

Exer 3.1

[N/N114b]

Here is a small table of percentiles of typical daily calorie consumption of college students.

Percentile	Calories
0	1400
5	1800
10	2000
25	2400
50	2600
75	2900
90	3100
95	3300
100	3700

1. What is the 50%-coverage interval?

Lower Boundary 1800 1900 2000 2200 2400 2500 2600 Exer 3.1-1

Upper Boundary 2600 2750 2900 3000 3100 3200 3500 Exer 3.1-2

2. What percentage of cases lie between 2900 and 3300?

10 20 25 30 40 50 60 70 80 90 95 Exer 3.1-3

3. What is the percentile that marks the upper end of the 95%-coverage interval?

75 90 92.5 95 97.5 100 Exer 3.1-4

Estimate the corresponding calorie value from the table.

2900 3000 3100 3300 3500 3700 Exer 3.1-5

4. Using the 1.5 IQR rule-of-thumb for identifying an outlier, what would be the threshold for identifying a low calorie consumption as an outlier?

1450 1500 1650 1750 1800 2000 Exer 3.1-6