
We consider how to design investigations primarily in chapter 2 with some reference to chapters 1, 4, 5, 6 and 7. We discuss how to report research in chapter 12. We review how to critique published research in 2.1. and 7.3. The following exercise allows you to apply your understanding of this material to a published report which is based on undergraduate research.

**Q1.** In the introduction the student clearly establishes the rationale for this study. What is their rationale?

**Q2.** In the method the student uses bovine liver samples as a model organism. Given the rational for the study what assumption is the student making?

**Q3.** When reading papers you often need to be a detective to find all the important details (7.3). In one part of the study the activity of glucose-6-phosphatase in the absence or presence of inhibitor was tested. How many replicates were used?

**Q4.** In Figures 6 and 7 the student uses standard deviations. Why? What other measures are sometimes used instead?

**Q5.** In Figs 6 and 7 the lines are extended to the point where they cross the *x* axis. In doing this the student is making an assumption about these data – what is this?