



R Code for Examples in the book  
*"Statistics: The Art and Science of Learning from Data"*  
 by Agresti, Franklin and Klingenberg, 5<sup>th</sup> edition

## Chapter 11

### Example 5: Headache from Flu Vaccine – Testing Homogeneity

#### Reading in data

```
data <- read.csv(file='https://img1.wsimg.com/blobby/go/bbca5dba-4947-4587-
b40a-db346c01b1b3/downloads/HeadacheRaw.csv?ver=1657293808775')
attach(data) # so we can refer to variable names
```

#### To make a table from the raw data

```
mytable <- table(drug, outcome)
mytable # viewing the table
```

	outcome		
drug	mild	moderate	severe
active	486	113	16
placebo	355	80	5

#### To perform a chi-squared test for homogeneity

```
chisq.test(mytable)
```

```
##
## Pearson's Chi-squared test
##
## data: mytable
## X-squared = 2.8601, df = 2, p-value = 0.2393
```