**Exercise 6C.1**

The Evans county heart disease study assessed the association between endogenous catecholamine level (CAT) and the subsequent seven-year incidence of coronary heart disease (CHD) in a cohort of 609 white males.

| | CHD | No CHD |
|---|---|---|
| High CAT | 27 | 95 |
| Low CAT | 44 | 443 |

(a) Estimate the risk difference for CHD for people with high CAT compared to people with low CAT.

(b) Compute a 95% confidence interval for the true risk difference.

## Exercise 6C.2

The Evans county heart disease study assessed the association between endogenous catecholamine level (CAT) and the subsequent seven-year incidence of coronary heart disease (CHD) in a cohort of 609 white males.

| | CHD | No CHD |
|---|---|---|
| High CAT | 27 | 95 |
| Low CAT | 44 | 443 |

(a) Estimate the relative risk of CHD for people with high CAT compared to people with low CAT, and interpret this quantity.

(b) Compute a 95% confidence interval for the true relative risk.

## Exercise 6C.3

The Evans county heart disease study assessed the association between endogenous catecholamine level (CAT) and the subsequent seven-year incidence of coronary heart disease (CHD) in a cohort of 609 white males.

| | CHD | No CHD |
|---|---|---|
| High CAT | 27 | 95 |
| Low CAT | 44 | 443 |

(a) Estimate the odds ratio for CHD for people with high CAT compared to people with low CAT, and interpret this quantity.

(b) Compute a 95% confidence interval for the true odds ratio.

## Exercise 6C.4

A study evaluated the use of ecinacea for upper respiratory infections (URIs) in children. Each child with a URI was randomized to receive either echinacea or placebo. One outcome recorded was the presence or absence of adverse events. The data are below.

| | Placebo | Echinacea |
|---|---|---|
| Adverse Event | 146 | 152 |
| No Adverse Event | 224 | 185 |

(a) Estimate and interpret each of the three measures of association between presence of side effects and receiving treatment with echinacea (compared to placebo).

(b) What type of hypothesis test would you do to test whether there is a significant association between taking echinacea and having adverse events?