**Unit 6 Sports Nutrition**

**Task 1 Discuss**

1. How does greater physical activity contribute to better overall fitness? Explain the process.
2. What are the latest findings on nutrition and performance?

**Task 2 Nutrition and Fitness: Summary**

**Complete the text with appropriate verbs from the list. Change the form of the verb if necessary.**

*meet break down increase replace consume include use restore recommend transform fuel form*

1. A gradual increase in regular physical activity is \_\_\_\_\_\_\_\_\_\_\_ for all healthy persons. A minimum plan \_\_\_\_\_\_\_ 30 minutes of physical activity on most (or all) days; 60 minutes a day provides even more benefit, especially if weight control is an issue. An intense program lasting about 60 to 90 minutes should begin with warm-up exercises to \_\_\_\_\_\_\_ blood flow and warm the muscles and end with cooldown exercises. Regular resistance activities and stretching add further benefits.
2. Human metabolic pathways extract chemical energy from food and \_\_\_\_\_\_\_ it into ATP, the compound that provides energy for body functions.
3. In carbohydrate fuel use, glucose is \_\_\_\_\_\_\_\_\_\_ into the three-carbon compound pyruvic acid, yielding some ATP. This is metabolised further via the aerobic pathway to \_\_\_\_\_\_\_ carbon dioxide (CO2) and water H2O or via the anaerobic pathway to form lactic acid.
4. At rest, muscle cells mainly \_\_\_\_\_\_\_\_\_ fat for fuel. For intense exercise of short duration, muscles mostly use phosphocreatine (PCr) for energy. During more sustained intense activity, muscle glycogen breaks down to lactic acid, providing a small amount of ATP. For endurance exercise, both fat and carbohydrate are used as fuels; carbohydrate is used increasingly as activity intensifies. Little protein is used to \_\_\_\_\_\_\_\_ muscles.
5. Anyone who exercises regularly should consume a diet that \_\_\_ calorie needs and is moderate to high in carbohydrates and fluid and adequate in other nutrients such as iron and calcium.
6. Athletes should consume enough fluid to both minimise loss of body weight and ultimately \_\_\_\_\_\_\_\_\_\_ pre-exercise weight. Sports-drinks help \_\_\_\_\_\_\_ fluid, electrolytes, and carbohydrates lost during workouts. Their use is essentially appropriate when continuous activity lasts beyond 60minutes.
7. Plenty of carbohydrates should be in pre-event meal, especially for endurance athletes. High-glycemic-load carbohydrates should be \_\_\_\_\_\_\_ by an athlete within 2 hours after a workout to begin restoration of muscle glycogen stores. Some protein in the meal is also helpful.

**Task 3 Passive Voice**

**Find examples of passive voice in the summary above. Then rewrite the sentences below into passive voice.**

1. The athlete consults a nutritionist. The nutritionist …………
2. The athlete is consulting a nutritionist. The nutritionist ………..
3. The athlete consulted a nutritionist. The nutritionist …………..
4. The athlete has consulted a nutritionist. The nutritionist ……….
5. The athlete should consult a nutritionist. The nutritionist ………

**Task 4 Listening**

**Listen to an expert talking about nutrition and take notes to answer these questions:**

1. Do the nutritional needs of athletes differ from non-athletes?
2. Should I drink water or sports drinks while exercising?
3. How do I pick the right sports drink?
4. What are electrolytes?
5. Is it possible to hydrate too much?

(http://www.videojug.com/interview/fitness-and-nutrition?)

**Task 5 Case study**

**Planning a Training diet**

Michael is training for a 10km run coming up in 3 weeks. He has read a lot about sports nutrition and especially about the importance of eating a high-carbohydrate diet while in training. He has also been struggling to keep his weight in a range that he feels contributes to better speed and endurance. Consequently he is also trying to eat as little fat as possible. Unfortunately, over the past week his workouts in the afternoon have not met his expectations. His run times are slower, and he shows signs of fatigue after just 20 minutes into his training programme.

 His breakfast yesterday was a large bagel, a small amount of cream cheese, and orange juice. For lunch, he had a small salad with fat-free dressing, a large plate of pasta with broccoli, and a diet soft drink. For dinner, he had a small broiled chicken breast, a cup of rice, some carrots, and iced tea. Later, he snacked on fat-free pretzels.

**In pairs, answer the following questions:**

1. Is the high-carbohydrate diet a good idea during Michael´s training?
2. Are there any important components missing in Michael´s diet? Are missing components contributing to his fatigue?
3. Describe some changes that should be made in Michael´s diet including some specific foods that should be included.
4. How should fluid needs be met during workouts?
5. Should Michael focus on fuelling his body before, during or after workouts?