Page 182

- Complete Activity 6.3

  Questions within
  1abc, 2b, 3abcd

All of the procedure and
Understanding Concepts #3,
Making Connections #4

Lets look at

Page 182-183
Procedure Questions

1 Study the pie chart in **Figure 1** that shows the risk factors associated with cancer.

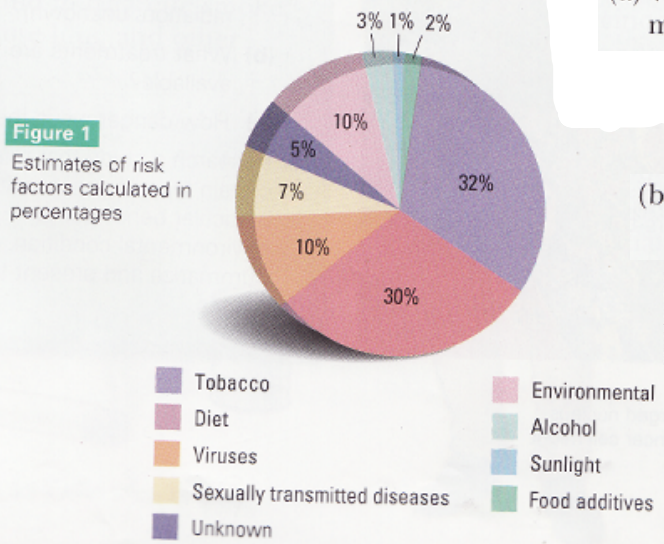


Figure 1
Estimates of risk factors calculated in percentages

(a) Which factor is responsible for the most cancer cases?

Tobacco

(b) Which of the cancer causes could be reduced by changes in lifestyle?

Lung cancer can be reduced by not smoking. Avoiding the sun can reduce skin cancer. A healthy diet can prevent colon cancer.

(c) List at least three lifestyle changes that could reduce cancer rates.

Quitting smoking would reduce lung cancer, reducing the amount of processed foods would help reduce colon cancer, reducing exposure to sunlight would reduce skin cancer. In addition, eliminating STDs by altering sexual activities would help reduce cancers associated with the reproductive system.

2 (7C) Copy a table similar to the one below in your notebook and complete the calculations for survival rates.

Type of cancer	New cases	After five years	
		Deaths	Survival rate
lung	19 600	16 600	15%
breast	17 000	5400	68%
colon	16 300	6300	61%
prostate	14 300	4100	71
bladder	4800	1350	72%
kidney	3700	1350	64%
leukemia	3200	1110	65%

$\frac{16600}{19600} \times 100$

$0.846 \times 100 \approx 85\%$

100 - Death rate

100 - 85 = 15%

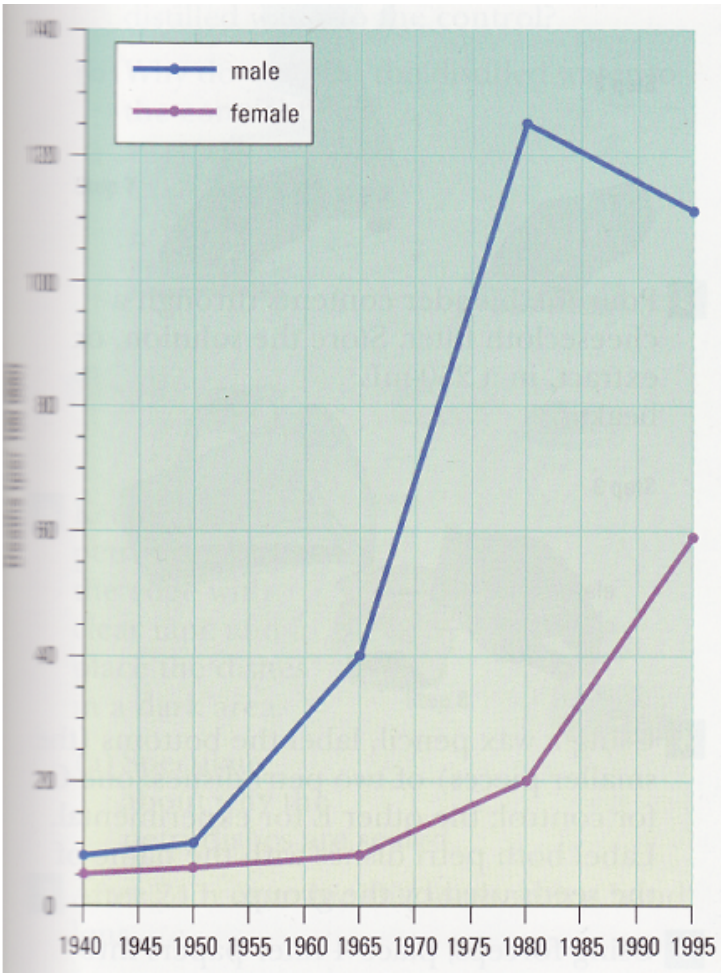
$\frac{4100}{14300} = 29\%$

28% Death

(b) Based on the data, which type of cancer is most deadly?

Lung cancer is the most deadly according to the data

Lung cancer is the second leading cause of death in both men and women in Canada. It is also a disease that can be largely prevented. Over a period of time, controllable environmental factors may cause lung cells to develop one or more of the various forms of lung cancer. Use the following questions to help you interpret the information presented in the graph in **Figure 2**:



(a) In the early 1920s, shortly after World War I, smoking became fashionable for men. Hypothesize about why lung cancer rates did not increase until the 1950s.

(a) It takes time for the carcinogens in the cigarettes to affect the cells.

(b) Suggest a reason why no comparable increase in lung cancer in women occurred during the same period. Explain.

It was not fashionable for women to smoke or perhaps they did not have access to the necessary money. Fewer women began smoking in the 1920s, or perhaps they did not access to the necessary money.

(c) Using what you know or can find out about the current smoking habits of Canadians, predict trends in lung cancer over the next 10 to 20 years.

There has been a decrease in the number of Canadians smoking. This should eventually lower the incidence of lung cancer.

(d) Compare the trends for males and females between 1980 and 1995.

The number of males affected by lung cancer is beginning to decline; however, the incidence for females continues to rise.

#3

1 cig = 20mg

10 cig = 200mg tar / day

X 7

1400mg per week

X0.75

1050 mg absorbed Tar

Attachments

The_Clone_Age.asf