

5+ a Day

As part of a study on nutrition, a teacher asked her class to record everything they ate on a particular day. When they submitted the information anonymously, the class then looked through the data to find how many servings of fruit and/or vegetables each student in the class had consumed that day. The results were:

Servings of f+v	Tally	Frequency
0		1
1		3
2	 	5
3	 	5
4		4
5		3
6		2
7		1
8		0
		24

What is the chance, if any two students in the class are picked at random, that they both ate their 5+ servings of fruit and/or vegetables that day?

1. What proportion of students had 5+ fruit and/or veges that day?
2. What is the probability that a student chosen at random from this class had 5+ fruit and/or veges that day?
3. Model this probability. Carry out at least 20 trials.
4. Use the results of your model (simulation) to answer the question: What is the chance, if any two students in the class are picked at random, that they both ate their 5+ servings of fruit and/or vegetables that day?