In a study published in a 2007 issue of the journal *Preventive Medicine*, researchers found that people who used candy cigarettes as children were more likely to become smokers as adults, compared to people who did not use candy cigarettes as children.

1. Identify the explanatory variable in this study.

2. Identify the response variable in this study.

3. Explain how you can tell that this was an observational study.

When hearing about this study, a colleague of mine said: “But isn’t the smoking status of the person’s parents a confounding variable here?”

4. Describe what it means to be a confounding variable and to provide an alternative to a cause/effect explanation in this context. Be sure to indicate how this potential confounding variable could be related both to the explanatory variable and the response variable.