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90177



NEW ZEALAND QUALIFICATIONS AUTHORITY
MANA TOHU MĀTAURANGA O AOTEAROA



National Certificate of Educational Achievement
TAUMATA MĀTAURANGA Ā-MOTU KUA TAEA

Level 1 Human Biology, 2005

90177 Describe maintenance of normal body functioning

Credits: Two

9.30 am Thursday 24 November 2005

Check that the National Student Number (NSN) on your admission slip is the same as the number at the top of this page.

You should answer ALL the questions in this booklet.

If you need more space for any answer, use the page(s) provided at the back of this booklet and clearly number the question.

Check that this booklet has pages 2–9 in the correct order and that none of these pages is blank.

YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.

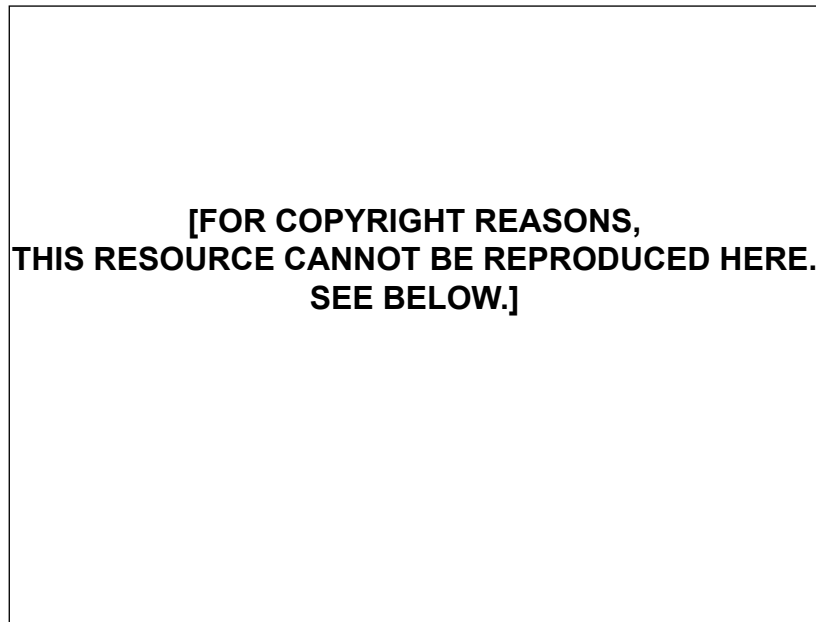
<i>For Assessor's use only</i>		Achievement Criteria	
Achievement		Achievement with Merit	Achievement with Excellence
Describe maintenance of normal body functioning.	<input type="checkbox"/>	Explain maintenance of normal body functioning.	<input type="checkbox"/>
		Discuss maintenance of normal body functioning.	<input type="checkbox"/>
Overall Level of Performance		<input type="checkbox"/>	

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You are advised to spend 30 minutes answering the questions in this booklet.

QUESTION ONE

The diagram below shows the location of the main endocrine glands.



Source: A F P Cooper (ed), Readings in Fifth Form Science: Biology, (Wellington: A H & A W Reed Ltd, 1972), p 37.

(a) Describe a function for each of the following hormones.

Gland	Hormone	Function
Pituitary	ADH (antidiuretic hormone)	
Pituitary	GH (growth hormone)	
Thyroid	thyroxine	
Pancreas	insulin	
Adrenals	adrenalin	

QUESTION THREE

Energy drinks are typically advertised as

- energising body and mind
- combating stress and fatigue
- perfect for getting you through the day, the night, the morning after the night before.

The “energy” in these drinks is sugar and caffeine. There is more caffeine in a can of energy drink than in an ordinary cup of plunger coffee. Each 250 mL serving of these drinks contains approximately 7 teaspoonfuls of sugar and provides close to 500 kJ of energy.

Cans may have a warning label such as: “Usage: 2 cans max daily”.

- (a) Describe **how** your body responds to the sudden **increase of sugar** after drinking an energy drink.

- (b) Describe TWO short-term effects of **caffeine** on the body.

1. _____

2. _____

