

# Nutritional Diseases — Deficiency, Excess and Diet- related Disorders

Use this worksheet after reading the lesson to practise the key ideas and prove you can meet the success criteria.

Name \_\_\_\_\_  
Date \_\_\_\_\_  
Class \_\_\_\_\_

## 1. Key Ideas

Australia spends over \$3 billion annually treating Type 2 diabetes — a disease almost entirely driven by diet and lifestyle. Meanwhile, vitamin D deficiency affects roughly 1 in 4 Australians despite living on the sunniest continent on Earth. Both too little and too much of the wrong nutrients disrupt the biochemistry that keeps cells functioning.

- The nutrient, deficiency disease, and mechanism for vitamin D, vitamin C, iodine, and iron
- Why a single micronutrient deficiency can produce symptoms across multiple body systems

## 2. Success Criteria

By the end, you should be able to:

- The nutrient, deficiency disease, and mechanism for vitamin D, vitamin C, iodine, and iron
- How excess refined sugar causes insulin resistance and Type 2 diabetes
- How excess saturated fat causes atherosclerosis and cardiovascular disease

## 3. Key Terms

### nutritional diseases in Australia

Type 2 diabetes and cardiovascular disease — both associated with chronic excess of specific dietary components (refined

### What

your hypothesis for the mechanism?

### Why atherosclerosis

a decades-long process before producing symptoms

### When that nutrient

insufficient (deficiency) or excessive (excess), the function is disrupted — producing specific, predictable consequence

### because the same nutrient

required for multiple physiological processes simultaneously

### Iron

required for haemoglobin synthesis — deficiency reduces oxygen delivery to every organ in the body

## 4. Activity: Build the Lesson Map

Use the lesson to complete the table. Keep answers brief but specific.

Prompt	Your answer
Main concept	
Important example	
Common mistake to avoid	
How this links to the next lesson	

## 5. Short Answer Questions

1. Explain this lesson goal in your own words: "The nutrient, deficiency disease, and mechanism for vitamin D, vitamin C, iodine, and iron". Use one specific example from the lesson.

**BAND 3** **2 MARKS**

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2. Apply this idea to a new example: "How excess refined sugar causes insulin resistance and Type 2 diabetes". Show your reasoning clearly.

**BAND 4** **3 MARKS**

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3. Analyse why this idea matters for understanding Nutritional Diseases — Deficiency, Excess and Diet-related Disorders: "How excess saturated fat causes atherosclerosis and cardiovascular disease".

**BAND 5** **4 MARKS**

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## 6. Extend: Apply the Idea

BAND 5/6

5 MARKS

**A student gives a memorised answer about Nutritional Diseases — Deficiency, Excess and Diet-related Disorders but does not use evidence or reasoning.**

Improve the answer by writing a stronger response that uses accurate terminology, a relevant example and a clear explanation.

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## 7. Multiple Choice

1. What is the best first step when answering a question about Nutritional Diseases — Deficiency, Excess and Diet-related Disorders?

- A. Identify the key concept being tested
- B. Write every fact from memory
- C. Ignore the command word
- D. Skip examples and evidence

2. Which answer would show stronger understanding of Nutritional Diseases — Deficiency, Excess and Diet-related Disorders?

- A. An answer with accurate terms and reasoning
- B. A copied definition only
- C. A single-word response
- D. An answer with no example

3. What should you do if a question asks you to explain?

- A. Link the idea to a reason or cause
- B. List unrelated facts
- C. Only draw a diagram
- D. Write the shortest possible answer

## 8. Success Criteria Proof

Finish with evidence that you can do each success criterion.

### SUCCESS CRITERION 1

**Prove that you can: The nutrient, deficiency disease, and mechanism for vitamin D, vitamin C, iodine, and iron**

**BAND 3** **2 MARKS**

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### SUCCESS CRITERION 2

**Prove that you can: How excess refined sugar causes insulin resistance and Type 2 diabetes**

**BAND 4** **3 MARKS**

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### SUCCESS CRITERION 3

**Prove that you can: How excess saturated fat causes atherosclerosis and cardiovascular disease**

**BAND 5** **4 MARKS**

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**One thing I still need help with:**

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