

# Is Testosterone Really Your Sex Hormone: Sexual Practices As Defined by Testosterone Concentration

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## INTRODUCTION

- Testosterone has long been thought of as the male sexual hormone.
- Individuals with elevated levels of testosterone have been portrayed to have increased sexual promiscuity.
- Testosterone levels have been associated with different male behavioral profiles, emphasizing possible strategies for mating or parental effort.

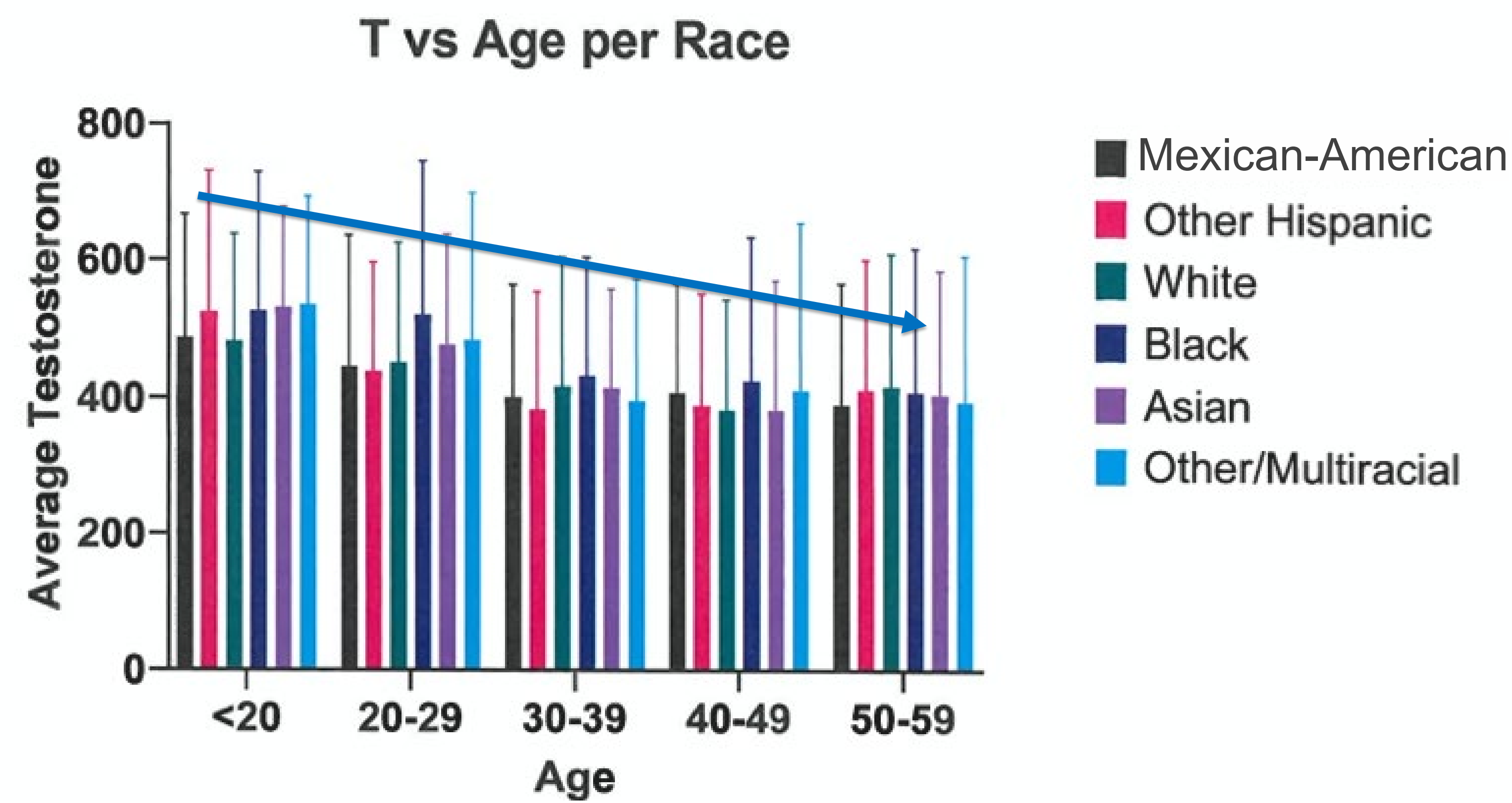
## AIM

- To evaluate age at first sexual encounter and number of lifetime female sexual partners based on testosterone levels and race.

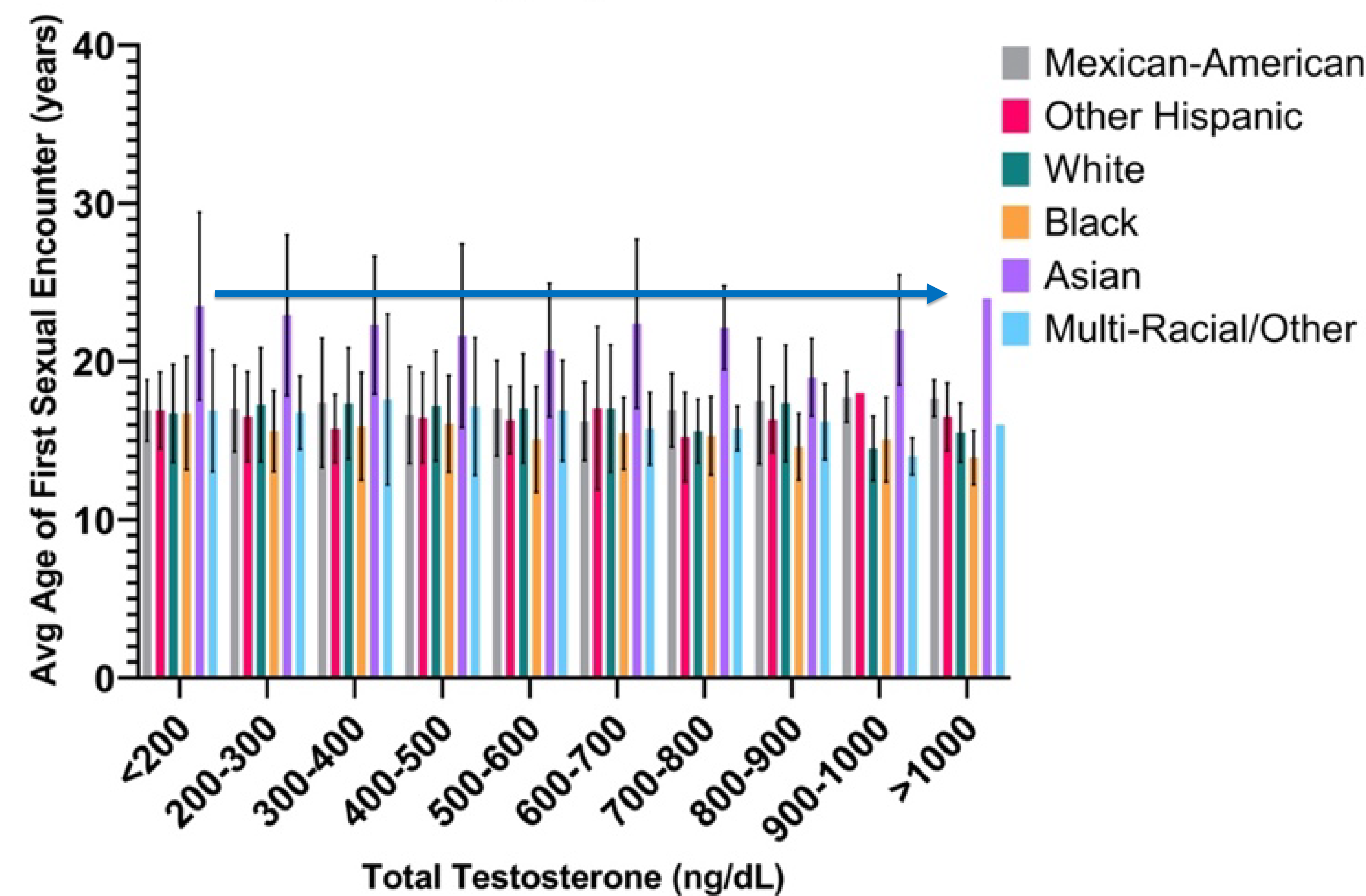
## METHODS

- The National Health and Nutrition Exam Survey (NHANES) database was searched from 2011 to 2016 for males over the age of 18 with available serum testosterone levels.
- Average testosterone values in increments of 100ng/dL were plotted against different age groups per race.
- Average age of the first sexual encounter and average number of total lifetime female sexual partners were plotted against testosterone per race.
- Men who did not identify as heterosexual were not included due to the limited sample size.
- Men with zero or greater than 300 sexual lifetime partners were excluded as not reflective of the general population.

## RESULTS



Age of First Sexual Encounter per Testosterone Range by Race



Total # of Female Sexual Partners		
Testosterone (ng/mL)	M±SD	Population Size
<300	15.1±23.7	1031.0
300-400	15.6±24.5	1040.0
400-500	16.4±25.4	877.0
500-600	15.7±25.8	546.0
600-700	17.7±28.4	310.0
700-800	17.6±22.4	156.0
800-900	16.7±22.9	84.0
900-1000	17.6±18.9	46.0
>1000	25.4±32.3	36.0

- 3,179 participants were identified and evaluated.
- **Average testosterone levels showed a decreasing trend** with age below 50-year-olds (<20 = 490.70; 20-29 = 478.78; 30-39 = 407.03; 40-49 = 401.59; p<0.0001).
- **Age of first sexual encounters did not change** when stratified among testosterone ranges (average = 17.27, p = 0.008353).
- Asian men reported their first sexual encounter at an older age (22.03, p = <0.0001).
- **Average number of total lifetime sexual partners was 16 and did not change** when stratified among all testosterone values (p<0.368).

## CONCLUSIONS

- The number of lifetime sexual partners and earlier age of sexual activity were not found to have a consistent correlation with testosterone values.
- When examined by race, Asian men were noted to have their first sexual encounter at an older age.

