

## Question 22 (continued)

- (b) Discuss the role of supplementation in meeting the dietary needs of athletes. 6

The majority of vitamins and minerals should be consumed in the regular dietary intake of athletes. However, some may be required

#### VITAMINS

- Vitamin C is required by athletes to reduce risk of infection, regulate bodily fluids and maintain bodily functioning. Vitamin C is essential for performance, and may lead to sub-maximal performance with deficiencies, but supplementing in excess of RDI will not improve performance

- B-complex is required by athletes for proper cellular metabolism and functioning. Athletes must meet the daily requirements of B-complex, and if levels are below this then supplements should be taken however levels in excess of daily requirements can disrupt cellular metabolism and cause illness

#### MINERALS

- Iron is the primary mineral which may need supplementing particularly in female athletes during menstruation. Large quantities of iron are lost from blood loss, and female athletes competing during menstruation may require iron supplements. Exercise induced anaemia is also common amongst female athletes and requires monitoring to justify the use of iron supplements

- Calcium supplements should also be considered for athletes with low bone density. These supplements may reduce risk of fractures during activity