Homework #1

Read the article “A Randomized Trial of an Intervention to Increase Fruit and Vegetable Intake in Curatively Treated Patients with Early-Stage Head and Neck Cancer” by Cartmel B, et al., Cancer Epidemiology, Biomarkers & Prevention, 2005, 14(12), 2848-2854. This can be accessed online at http://cebp.aacrjournals.org/cgi/reprint/14/12/2848.

In this homework, we will practice critical thinking and appraisal of published research. Since this homework is oriented toward written answers (rather than computations), please type your answers and write in complete sentences. If, for any of the questions below, the research article does not clearly provide the answer, say so. A very well-written research article should provide answers to all of the questions.

1. **Why?** What was the purpose of the study? What was the study hypothesis?

2. **How?** What was the study design? Was randomization required? Were data collected retrospectively or prospectively?

3. **Who?** What is the population from which the study sample was drawn? If there were any inclusion and exclusion criteria, what were they? Were those who did not participate in the study any different from those who did participate in the study? Were the groups comparable at baseline? If not, what are the confounding factors (factors for which they were not comparable)?

4. **What?** What was the independent variable of interest? Discuss the advantages and disadvantages of using self-reported fruit and vegetable intake as the outcome. What statistical analyses were used, and were they appropriate for the outcomes being measured?

5. **How big?** What were the estimated effects associated with the independent variable of interest? Were they statistically significant? Does the article discuss power, type I or II error rates, or sample size calculations? If so, what does it say?

6. **Now what?** What is the significance of the study’s findings? Could the study results be generalized to other study populations (i.e., is the study population representative)? What impact might these findings have on future head and neck cancer patients? What impact might these findings have on public health research of head and neck cancer?