

**Paper Reference(s)    4HB1/02**  
**Pearson Edexcel International GCSE (9–1)**

**Human Biology**  
**UNIT: 4HB1**  
**PAPER: 02**

**Diagram Booklet**

**In the boxes below, write your name, centre number and candidate number.**

|                         |  |  |  |  |  |
|-------------------------|--|--|--|--|--|
| <b>Surname</b>          |  |  |  |  |  |
| <b>Other names</b>      |  |  |  |  |  |
| <b>Centre Number</b>    |  |  |  |  |  |
| <b>Candidate Number</b> |  |  |  |  |  |

## INSTRUCTIONS

There may be spare copies of some diagrams in case you need them.

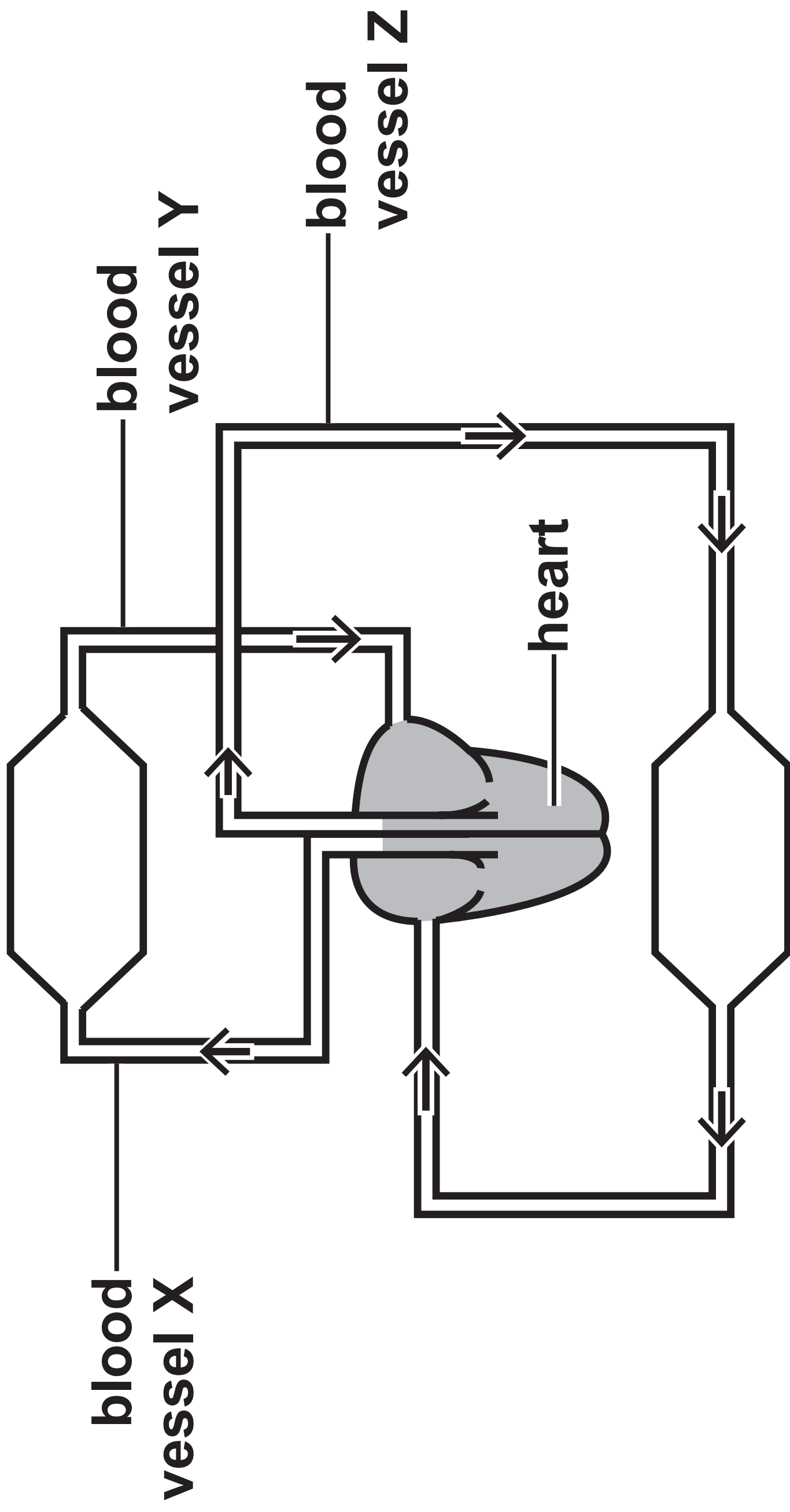
**THIS DIAGRAM BOOKLET MUST BE  
RETURNED WITH THE QUESTION PAPER  
AT THE END OF THE EXAMINATION.**

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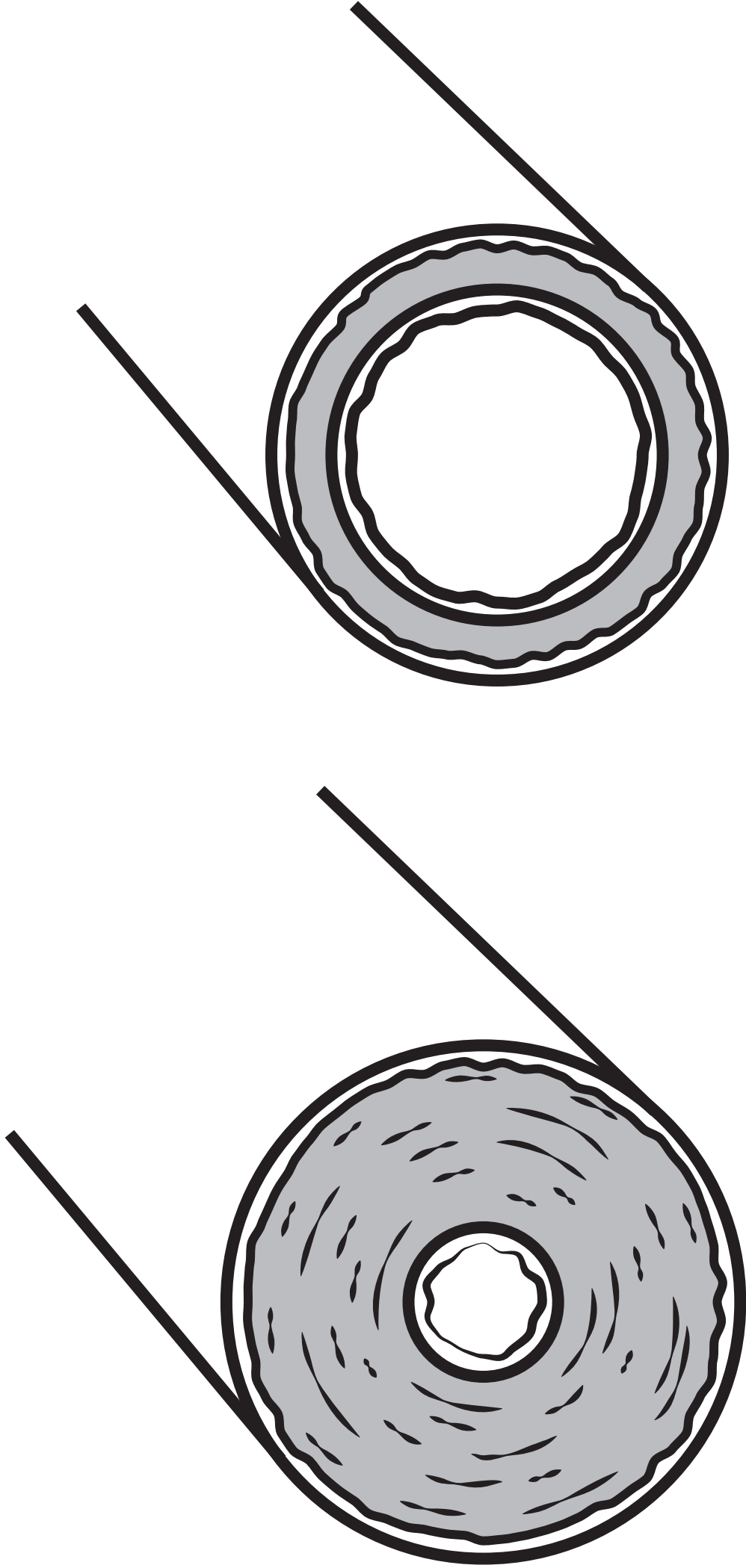
## Question 1(a)



Question 1(c)

blood vessel X

blood vessel Y

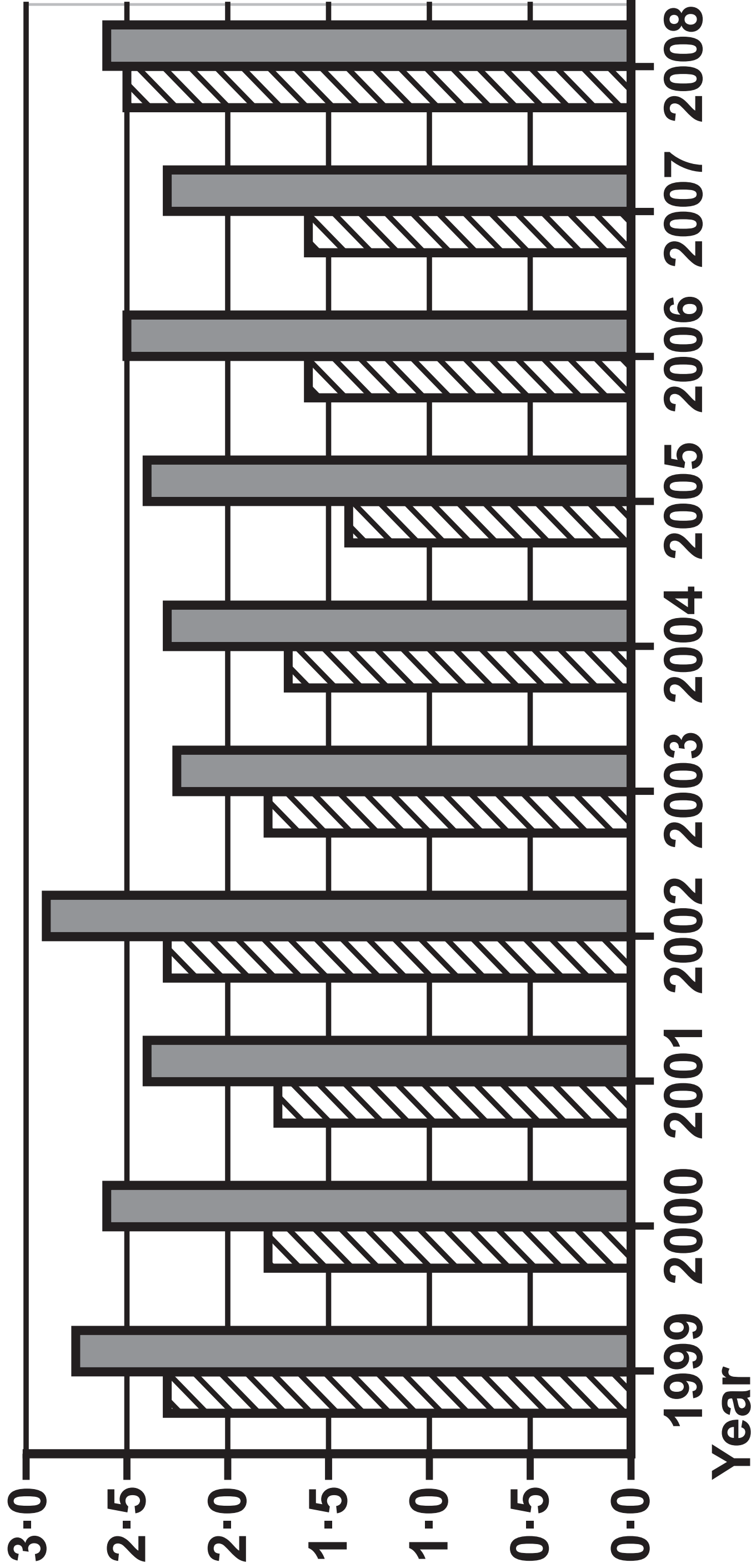


Question 2(a)

KEY:

Men Women

Number of people  
at risk in millions



## Question 2(b)

**Mental illness**

**Symptom**

**depression**

● **hallucinations**

● **tremors  
(shakes)**

**schizophrenia**

● **lack of energy**

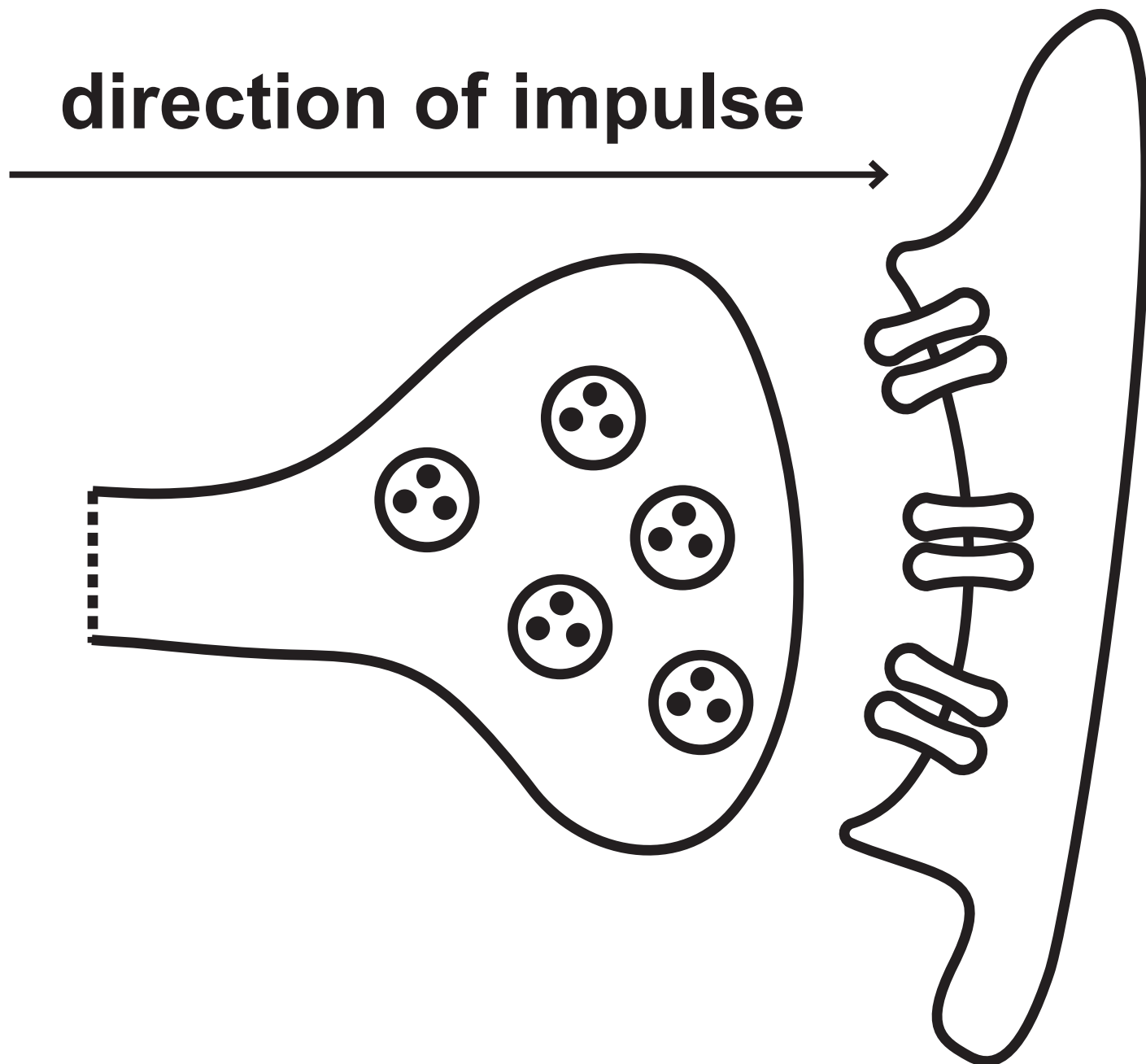
● **memory loss**

## Question 2(b)

**Mental illness****Symptom****depression****schizophrenia****hallucinations****tremors  
(shakes)****lack of energy****memory loss**



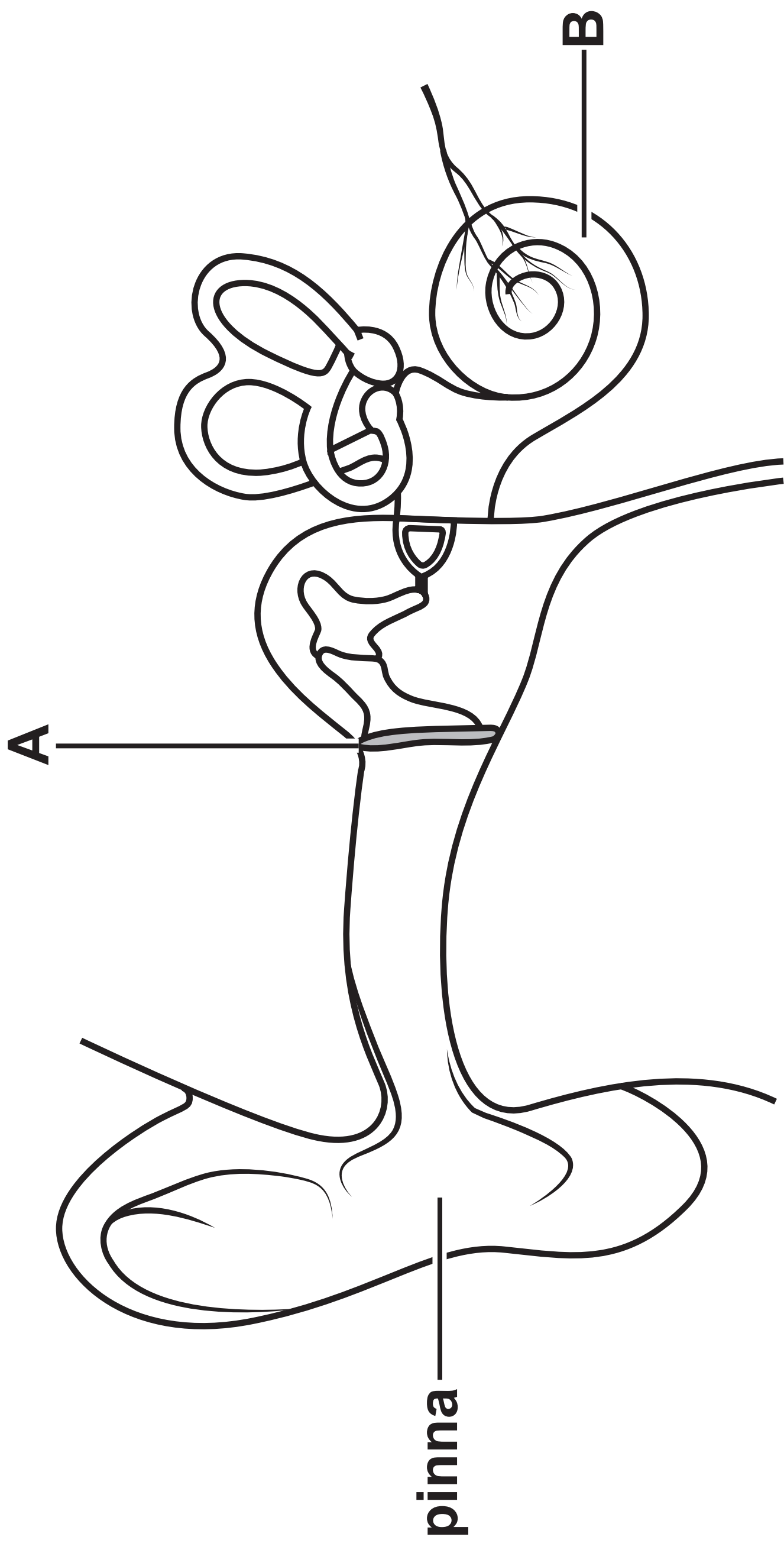
## Question 3(b)



Question 4

| Food | Solution used in test |           |            |
|------|-----------------------|-----------|------------|
|      | A                     | B         | C          |
| W    | no change             | no change | blue-black |
| X    | lilac                 | no change | no change  |
| Y    | no change             | brick-red | no change  |

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Question 5(a)



## Question 5(b)

| <b>Age<br/>in years</b> | <b>Maximum<br/>frequency<br/>detected<br/>in kHz</b> |
|-------------------------|--|
| <b>20</b>               | <b>20</b>  |
| <b>30</b>               | <b>18</b>  |
| <b>40</b>               | <b>16</b>  |
| <b>50</b>               | <b>14</b>  |

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### Question 5(b)(i)

[illegible]

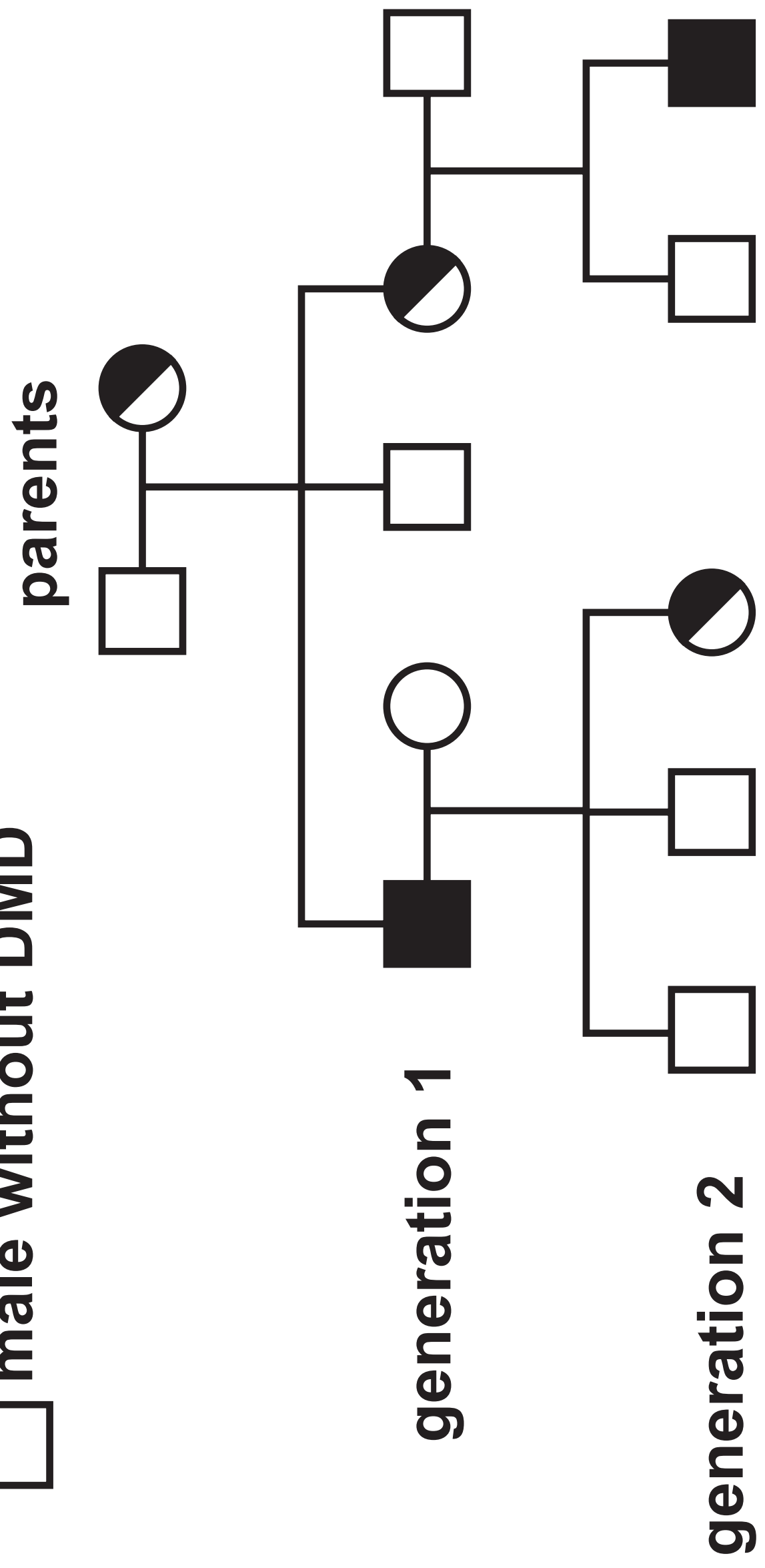
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### Question 5(b)(i)

[illegible]

Question 8(b)

- KEY:**
- female with DMD
  - ◐ female carrier
  - female without DMD
  - male with DMD
  - male without DMD



**Question 8(b)(iii)**



**Question 8(b)(iii)**