

Premedical course

MINITAB practical 4

1. The following data refer to the height (in metres) and the haemoglobin (in g/100 ml) of a group of 30 medical students. Plot the data suitably and discuss the assertion that there is a relationship between haemoglobin and height.

<i>Males</i>		<i>Females</i>	
Height (m)	Hb (g/100 ml)	Height (m)	Hb (g/100 ml)
1.705	16.6	1.63	14.2
1.725	15.8	1.65	13.5
1.73	17.8	1.66	13.2
1.74	15.8	1.66	13.7
1.745	16.0	1.66	15.8
1.75	15.9	1.665	14.4
1.765	17.0	1.68	11.3
1.78	16.4	1.695	13.6
1.78	16.5	1.7	14.2
1.785	16.2	1.7	14.4
1.795	16.3	1.71	14.6
1.84	16.5	1.71	14.8
1.86	16.7	1.725	13.4
1.88	15.2	1.77	12.9
1.93	15.3	1.78	13.2

2. A case-control study compared 100 men with lung cancer to 100 age-matched controls (ie men without lung cancer), to see whether there were differences in the prevalence of 'risk factors' between the groups. The following data were obtained:

	Asthmatics	Non- asthmatics	Total
Cancer patients	7	93	100
Controls	19	81	100
Total	26	174	200

Suggest reasons why this apparent substantial reduction of lung-cancer prevalence in asthmatics could be spurious. Give plausible figures to support your argument.

The solution to this practical must be handed in at the first timetabled session in Semester 2.