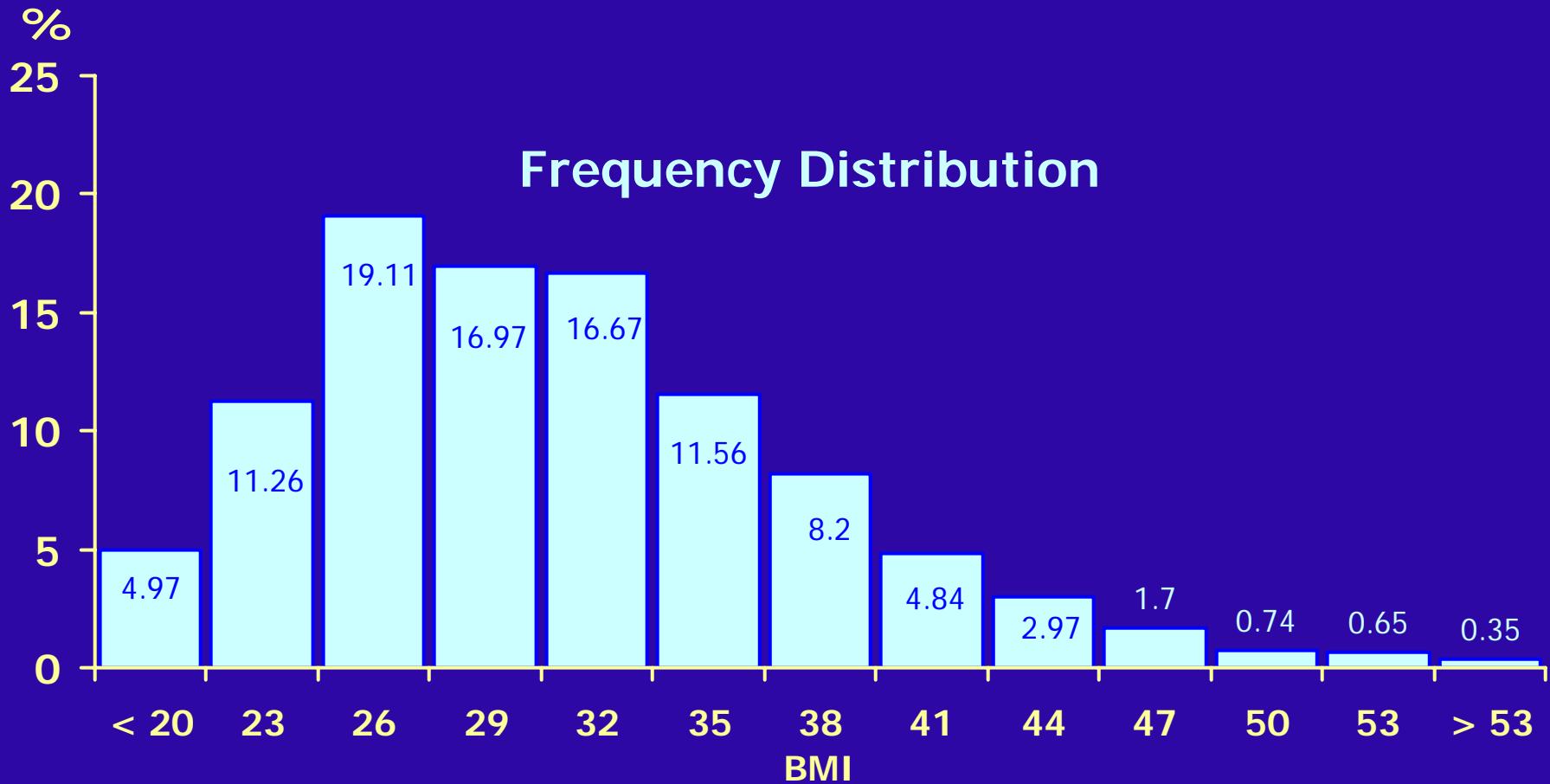
# Prevalence of Obesity in Different Countries



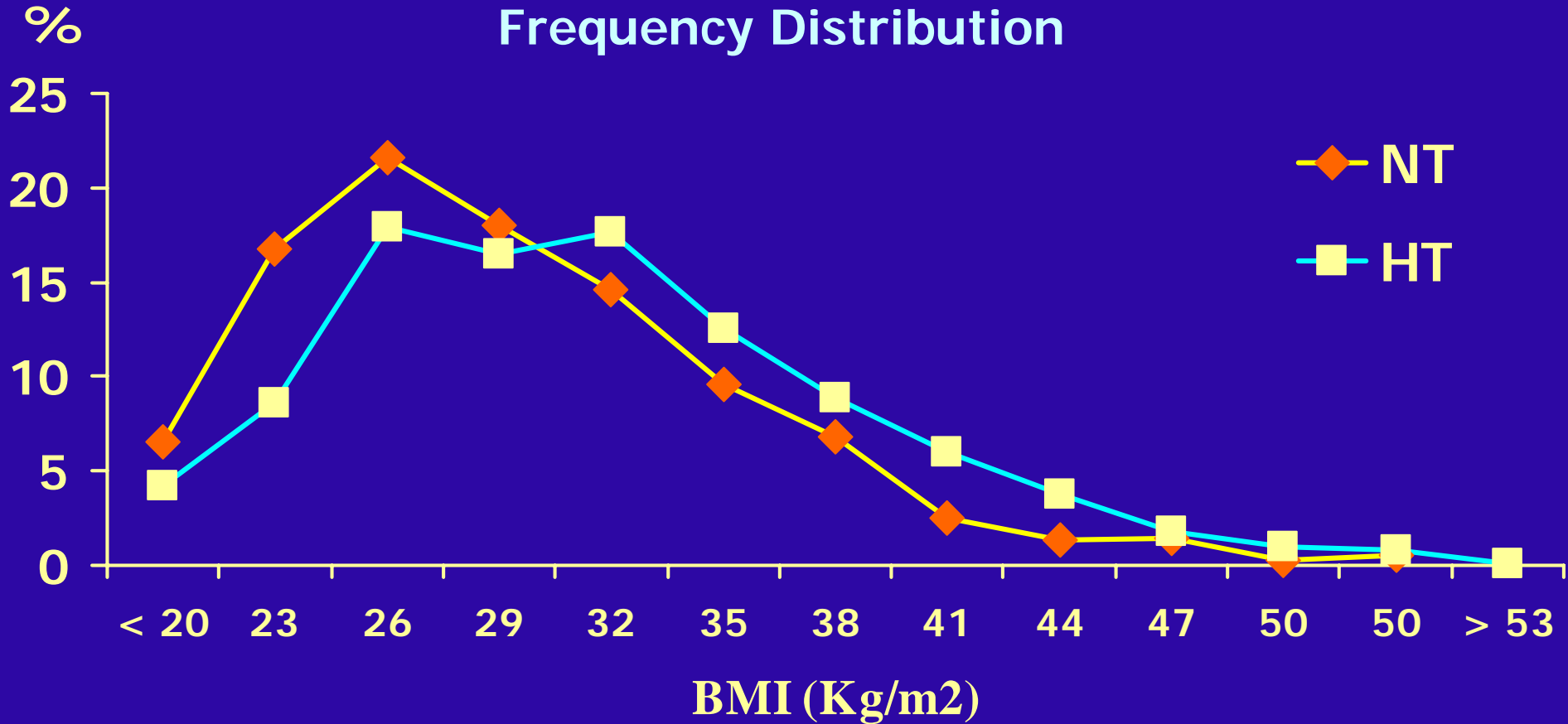
\* Normotensives only

# BMI in Egyptians

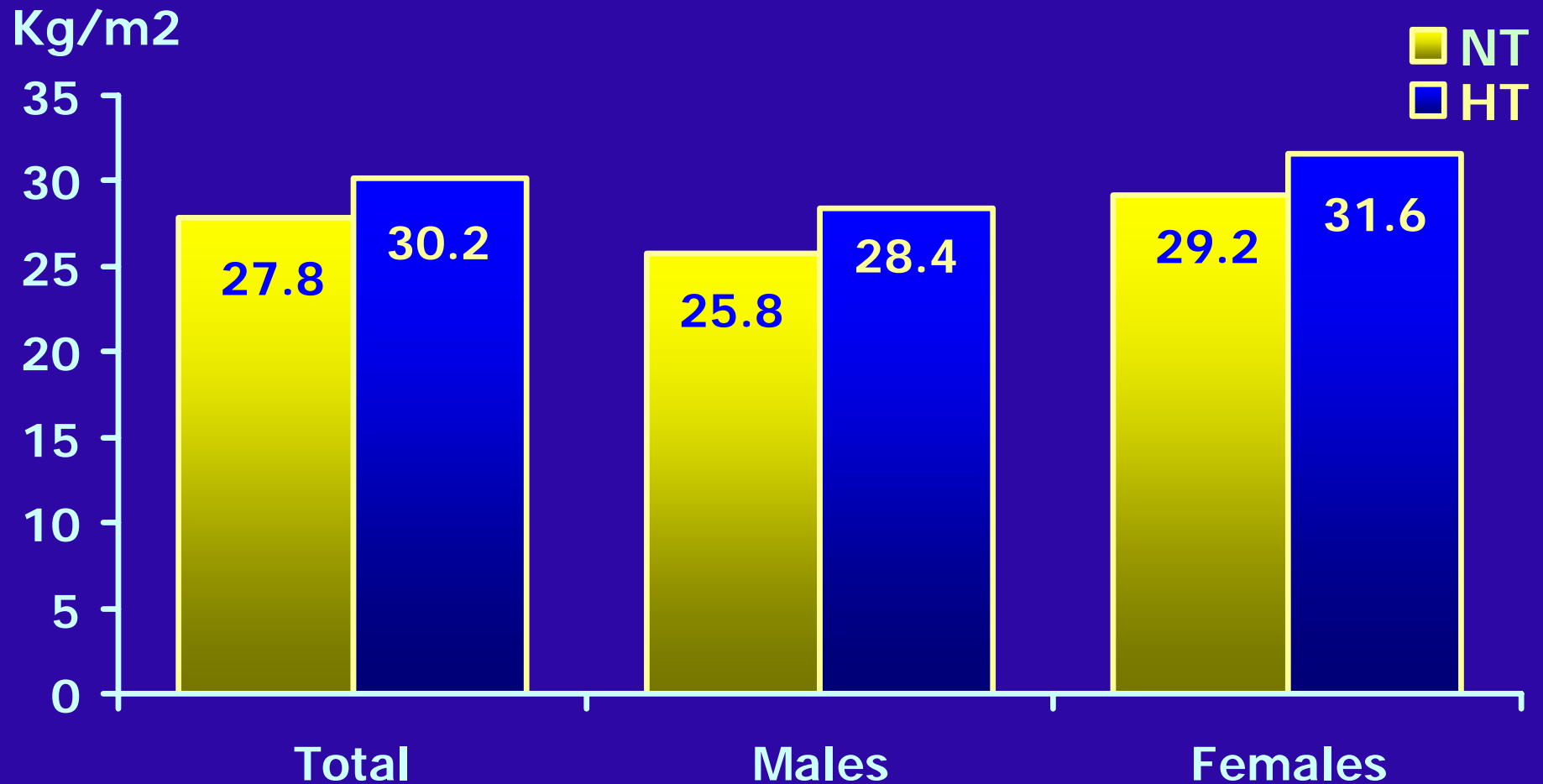
(Total Sample : 2292)



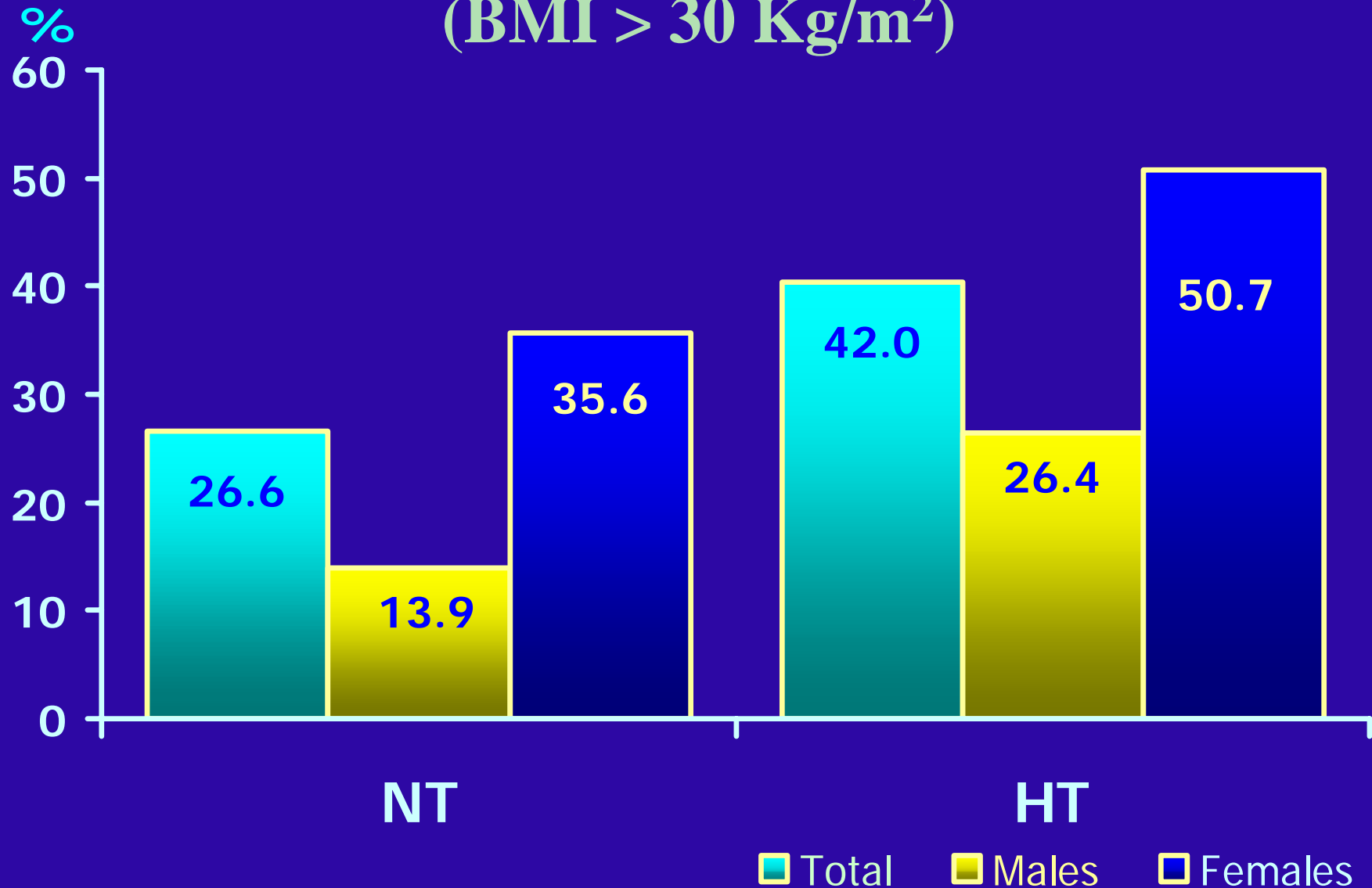
# BMI in NT & HT Egyptians



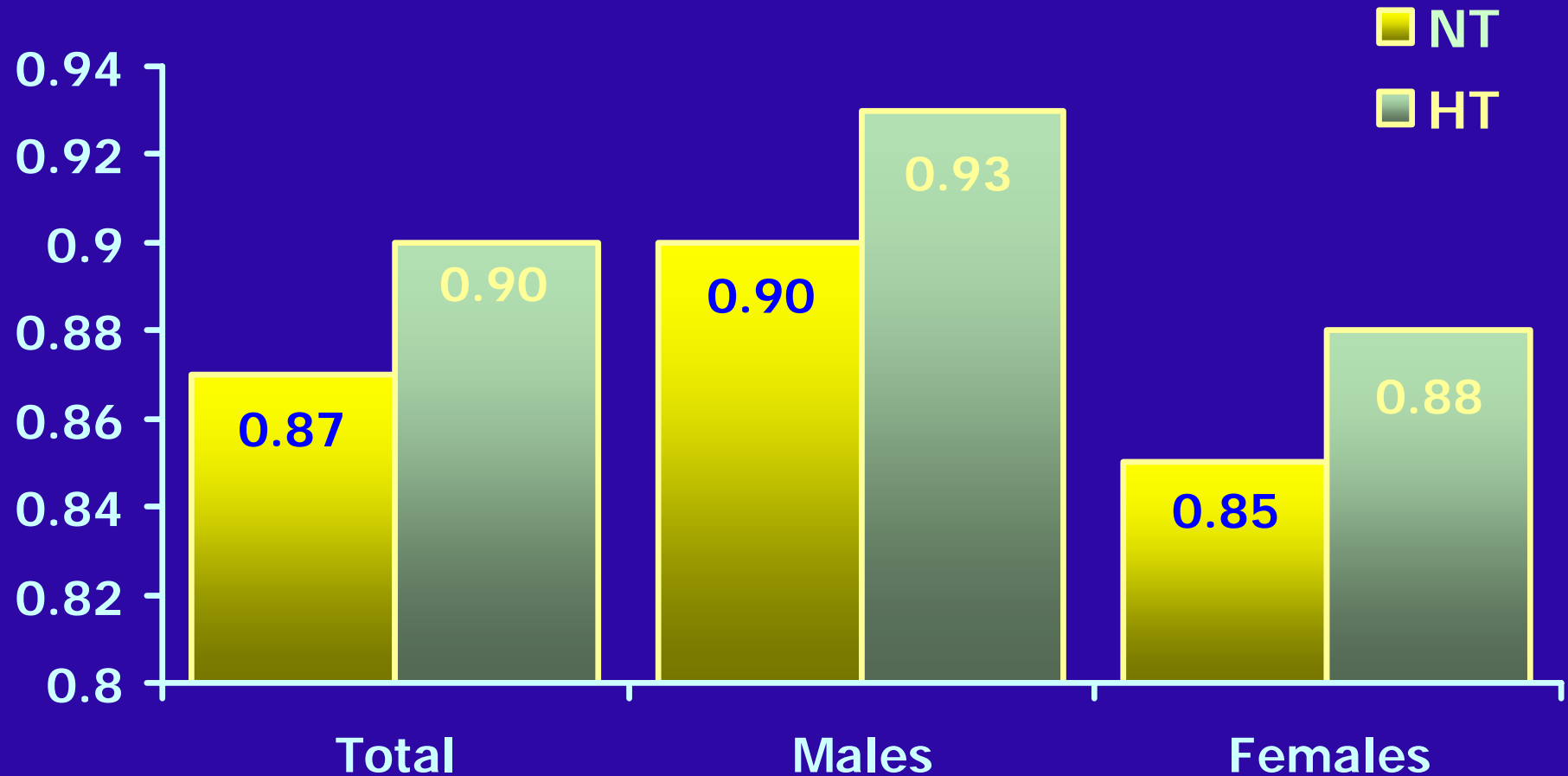
# Body Mass Index



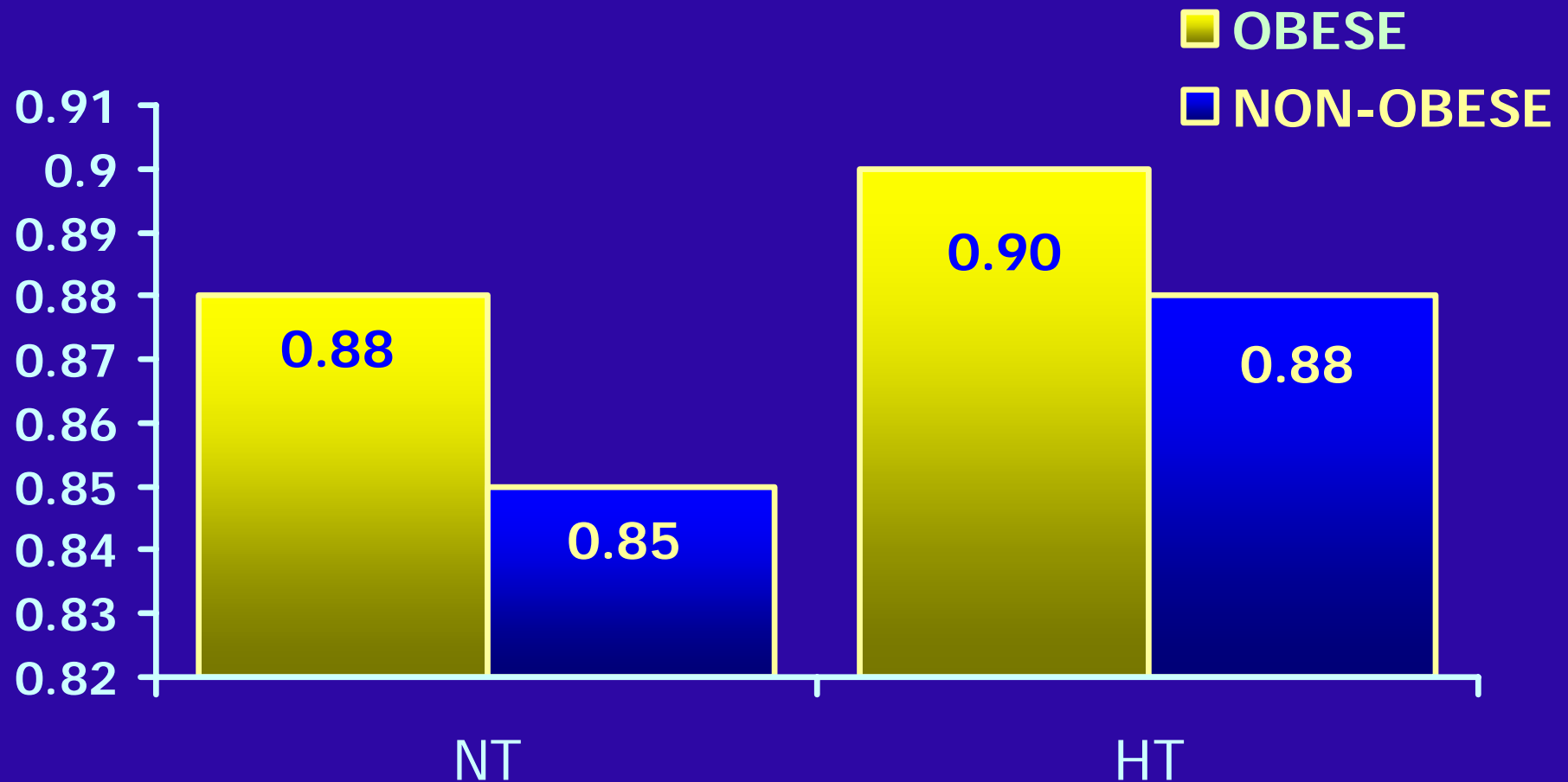
# Obesity in Egyptians (BMI > 30 Kg/m<sup>2</sup>)



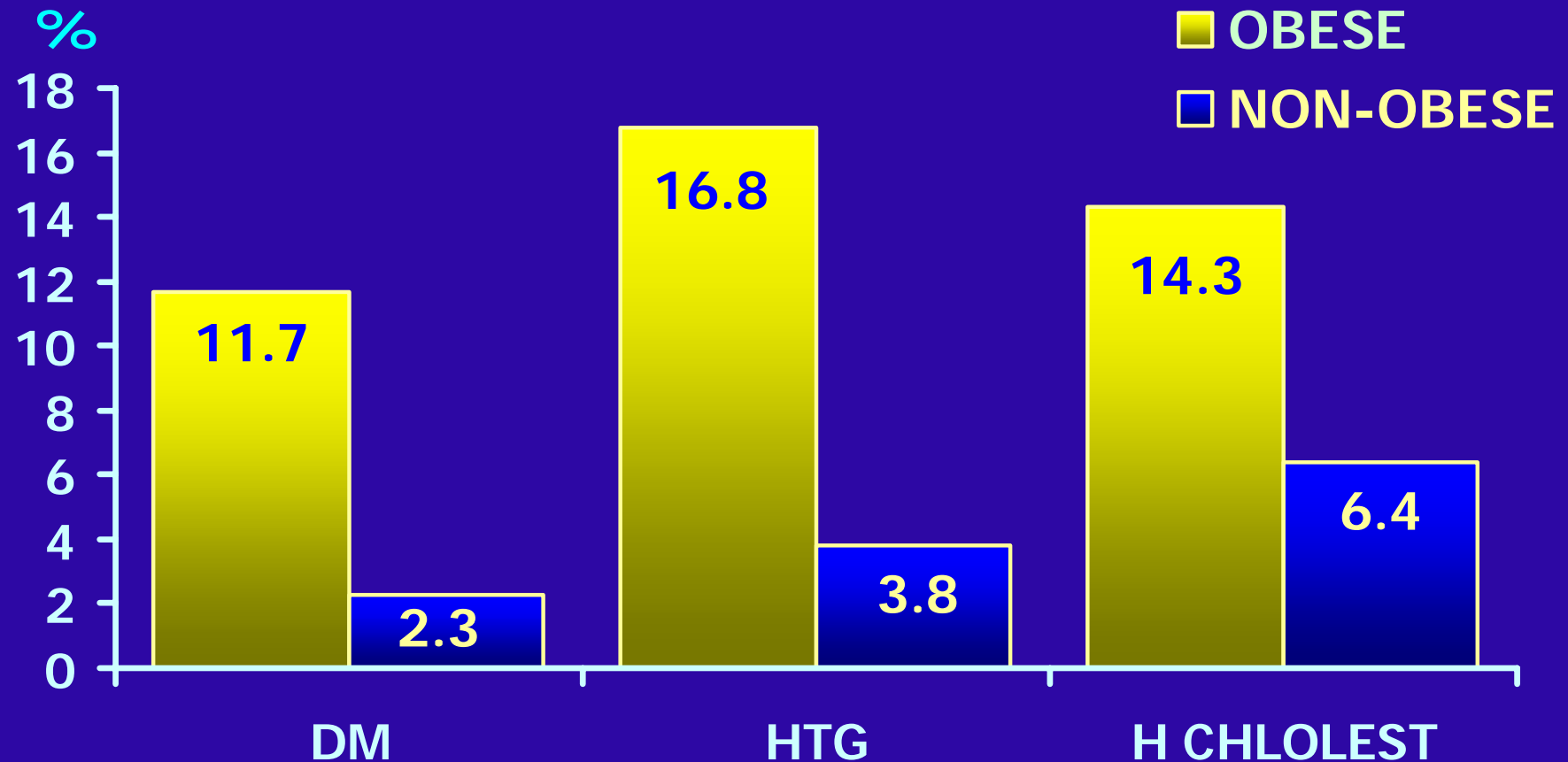
# Waist / Hip Ratio



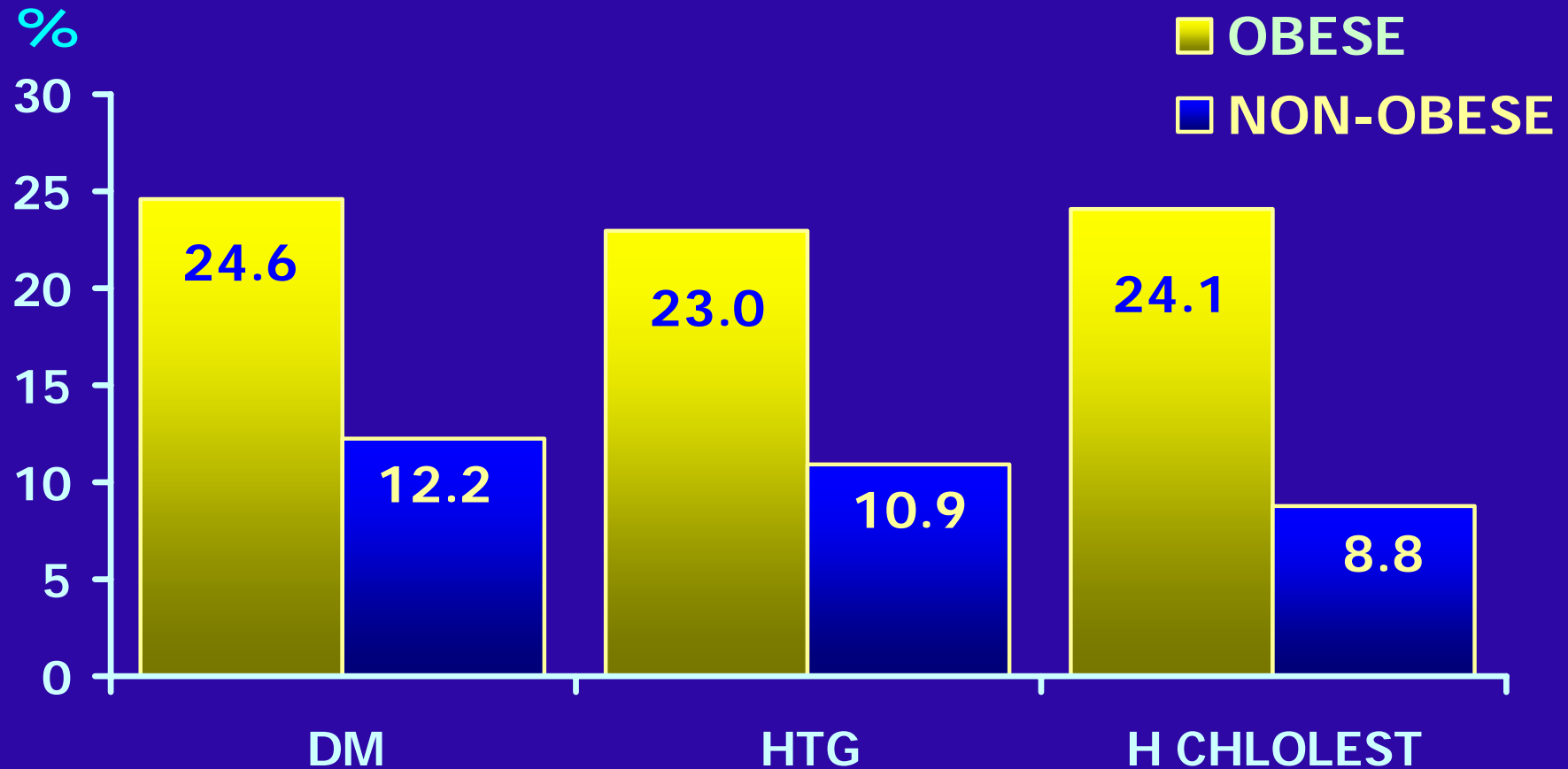
# Comparison of Obese & Non-Obese Waist / Hip Ratio



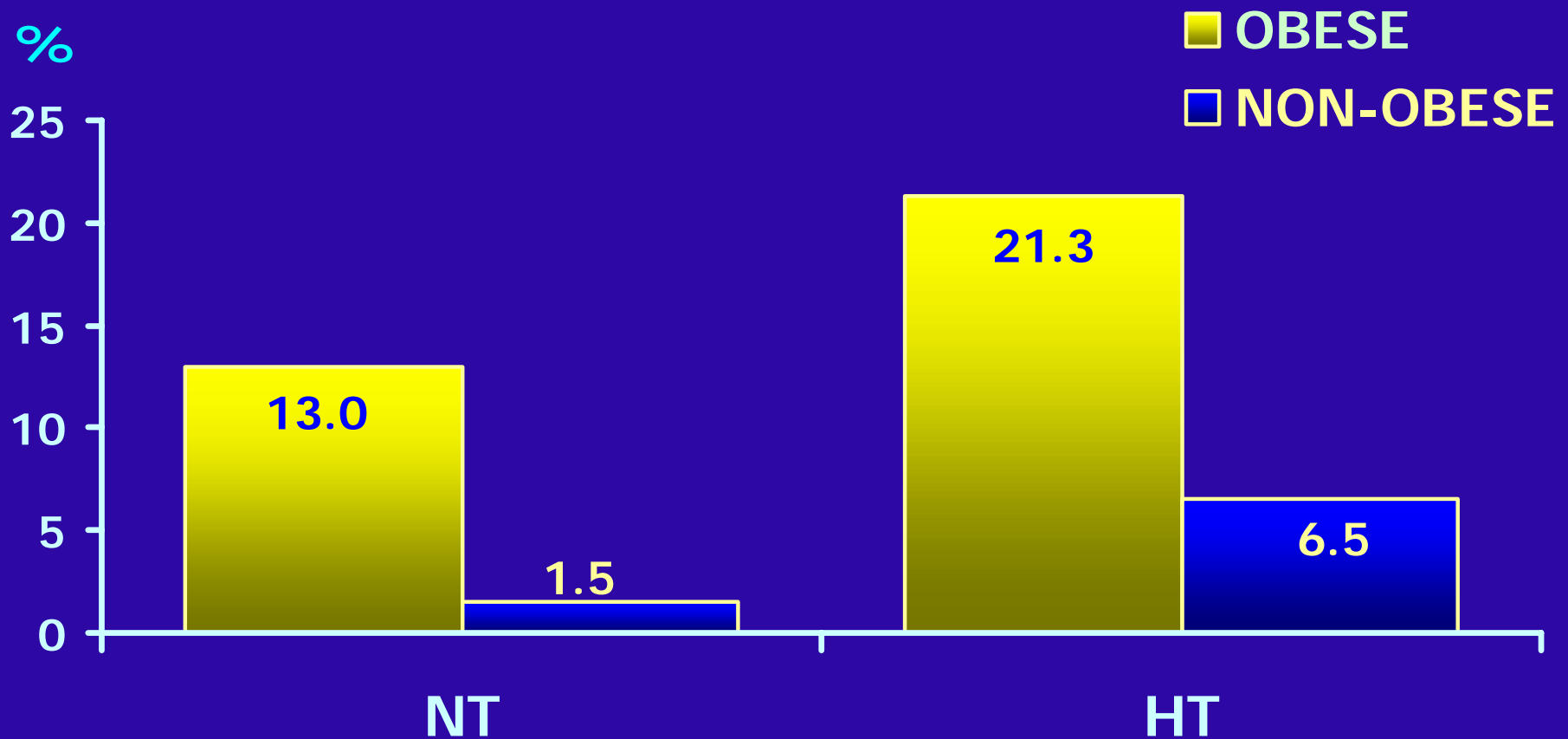
# Comparison of Obese and Non-Obese (Normotensives)



# Comparison of Obese and Non-Obese (Hypertensives)



# Comparison of Obese and Non-Obese Clinical Heart Failure



## Correlations (n: 2292)

### BMI - *Total*

	r	p
FBS	0.156	0.000
PPBS	0.138	0.000
Cholest	0.223	0.000
AGE	-0.012	NS
SBP	0.068	0.001
DBP	0.042	0.042
TG	0.176	0.000