Chapter 10

Diseases and immunity

10.1 Diseases and immunity

01. 0610_m22_qp_22 Q: 19

Which statement about passive immunity is correct?

A Antibodies are acquired.

B It gives a long-term effect.

C It is inherited.

D Memory cells are produced.

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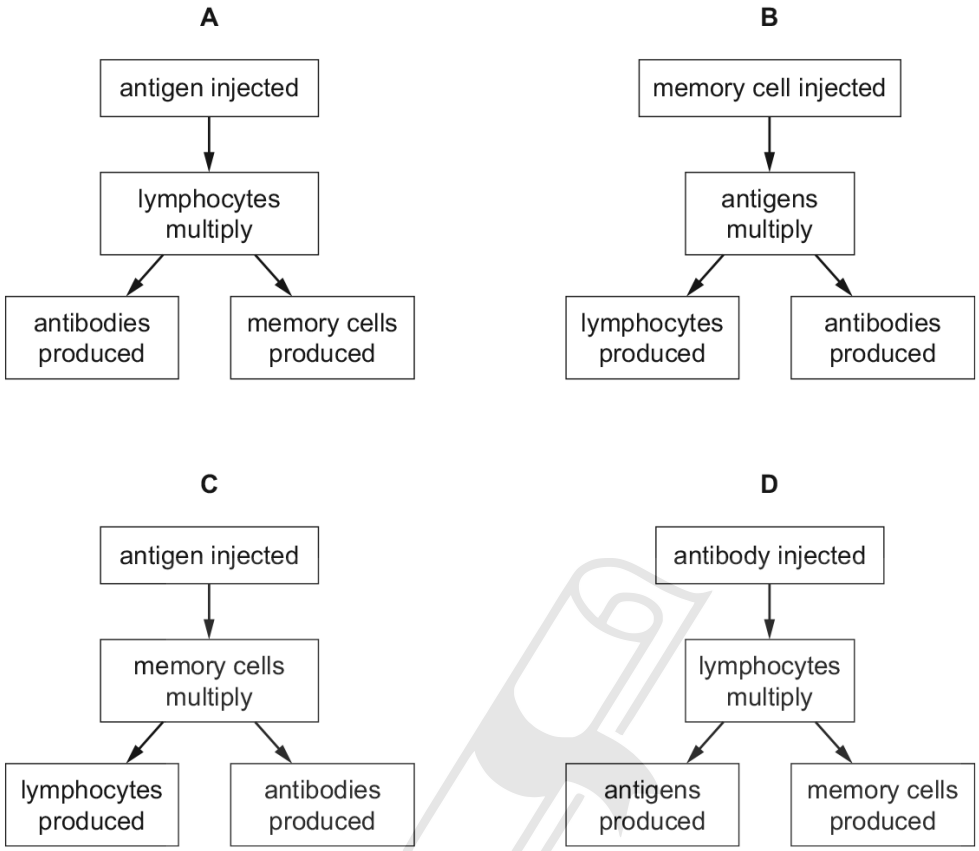
02. 0610_m21_qp_22 Q: 21

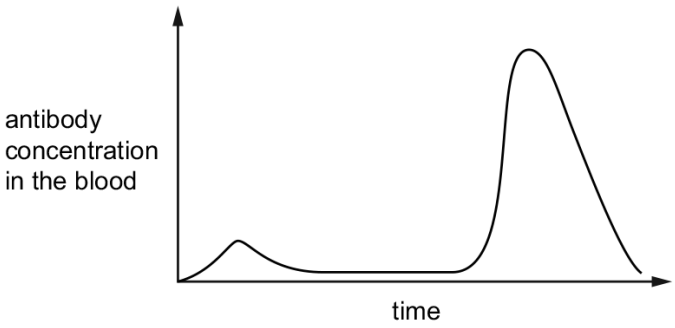
Which diagram shows how a vaccination can lead to long-term immunity?



03. 0610_s21_qp_21 Q: 21

A child is vaccinated against measles. After a period of time the child is infected with the measles virus.

The graph shows the concentration of measles antibodies in the child's bloodstream during this time.



Which statement is consistent with the information in the graph?

A After the vaccination, the child produced memory cells.

B The child had passive immunity against measles.

C The measles virus contains antibodies.

D The vaccination failed to protect the child against measles.

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04. 0610_w21_qp_21 Q: 21

Some features that help to defend the body against pathogens are listed.

1 mucus

2 skin

3 stomach acid

4 phagocytosis

Which features can prevent pathogens entering body tissues?

A 1, 2, 3 and 4

B 1, 2 and 3 only

C 2 and 3 only

D 4 only

---

05. 0610_m20_qp_22 Q: 21

The antibodies that give immunity to a disease can be acquired in the following different ways.

1 feeding on breast milk

2 infection by disease

3 vaccination

Which give active immunity?

A 1 and 2 only **B** 1 and 3 only **C** 2 and 3 only **D** 1, 2 and 3

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06. 0610_m20_qp_22 Q: 31

What is a correct statement about lymphocytes?

A Lymphocytes engulf pathogens.

B Lymphocyte numbers can be reduced when a person is infected with HIV.

C Lymphocytes produce antigens.

D Lymphocytes transport oxygen to different parts of the body.

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07. 0610_p20_qp_20 Q: 15

These actions may be important in controlling the spread of disease.

1 washing hands after going to the toilet

2 disposing of waste frequently

3 using separate cutting boards for meat and salad

4 disposing of raw sewage into a river

Which would help control the spread of disease?

A 1, 2, 3 and 4

B 1, 2 and 3 only

C 2 and 3 only

D 4 only

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08. 0610_p20_qp_20 Q: 16

New-born babies have passive immunity.

Why is this only temporary?

A No memory cells are produced in the baby.

B The antibodies are insufficient in number.

C The antibodies only act in the mother.

D The immunity is not inherited.

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09. 0610_s20_qp_22 Q: 19

The following are statements about immunity.

1 The transfer of antibodies from mother to baby in breast milk is an example of passive immunity.

2 Passive immunity results in long term immunity because of the production of memory cells.

3 Active immunity is gained after vaccination with antigens.

Which statements are correct?

A 1, 2 and 3 **B** 1 and 2 only **C** 1 and 3 only **D** 2 and 3 only

---

10. 0610_s20_qp_23 Q: 19

Vaccinations can be given to gain active immunity.

Which statement about this type of vaccination is correct?

A The vaccination contains antibodies.

B The vaccination must contain harmful pathogens.

C The vaccination triggers antibody production in the body.

D The vaccination triggers antigen production in the body.

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11. 0610_w20_qp_21 Q: 19

The sequence of amino acids in antibodies enables them to complete which function?

A bind to a specific antigen

B bind to all pathogens

C perform phagocytosis

D confer passive immunity for all diseases

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12. 0610_w20_qp_22 Q: 19

A patient was injected with antibodies after being bitten by a poisonous snake. The patient recovered and survived.

What describes the effect in the patient's body?

	active immunity	passive immunity	memory cells produced
A	✓	✗	✓
B	✓	✗	✗
C	✗	✓	✓
D	✗	✓	✗

key
✓ = yes
✗ = no

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13. 0610_w20_qp_23 Q: 19

A baby acquires protection from pathogens from its mother's breast milk.

What is this protection called?

A active immunity

B immunisation

C vaccination

D passive immunity

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14. 0610_m19_qp_22 Q: 20

The body has different types of defences against pathogens.

1 antibodies

2 hairs in the nose

3 mucus

4 skin

Which defences help to prevent pathogens reaching the alveoli when breathing in?

A 1, 2, and 3 **B** 2, 3, and 4 **C** 2 and 3 only **D** 2 only

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15. 0610_s19_qp_22 Q: 20

Which disease is transmissible?

A cholera

B coronary heart disease

C lung cancer

D scurvy

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16. 0610_w19_qp_21 Q: 18

Which row describes the features of passive immunity?

	antibodies made	involves memory cells	effective period
A	no	no	short term
B	no	yes	short term
C	yes	no	long term
D	yes	yes	long term

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17. 0610_m18_qp_22 Q: 15

The body has defences to protect itself from diseases.

What is a mechanical barrier to diseases?

A hairs in the nose

B plasma

C stomach acid

D white blood cells

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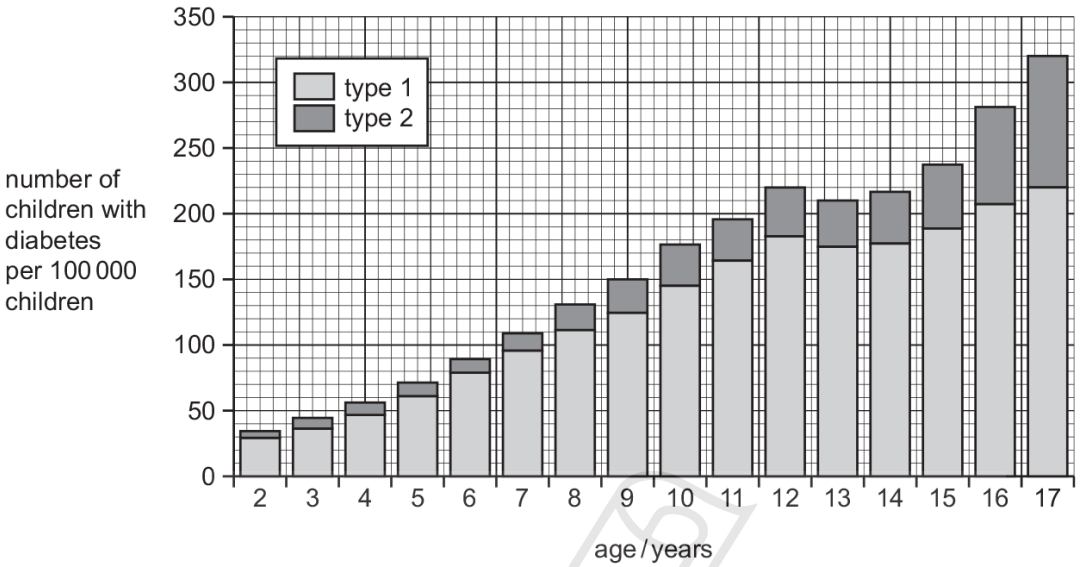
18. 0610_m18_qp_22 Q: 21

There are two types of diabetes, type 1 and type 2.

The graph shows the number of children with each type of diabetes per 100 000 children, in one country.



Which conclusion can be made from the graph?

A 1.5% of 9-year-olds have diabetes.

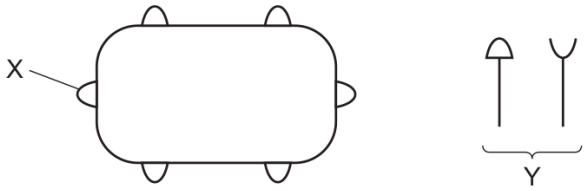
B 31.3% of 17-year-olds with diabetes have type 2 diabetes.

C There are 10 more 12-year-olds in the country with diabetes than 13-year-olds.

D Type 2 diabetes will cause more health problems than type 1.

19. 0610_w18_qp_21 Q: 19

The diagram with the structure labelled X shows a bacterium with proteins on its surface. The diagram labelled Y shows proteins made by the human body.



Which row shows the correct combination for destroying the bacterium?

	name of X	name of Y	correct shape of Y
A	antigen	antibody	
B	antibody	antigen	
C	antigen	antibody	
D	antibody	antigen	

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20. 0610_m17_qp_22 Q: 17

What is a common feature of both active and passive immunity?

A They are acquired by vaccination.

B They are always short-term.

C They involve the activity of memory cells.

D They involve antibodies.

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21. 0610_s17_qp_21 Q: 19

What is a disease-causing organism called?

A antibody

B host

C pathogen

D phagocyte

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22. 0610_s17_qp_23 Q: 19

Which statement about antibodies is correct?

A Breast milk contains antibodies and protects babies by giving them active immunity.

B Injections of antibodies give passive immunity against the disease scurvy.

C Insect repellents contain antibodies and give mosquitoes passive immunity against malaria.

D Injections of antibodies give passive immunity against some pathogens.

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23. 0610_w17_qp_21 Q: 19

Which are both chemical barriers to the transmission of pathogens?

A mucus and stomach acid

B mucus and white blood cells

C skin and hairs in the nose

D skin and stomach acid

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24. 0610_w17_qp_21 Q: 27

The immune system recognises pathogens and attacks them.

Which feature of pathogens triggers this response?

A antibodies

B antibiotics

C antigens

D memory cells

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25. 0610_w17_qp_22 Q: 19

Which is a mechanical barrier to pathogens?

A acid in the stomach

B hairs in the nose

C mucus in the trachea

D phagocytosis in the blood

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26. 0610_m16_qp_22 Q: 21

What happens when a child is vaccinated against tuberculosis?

	type of immunity	production of memory cells
A	active	no
B	active	yes
C	passive	no
D	passive	yes

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27. 0610_p16_qp_20 Q: 15

These actions may be important in controlling the spread of disease.

1 washing hands after going to the toilet

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Which would help control the spread of disease?

A 1, 2, 3 and 4

B 1, 2 and 3 only

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D 4 only

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28. 0610_p16_qp_20 Q: 16

New-born babies have passive immunity.

Why is this only temporary?

A No memory cells are produced in the baby.

B The antibodies are insufficient in number.

C The antibodies only act in the mother.

D The immunity is not inherited.

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29. 0610_s16_qp_21 Q: 20

Which part of a pathogen is recognised by the immune system?

A active site

B antibiotic

C antibody

D antigen

---

30. 0610_s16_qp_22 Q: 17

The antibodies that give immunity to a disease can be acquired in the following different ways.

1 feeding on breast milk

2 infection by disease

3 vaccination

Which give active immunity?

A 1 and 2 only

B 1 and 3 only

C 2 and 3 only

D 1, 2 and 3

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31. 0610_s16_qp_23 Q: 19

Which row describes the features of passive immunity?

	antibodies made	involves memory cells	effective period
A	no	no	short term
B	no	yes	short term
C	yes	no	long term
D	yes	yes	long term

---

32. 0610_w16_qp_21 Q: 12

Which diseases are caused by a lack of iron and a lack of vitamin D?

	lack of iron	lack of vitamin D
A	anaemia	soft bones
B	kwashiorkor	anaemia
C	kwashiorkor	soft bones
D	soft bones	anaemia

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33. 0610_w16_qp_21 Q: 21

What is **not** a consequence of vaccination?

A Antigens trigger an immune response.

B Antibodies lock onto antigens.

C Memory cells are produced.

D Phagocytes produce antibodies.

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34. 0610_w16_qp_22 Q: 22

How does passive immunity differ from active immunity? In passive immunity

A antibodies are produced by lymphocytes.

B immunity depends on vaccination.

C immunity is specific to one type of antigen.

D no memory cells are produced.

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35. 0610_w16_qp_23 Q: 21

What are disease-causing organisms?

A antibodies

B pathogens

C phagocytes

D vaccines

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36. 0610_w16_qp_23 Q: 22

Which row describes active immunity?

	depends on phagocytes	memory cells are produced
A	✓	✓
B	✓	✗
C	✗	✓
D	✗	✗

SN	Paper	Q. No.	Answer
01	0610_m22_qp_22	19	A
02	0610_m21_qp_22	21	A
03	0610_s21_qp_21	21	A
04	0610_w21_qp_21	21	B
05	0610_m20_qp_22	21	C
06	0610_m20_qp_22	31	B
07	0610_p20_qp_20	15	B
08	0610_p20_qp_20	16	A
09	0610_s20_qp_22	19	C
10	0610_s20_qp_23	19	C
11	0610_w20_qp_21	19	A
12	0610_w20_qp_22	19	D
13	0610_w20_qp_23	19	D
14	0610_m19_qp_22	20	C
15	0610_s19_qp_22	20	A
16	0610_w19_qp_21	18	A
17	0610_m18_qp_22	15	A
18	0610_m18_qp_22	21	B
19	0610_w18_qp_21	19	A
20	0610_m17_qp_22	17	D
21	0610_s17_qp_21	19	C
22	0610_s17_qp_23	19	D
23	0610_w17_qp_21	19	A
24	0610_w17_qp_21	27	C
25	0610_w17_qp_22	19	B
26	0610_m16_qp_22	21	B
27	0610_p16_qp_20	15	B
28	0610_p16_qp_20	16	A
29	0610_s16_qp_21	20	D
30	0610_s16_qp_22	17	C
31	0610_s16_qp_23	19	A
32	0610_w16_qp_21	12	A
33	0610_w16_qp_21	21	D
34	0610_w16_qp_22	22	D
35	0610_w16_qp_23	21	B
36	0610_w16_qp_23	22	C