

## **Mosaic Plots – Key**

### **1. Body image**

- (a) 560 of the 855 respondents who felt that their body image was about right, or a proportion of 0.655, were female.
- (b) 560 of the 760 females, or 73.7%, felt that their body image was about right.
- (c) Based upon the mosaic plot, there is an association between perceived body image and gender. Males are about 4 times as likely as females to perceive that they are underweight. Males are also less likely to perceive that they are overweight, however, the overwhelming majority of both genders perceive that their body image is about right.

### **2. Python eggs**

- (a) Seventy-five of the 129 eggs that hatched, or a proportion of 0.581, were randomly assigned to hot water.
- (b) Seventy-five of the 104 eggs that were randomly assigned to hot water, or 72.1%, hatched.
- (c) Based upon the mosaic plot, there is an association between water temperature and whether the eggs hatched or not. The python eggs were least likely to hatch in cold water (59.3% hatched) and most likely to hatch in hot water (72.1% hatched), so the chance of hatching increased as the water temperature increased.