Introduction to statistics 02402Project 1 - BMI survey

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Descriptive analysis

1 a) - Data description and introduction

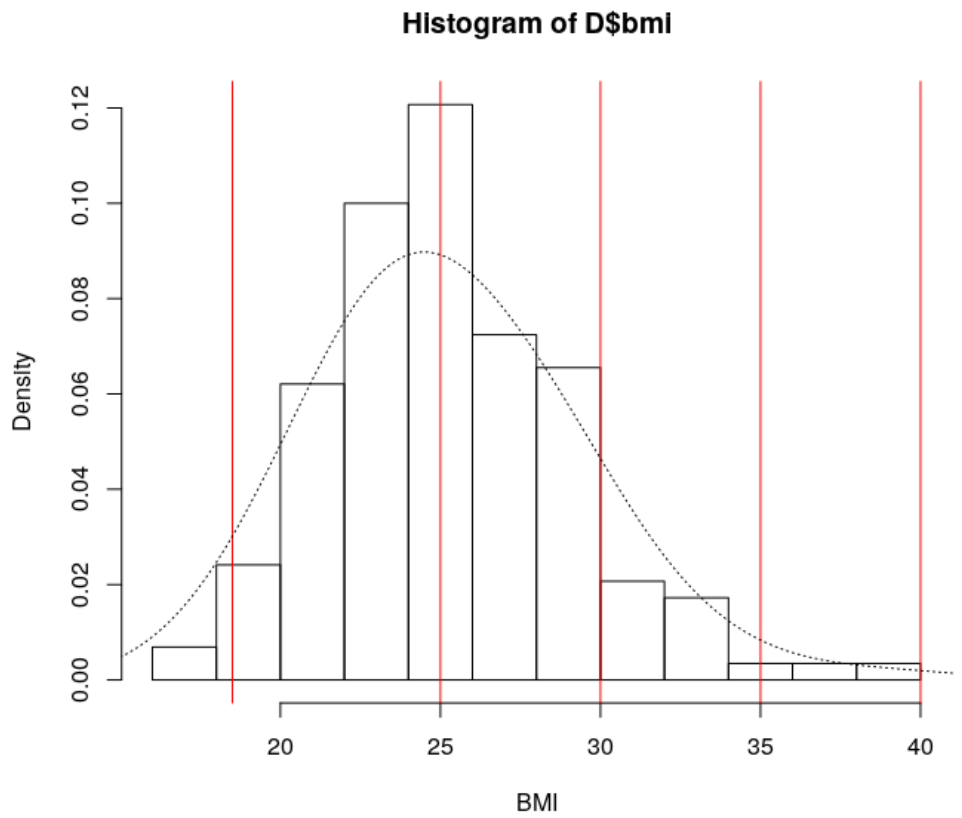
Body Mass Index or BMI is a formula to describe whether a person is overweight or not. It only considers height and weight, not things such as body fat. The formula is simply:

$$BMI = \frac{weight(kg)}{height(cm)^2}$$

The data we are given is a number of measurements done on 145 persons. The information given is: height, weight, gender, urbanity and fastfood. Height is in cm, weight in kg, gender as 0(female) or 1(male), urbanity ranging from 1 to 5 given as the population of the place where the person lives, 0 being outside urban areas and 5 being in a city with more than 100000 inhabitant. Fastfood is given as how often the person eats fastfood given in days per year. Of the given variables, height, weight and fastfood are quantitative while gender and urbanity are categorized variables. We are given 145 observations and there are no missing values.

2 b) - Density histogram

The figure below shows a density histogram of the BMI observations. The red lines separate each of the BMI categories and the dotted line is a density estimate derived from the given data.



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