

SISFFIT005 Provide healthy eating information



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ASSESSMENT FOR SISFFIT005

Student name	Paul van der Merwe
Date of assessment submission	26/07/2018
Trainer/Assessor's name	Kymberley Sant
Date of assessment marking	30/07/2018
Outcome for units	☐ Competent ☒ Not Yet Competent

TASK INSTRUCTIONS

- The assessment for these units of competency consists of the following:
 - **Quiz:** You are required to complete a series of multiple choice questions to demonstrate your knowledge and skills.
 - **Short answer activities:** You are required to provide short written responses to a series of activities to demonstrate your knowledge and skills.
 - **Case studies:** You are required to provide written responses to a series of case study scenarios to demonstrate your knowledge and skills.
 - **Practical task:** You will be required to put your knowledge and skills into practice, through observed tasks and work experience.
- At times, you will be provided with a specific context to which you must respond, otherwise it is anticipated that you will use a scenario of your choosing to provide context to the task.

QUIZ

QUESTIONS	CORRECT
1. The six (6) essential nutrients can be classified as... ☒ Carbohydrates, Fats, Proteins, Vitamins, Minerals, Water ☐ Water, Meat, Vegetables, Breads, Grains, Fats ☐ Fruit, Vegetables, Proteins, Water, Carbohydrates, Fluids ☐ Carbohydrates, Fats, Proteins, Fibre, Minerals, Milk	☒
2. Generally, where does the main source of energy from food come from? ☐ Fats ☒ Carbohydrates ☐ Oxygen ☐ Protein	☒
3. What is the basic daily percentage requirements for carbohydrates? ☐ 10-15% ☐ 33% ☐ 20-35% ☒ 45-65%	☒
4. What does GI stand for? ☒ Glycaemic Index ☐ Glycaemic Indicator ☐ Glyogen Index ☐ Glycolytic Indication	☒
5. 15% to 25% of kilojoules consumed in a balanced diet should come from... ☐ Vitamins and minerals ☐ Water ☐ Fats ☒ Protein	☒
6. What are considered the building blocks of life? ☐ Carbohydrates ☐ Proteins ☐ Fluids ☒ All of the above	☐

7. Which of the following does calcium play a role in?	☐
☒ Bone strength ☐ Blood clotting ☐ CNS transmissions ☐ All of the above	
8. Bone strength can be affected by...	☒
☐ High levels of physical activity ☐ Excessive protein intake ☐ Low sodium diet ☒ None of the above	
9. What is 1 kcal is equivalent to?	☒
☒ 4.184 kJ ☐ 5.233 kJ ☐ 3.123 kJ ☐ 6.001 kJ	
10. How many kilojoules are provided by 1g of fat?	☒
☐ 39 kJ ☐ 17 kJ ☐ 16 kJ ☒ 37 kJ	

Outcome for Quiz	☐ Satisfactory ☒ Not satisfactory
Trainer/Assessor comments	Great try.

SHORT ANSWER ACTIVITIES

A.

Briefly describe what is outlined in the Australian government's *Dietary Guidelines for Australian Adults*.

Brief description

The Australian Dietary Guidelines use scientific evidence to provide information on the types and amounts of foods, food groups and dietary patterns that aim to promote health and wellbeing, reduce the risk of diet-related conditions and reduce the risk of chronic disease. The Guidelines are for use by health professionals, policy makers, educators, food manufacturers, food retailers and researchers. The content of the Australian Dietary Guidelines applies to all healthy Australians, as well as those with common diet-related risk factors such as being overweight. However, they do not apply to people who need special dietary advice for a medical condition, or to the elderly.

Outcome for Activity 1	☒ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

B.

Respond to the following questions about metabolism:

1. Provide a definition of metabolism.
2. Explain the role of metabolism in body composition and muscle contraction.

Definition

Metabolism refers to all the chemical processes going on continuously inside your body that allow life and normal functioning (maintaining normal functioning in the body is called homeostasis). These processes include those that break down nutrients from our food, and those that build and repair our body. Building and repairing your body requires energy that comes from your food. The amount of energy, that your body burns at any given time is affected by your metabolism.

Role of metabolism

A higher metabolism is favourable for weight loss and health benefits. It requires more energy by the body to maintain muscle than it does to maintain fat. Therefore, having a higher percentage of fat free mass muscle can increase your metabolism. Having a slow metabolism will then have the opposite effect on the body.

Outcome for Activity 2

- ☒ Satisfactory
☐ Not satisfactory

Trainer/Assessor comments

C.

Diabetes is a disease which affects people of all ages throughout Australia.

1. Describe the difference between Type 1 and Type 2 diabetes.
2. Explain how nutrition plays a role in the symptoms and treatment of diabetes.

Differences between types

Type 1 diabetes is usually diagnosed at a young age, whereas type 2 diabetes is mostly diagnosed in adults over the age of 30 years. Type 2 diabetes is often associated with excess body weight and type 1 is not. People with type 1 diabetes often have higher than normal ketone levels at diagnosis, whereas type 2 diabetes is usually caused by high blood pressure and/or high cholesterol levels at diagnosis. Type 1 can be treated by insulin injections or with an insulin pump and type two is usually treated without medication or with tablets. Type 1 diabetes cannot be controlled without taking insulin and with type 2 diabetes it is sometimes possible to get off medication.

Role of nutrition in symptoms and treatment

If someone with diabetes' sugar is too high or too low, it can get dangerous as there is a risk of fainting and if not treated properly it can become fatal. This is known as a diabetic coma. Therefore, their diet needs to have a well-balanced amount of sugar.

Outcome for Activity 3

- ☒ Satisfactory
☐ Not satisfactory

Trainer/Assessor comments

D.

Many clients look to their trainer for advice on nutrition.

1. How much advice should a trainer give on nutrition?
2. Where else can clients look for nutrition advice?

Trainer advice

A trainer can give as much advice on nutrition as they feel necessary, but must never give more advice than what they have knowledge of.

Other advice sources

Clients can find diets on the internet, they can see a nutritionist and they can ask friends or family for any more advice on nutrition.

Outcome for Activity 4

- ☐ Satisfactory
☒ Not satisfactory

Trainer/Assessor comments

Please list professional sources for advice in question 2.

E.

Glycaemic Index is a classification system for foods.

1. Describe the purpose of the Glycaemic Index.
2. Explain the basis for how foods are rated.

Purpose

To show how much glucose a certain carbohydrate puts into the blood system.

How foods are rated

Foods are rated by a GI level:

- Low GI foods are foods with a GI less than 55.
- Intermediate GI foods are foods with a GI between 55 and 70.
- High GI foods are foods with a GI greater than 70.

Outcome for Activity 5

- ☒ Satisfactory
☐ Not satisfactory

Trainer/Assessor comments

F.

Respond to the following questions about lactose intolerance:

1. Provide a definition of lactose intolerance.
2. Identify foods to avoid to prevent gastrointestinal discomfort.

Definition

The inability to digest lactose, a component of milk and some other dairy products.

Foods to avoid

Lactose is found in milk, yogurt, cream, butter, ice cream and cheese. But it's also in some breads and baked goods, pancake mixes, ready-to-eat breakfast cereals, instant soups, candy, cookies, salad dressings, deli meats, drink mixes and margarine.

Outcome for Activity 6

- ☒ Satisfactory
☐ Not satisfactory

Trainer/Assessor comments

G.

Water plays a key role in nutrition for all humans. What are its key uses in the body?

Key uses of water

Your body uses water in all its cells, organs, and tissues to help regulate its temperature and maintain other bodily functions. Because your body loses water through breathing, sweating, and digestion, it's important to rehydrate by drinking fluids and eating foods that contain water.

Outcome for Activity 7

- ☒ Satisfactory
☐ Not satisfactory

Trainer/Assessor comments

H.

Irritable Bowel Syndrome is a highly publicised illness.

1. What are its effects on the body?
2. What treatments are available for sufferers of Irritable Bowel Syndrome?

Effects on body

a person can feel the abdominal cramps, bloating, constipation, and diarrhea that may be signs of Irritable Bowel Syndrome.

Treatments

Treatment of IBS focuses on relieving symptoms so that you can live as normally as possible.

- Avoid foods that trigger your symptoms
- Eat high-fiber foods
- Drink plenty of fluids
- Exercise regularly
- Get enough sleep

Outcome for Activity 8

- ☒ Satisfactory
☐ Not satisfactory

Trainer/Assessor comments

I.
Observation of religious practices can have an effect on training.
1. What are some training considerations for a client undertaking Ramadan?
2. Describe your role, as a trainer, in guiding a person who still wants to train during this month of fasting.

Training considerations
Exercise during Ramadan fast sometimes confuses personal trainers because of a common belief that to make gains in the gym, its often recommend that people eat immediately after working out. This is called nutrient timing. This is something that isn't possible during Ramadan, if exercise occurs during the day.
Guiding clients
It would be important to inform your client that their training sessions will have to be modified to suit their dieting habits. As it is not good to overwork the body when you are not receiving sufficient nutrients in order to function, rebuild muscles and recover..

Outcome for Activity 9	☒ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

J.

Body image is an area that affects people of all ages. In what ways can you, as a trainer, assist in the promotion of healthy body image for the following parties:

1. Your clients.
2. All people in the fitness industry.

Clients

Always be confident within yourself and be well spoken. Keep fit and it will show your clients the positive effects of training on your body. Don't rock up to sessions with fast food or junk food. Make sure your clients are completing healthy diets and are committed to maintaining a positive body image.

Fitness industry

Always dress properly, eat healthy in front of people and be confident. If you are working in a gym, put up posters of healthy diets or even training routines that people can complete by themselves at home.

Outcome for Activity 10

- ☐ Satisfactory
☒ Not satisfactory

Trainer/Assessor comments

Please talk more about how you can assist your client with the promotion of healthy body image, not about you. Please go into more detail about how you can contribute to healthy body image in the fitness industry- for example being supportive, etc.

K.

The role of social media has had a large impact on people's use of fad diets, supplements and performance enhancers.

1. What advice would you give to a client with regards to these issues?
2. Who would you refer clients to talk to before using/undertaking any of these nutritional avenues, in order to ensure their safety?

Advice

I would inform my clients not to pay attention to ads regarding steroid or performance enhancers at all if they are looking to train for a specific sport. If they are caught it can get them in big trouble. If they are looking to undertake a specific diet that did not give them the specific required nutrients to properly complete their training sessions I would inform them.

Referral for advice

I would refer them to a nutritionist or diet specialist for more information on these nutritional avenues.

Outcome for Activity 11

- ☒ Satisfactory
☐ Not satisfactory

Trainer/Assessor comments

L.

Find one (1) scholarly article discussing the benefits of diet on mood and mental health. Summarise the findings of this article in 100-200 words.

Role of food in mental health

Physical activity is an important public health tool used in the treatment and prevention of various physical diseases, as well as in the treatment of some psychiatric diseases such as depressive and anxiety disorders. However, studies have shown that in addition to its beneficial effects, physical activity can also be associated with impaired mental health, being related to disturbances like "excessive exercise" and "overtraining syndrome". Although the number of reports of the effects of physical activity on mental health is steadily increasing, these studies have not yet identified the mechanisms involved in the benefits and dangers to mental health associated with exercise. This article reviews the information available regarding the relationship between physical activity and mental health, specifically addressing the association between exercise and mood.

Outcome for Activity 12

- ☒ Satisfactory
☐ Not satisfactory

Trainer/Assessor comments

CASE STUDIES

1.

Observe your eating habits for two (2) days.

1. Complete a food diary for the two (2) days. Take note of the kilojoules consumed and major nutrients ingested.
2. In 300 words, discuss your daily food intake
 - Examine the key nutrients and discuss the benefits and negatives of the foods you consumed.
 - Identify four (4) changes you can make to your diet to better meet your recommended daily nutritional needs.
 - Should you believe you do not need to make any changes, identify four (4) pieces of nutritional advice you would give to a client to improve their eating.

Respond to the following questions:

3. What societal and cultural beliefs and activities have an impact on people's food choices?
4. Discuss the role of essential nutrients in digestion and regular muscle and body function.

DAY 1

Meals	Food consumed	Kilojoules	Major nutrients
Breakfast	Bowl of Milo cereal with milk	2679KJ	Sugar Calcium Protein Carbs
Lunch	Leftover food (meat and rice)	2348KJ	Protein Carbs Fat
Dinner	Macaroni, mince and cheese	3453KJ	Protein Carbs Calcium Fat
Snacks	Noodles, chocolate, chocolate chip cookies, Nutella sandwich.	3675KJ	Sugar Carbs Calcium

DAY 2			
Meals	Food consumed	Kilojoules	Major nutrients
Breakfast	Bacon, Eggs on toast, Cheese Grillers	3876KJ	Protein Calcium Carbs Fat
Lunch	Avocado on toast	3123KJ	Protein Carbs
Dinner	Ham roast, salad, baked potato, rice, pumpkin	3981KJ	Protein Carbs Iron Fibre Fat
Snacks	Popcorn, crisps,	2376KJ	Fats Sodium Carbs

Your daily food intake

It is clear that I do not have the healthiest diet. I consume a large amount of carbs and sugar on a day to day basis, but this is countered well due to the fact that I am very physically active during the week at school and with extracurricular activities. The pros and cons to the food I consume everyday can be based off whether or not I have a busy week doing sport or not. If I do, I consume a considerable amount of nutrients to rebuild muscle and provide my body with the sufficient amount of energy to play sport. The carbs along with the sugar help provide a good amount of glucose to restore the ATP in my body while playing sport. The protein is good for helping my muscles recover after hard rugby games and trainings. But, during the holidays or off season when I am not physically active, my diet could tend to become a bit hefty in regard to the number of calories I consume without burning them off. If I were to completely stop doing any physical activity all-together I will probably start to see a gain in body weight as it is not an extremely balanced nor healthy diet. I consume a lot of sugar and fats; therefore, this will aid in this circumstance. I feel that if I were to stop doing physical activity, I would probably have to cut down a lot on the amount of sugar and carbs I consume by cutting down on chocolate and bread/pastry I consume. But, I am not looking to stop being physically active any time soon so there are not any other major changes I would make to my diet.

Societal and cultural beliefs

There are many factors that can affect a person's diet choices. For example; people who fast or people who take part in FAD diets such as vegetarians/vegans. It can also be affected by the types of diets that are popular on social media. A lot of people tend to take part in diets that celebrities are taking part in, regardless of whether or not it is good or bad for them.

Role of essential nutrients
Carbohydrates are the main energy source for the brain. Without carbohydrates, the body could not function properly. Sources include fruits, breads and grains, starchy vegetables and sugars. Protein is the major structural component of cells and is responsible for the building and repair of body tissues. Fat is an energy source that when consumed, increases the absorption of fat-soluble vitamins including vitamins A, D, E and K. Vitamin C is necessary for the synthesis of collagen, which provides structure to blood vessels, bone and ligaments.

Outcome for Case Study 1	☒ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	Your answers are correct here but please note Vegetarian/ Vegan is not a FAD diet- it is a lifestyle choice. Fat should be added to Lunch for Avocado on Toast. Not necessary to list minerals and vitamins here, but great work.

2.

Michael has joined your gym after training at another facility for six (6) months. Michael has expressed frustration at his inability to lose body fat and gain lean muscle mass. He wants to make significant changes over the next six (6) months.

Michael is lifting weights from a program he found on the internet, and he is following advice that he has read online. Michael is interested in following the Paleo diet to help him lose body fat.

Respond to the following points:

1. Recommend methods to help lost body fat, increase lean muscle mass and improve general wellbeing.
2. Describe the way body systems react to nutrients in food and use them for energy.
3. Identify ways to improve Michael's current body satisfaction.
4. Flag issues with internet forums and advice suggested online.
5. List the best places and people to go to for nutritional and training advice.
6. Discuss fad diets and the benefits/positives of the Paleo diet.
7. Explain the consequences of poor nutrition with regards to chronic diseases.
8. Develop a program of exercises and training methods to help Michael meet his goals of fat loss and hypertrophy.

	Response
a)	If Michael is not seeing an improvement in his body composition, he might need to look at getting a professional workout set out for him by a personal trainer. Depending on the components of the online workout, he might not be doing the sufficient amount of work to complete his goals. The diet he is undertaking is definitely a step in the right direction, now he needs to focus on sticking by it and making sure he completes the diet properly.
b)	The body breaks down nutrients in the food we consume, we call this glucose. During physical activity the body produces ATP, when the ATP in the body gets used up it relies on the glucose from the nutrients to rebuild and stop the body from getting fatigued and, therefore, we can keep taking part in physical activity for longer periods of time.
c)	Depending on how committed Michael is, he can instead of only doing a weight training session from the internet, look to take part in aerobic fitness training as well. This will aid in his desire to lose body weight and if he continues to complete the weight trainings, he will see an improvement in muscle mass and body composition.
d)	Online sources are not always the most reliable to look for any information in general. Therefore, it might be better for Michael to seek help from a real professional to make it easier for him to achieve his goals.
e)	Michael can seek help from a nutritionist, dietary specialist or a personal trainer.
f)	FAD diets rely on cutting out specific nutrients completely. In Michael's this might not be the best option for example if he was a vegetarian, his body might not receive the sufficient amount of protein in order to rebuild his muscles and help them recover. The Paleo diet is good in regard to his intake of nutrients as it is well balanced.
g)	Poor nutrition can lead to chronic diseases such as diabetes high cholesterol and heart problems. That is why large amounts of a specific nutrient is not good for the body.

h)	Michael can look to take part in more aerobic based exercises to help lose body weight. He can also look to seek a sport club for a sport that he is interested in and take part in social sporting events which he will also need to complete a number of different types of trainings. Michael can also reflect on his current diet and decide whether or not he is consuming the right amounts of certain nutrients to be able to achieve his goals.
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Outcome for Case Study 2	☐ Satisfactory ☒ Not satisfactory
Trainer/Assessor comments	Great job here! Please answer question 8- Develop a program of exercises and training methods to help Michael meet his goals of fat loss and hypertrophy.

PRACTICAL TASK

You are required to have a suitable observer verify your ability to complete the following tasks. These tasks may be simulated or real.

TASKS	VERIFIED
1. Over a period of at least two (2) hours, you are to provide five (5) clients with information on healthy eating relating to the maintenance of health and prevention of chronic disease. Each client has special needs (i.e. specific dietary requirements/concerns or needs support regarding positive eating attitudes). During each client contact session, you are to complete the following: 1. Collaborate with the client to implement healthy eating habits, showing sensitivity to cultural and social differences influencing food choices 2. Refer to current healthy eating information resources, answering client queries/concerns regarding the interpretation of such resources 3. Explain the adverse effects of poor nutrition 4. Identify and prepare a referral to an accredited practising dietitian, accredited sports dietitian and/or general practitioner	☐

Outcome for Practical Task	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	