



Quarterly Problem

- Science Edition -

Female Models for Health Science

Do you know that according to a study from the University of Virgina, women are 73% more vulnerable than men in a car accident? In addition to the physical and biomechanical differences between women and men (such as the fundamental mechanical properties of bones, ligaments and tissues, differences in the body gravity center or hormonal variations that can affect tissue stiffness and susceptibility to injury), male parameters are taken into account in the development of cars safety equipment. In fact, until recently, there were no female dummies for car accidents testing!

However, when the first female dummies began to appear, they tended to simulate small sized women (1.5 m height and 50 kg weight). Does this correspond to the average of the world female population?

Take a look here to find out an answer: ourworldindata.org

Fortunately, great progress is being made in this field by optimizing the design of female dummies:

www.youtube.com/watch?v=dZoM8J_PYf4.

Many diseases affect mostly women and taking into account that women have been excluded from many clinical trials testing drugs and health treatments, the consequences for the health of this half of the population can be terrible.

Do you know diseases that affect mostly or exclusively women or men? Find out about them and create a table indicating their name, when they were discovered and when an effective treatment for them was found (if so has been achieved).

Brainstorm-Box

Why do you think the female figure is so scarce in some classic artworks or whythey used to have masculine traits (e.g. archaic Korai)?



De Marsyas, CC BY-SA 2.5, https://commons.wikimedia.org/w/index.php?curid=1716893

Present your findings to your classmates!

What did you find out? What are your sources? Why do you trust them? What surprises you? What might be explanations?

© Martín-Peciña, M., Abril, A.M, Quesada, A. Ariza, M.R.: University of Jaén, International Centre for STEM Education (ICSE), 2023. CC-BY-NC-SA 4.0 License granted.



