

- vitamins
- minerals
- carbohydrate loading

Marks

Question 22 (continued)

- (b) Discuss the role of **supplementation** in meeting the dietary needs of athletes.

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**Supplementation** has become increasingly popular for athletes who want to achieve a balance in their diet that will give them optimum performance. Taking multi-vitamin and mineral supplements will not enhance performance in the way drugs do but they provide a platform for where the athlete can look at achieving their best performance through the ideal balanced diet. Vitamins can be taken if the athlete has an imbalance such as vitamin C or if they can't drink orange juice before a competition. However, excess vitamins won't enhance performance - any extra vitamins will not be used by the body and will just be excreted. Often women can be ~~at~~ deficient in calcium and iron and they are the most common for supplementation. Women will take calcium and iron supplements if they are allergic to dairy, anaemic, vegetarian or if they have a deficiency. **carbohydrate loading** is a form of supplementation where the athlete goes through a period of glycogen sparing where they ~~stop~~ starve their body of carbohydrates for about 1 week so when they take (40g) against their glycogen storage capacity has increased so they are able to carry more fuel for their body when competing. However this can be dangerous because the athlete can become fatigued easily and often lose direction of their goal and lose concentration at training.

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