



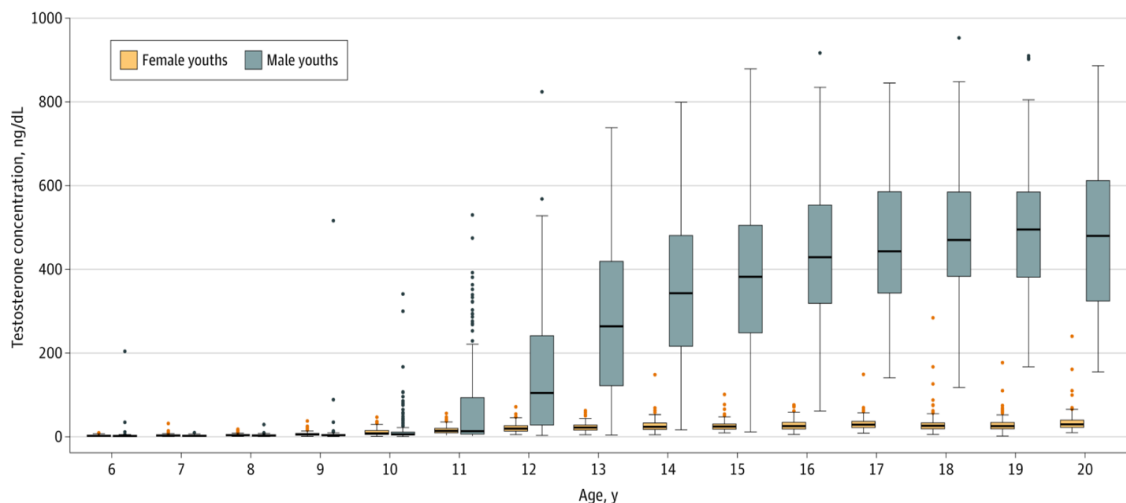
FREQUENTLY ASKED QUESTIONS – ABOUT SCIENCE AND SEX

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Q9. What do people mean when they say that there is a "male range" and a "female range" for testosterone?

A9. Both males and females produce testosterone naturally in their bodies, males primarily in the testes and females primarily in the ovaries. Starting from the onset of male puberty, generally about age 11, testes begin to produce much more testosterone than ovaries. From that point forward, the normal female range is between 0.06 and 1.68 nanomoles per liter (nmol/L), and the normal male range is between 7.7 and 29.4 nmol/L. The gap between top of the female range and the bottom of the male range is 6.02 nmol/L. Converted to ng/dL – the metric typically used in medicine in the U.S. – the normal female range is from 1.73 to 48.45 ng/dL, the normal male range is from 222 to 848 ng/dL, and the gap between the top of the female range and the bottom of the male range is 173 ng/dL.

The figure below was published this year in the Journal of the American Medical Association (JAMA). It represents data from the U.S. National Health and Nutrition Examination Survey (NHANES). It shows the increase in testosterone concentration in male youth starting from age 11 onward, as well as the gap that emerges as a result between male and female testosterone levels.



(from J. Senefeld et al., JAMA Research Letter (2020))