

TT4 Micronutrients: *Vitamins*

1. Describe the difference between water-soluble and fat-soluble vitamins. (2 marks)

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2. Identify the fat-soluble vitamins below: (1 mark)

- Thiamin (vitamin B1)
- Retinol (vitamin A)
- Folic acid (vitamin B9)
- Cholecalciferol (vitamin D)
- Phylloquinone (vitamin K)
- Tocopherol (vitamin E)



3. For each of the vitamins below complete its reference nutrient intake (RNI) value, for 15-year-old boys and girls. (4 marks)

	Vit. B1	Vit. B2	Vit. C	Vit. D	Vit. A	Vit. B9
Boys						
Girls						

4. i) Vitamin A allows us to see in dim light. (1 mark)

TRUE/FALSE

- ii) Night blindness is a condition caused by vitamin D deficiency. (1 mark)

TRUE/FALSE

- iii) Vitamin D is found in oily fish and dairy products. (1 mark)

TRUE/FALSE

- iv) Riboflavin deficiency may lead to scurvy. (1 mark)

TRUE/FALSE

5. List **three** sources of vitamin E. (1 mark)

1.

2.

3.

6. Deficiency of which vitamin causes a disease called spina bifida? (1 mark)

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7. List the main symptoms of pellagra – a disease caused by niacin deficiency. **(3 marks)**

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8. Where is vitamin K produced in the body? **(1 mark)**

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9. Explain why it is difficult to experience the symptoms of an excess of water-soluble vitamins? **(1 mark)**

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10. i) Define antioxidants and explain their health benefits for the body. **(2 marks)**

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ii) Which vitamins are considered antioxidants? **(1 mark)**

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11. i) List **three** factors that cause vitamin loss during cooking and preparation of food. **(3 marks)**

1.
2.
3.

ii) Name **two** vitamins which are especially sensitive to the factors listed in point i) (are damaged most easily). **(2 marks)**

1.
2.

