

2004bQ2

(a) This was a convenience sample and it is possible that the students who arrive early ("first 100 students") may have opinions about food quality which are different than students who arrive later, producing a biased result.

This bias could be avoided by selecting the 100 students in a simple random sample, for example by using a random process to select 100 student ID numbers from a list of all student ID numbers of students living in the dorm.

(b) There are two problems with the question wording:

"Many students believe that the food served in the dining hall needs improvement" is leading students to answer "yes" because students are led to believe "yes" is already the most popular answer.

"... even though that would increase the cost of the meal plan?" is asserting that food quality cannot be improved without the undesirable effect of a cost increase, leading students to choose "no".

A better wording would be more neutral, such as ...

"Do you think that the quality of the food served here needs improvement?"