

Marks

Question 18 (4 marks)

Investigators gathered data on a group of 100 smokers for a period of 10 years. During this time 12 people in the group developed lung cancer, two died in traffic accidents, and three died of heart attacks. The investigators used this data to state that smoking caused lung cancer.

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Describe how this investigation could be improved.

Use a much larger sample size, and include people from mixed sex, religion, race etc. Taking the investigation over a 10 year period was good, but a number of sample groups over many years would improve the investigation. Other factors such as diet, lifestyle etc would need to be considered to determine other possible causes of lung cancer. The sample group would need to include both smokers + non-smokers so comparisons could be drawn.