

the females have a significantly lower overall capacity for aerobic oxidation and for anaerobic glycolysis than the males; (2) the females have a greater capacity for  $\beta$ -oxidation relative to the capacity of the citric acid cycle; and (3) the glycolytic potential relative to the potential for  $\beta$ -oxidation is lower in the females. Differences in whole-body lipid metabolism between men and women are indicated by lower-body fat accumulation in women but more marked accumulation of fat in the intra-abdominal visceral fat depots of men. Women generally have a larger proportion of body mass as fat, and are more likely to deposit fat subcutaneously and on their lower extremities; men are more likely to deposit fat in the abdominal region. Differences in rates of glucose and fat oxidation during exercise do not seem to explain the gender difference in FM. Women preferentially burn a higher fat-to-glucose fuel mixture during exercise [13]. Women do have a greater percent body fat, and it is possible that ovarian hormones, particularly oestrogen, may account for these observations by promoting postprandial conversion of dietary energy into fat. Also, women store more fat in the gluteal-femoral region, whereas men store more fat in the visceral (abdominal) depot. Women have higher rates of reuptake of NEFA into adipose tissue; however, they also have higher rates of fat oxidation during prolonged exercise. However, women consume fewer kilojoules per kilogram lean mass and burn fat more preferentially during exercise compared with men.