

Concept Check #10

HST 190: Introduction to Biostatistics

- The project is out-of-sync -- use ``renv::status()`` for details.

This worksheet is open-note. Take 15 minutes to consider the following questions. We will discuss as a group.

1. Fruits-and-vegetables epidemiology is a setting in which the results of experiments contradict observational studies. Observational studies suggest that people who eat a vitamin-rich diet get cancer at lower rates, “so” vitamins prevent cancer. The experiments say that vitamin supplements either don’t help or actually increase cancer risk. What might help to explain this discrepancy? (Adapted from Ch. 1 of [Freedman 2009](#))
2. An epidemiologist says that “randomization does not exclude confounding...confounding is very likely if information is collected—as it should be—on a sufficient number of baseline characteristics...” Do you agree or disagree? Discuss briefly. (Adapted from Ch. 6 of [Freedman 2009](#))

References

Freedman, David A. 2009. *Statistical Models: Theory and Practice*. Cambridge University Press.
<https://doi.org/10.1017/CBO9780511815867>.