## Week 3 Descriptive statistics

## hr130

The recorded heart rate (measured in beats per minute) of 130 participants in a study.

- 1. Plot a histogram of the data.
- 2. Compute the sample mean and sample variance of the heart rate.

## hrstudy

Data recorded during a study of various factors influencing heart rates. The study has 100 participants, with six variables recorded for each participant.

- 1. Assign appropriate levels of measurement to each variable.
- 2. Draw a pie chart to illustrate the proportion of participants in each diet category.
- 3. Draw a histogram to illustrate the age distribution of the participants.
- 4. Draw a bar chart to illustrate the relative proportion of participants in each diet.
- 5. Draw a clustered bar chart to group the participants according to diet and gender.
- 6. Draw a box-plot of the age distribution in each diet category and make a note of any outliers.
- 7. Suggest a way of dealing with the outlying points.
- 8. Speculate on the sampling method used to obtain the data.