

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?