

SISFFIT005 Provide healthy eating information



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ASSESSMENT FOR SISFFIT005

Student name	Miriam Hochstadt
Date of assessment submission	28/09/2017
Trainer/Assessor's name	Kymberley Sant
Date of assessment marking	13/10/2017
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	Very close, please review Q 4 & 6.

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

Your metabolism is the result of all the processes in your body working together to create the energy that keeps you going

Role of metabolism

The role of metabolism is to breakdown molecules to obtain energy and to provide the compounds that are needed by the cells.

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 is an autoimmune disease in which your immune system attacks and destroys the insulin-making cells in your pancreas. Type 2 is different in such that a person can make insulin, but he/she either doesn't make enough or has difficulty using it make efficiently

Role of nutrition in symptoms and treatment

Managing diabetes means managing your blood sugar level. What you eat is closely connected to the amount of sugar in your blood. The right food choices will help you control your blood sugar level

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

Fitness qualification of a PT contains basic nutritional knowledge. It means he/she can give basic advice and information to clients in accordance with recommended Dietary Guidelines and the laws of Fitness Australia.

Other advice sources

Good knowledge about nutrition is important when training. Clients could go to nutritionists, GPs, visit courses, read books and search the net for information

Outcome for Activity 4

- ☒ Satisfactory
☐ Not satisfactory

Trainer/Assessor comments

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
The Glycemic Index (GI) is a relative ranking of carbohydrate in foods according to how they affect blood glucose levels. As carbohydrates have different GI values, it is important to know which ones are the good ones (low GI) and bad ones (high GI). Consuming good quality carbohydrates helps to facilitate the management of diabetes, weight loss and provides help benefits.
How foods are rated
There are three ratings for GI: In individual portions: Low = GI value 55 or less Medium = GI value of 56 – 69 inclusive High = GI 70 or more

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

Lactose intolerance is defined as the inability to digest lactose, a component of milk and some other dairy products. As a result, many people have diarrhea, gas and bloating after eating or drinking dairy products.

Foods to avoid

- Fatty foods, spicy or acid-containing foods such as grape fruit, oranges, pineapple, citrus juices, carbonated beverages, and tomato juice, smoking, alcohol, caffeine

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

Makes up 60% of body, carries nutrients, regulates body temperature, lessens burden on kidneys and liver by flushing out waste products, assists chemical reactions in body, moistens tissues in body.

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

Irritable bowel syndrome (IBS) occurs when muscles in your large intestine contract faster or slower than normal. This causes pain, cramping, gassiness, sudden bouts of diarrhea, and constipation

Treatments

There is no complete cure for IBS, but a person can manage the symptoms with a combination of medicines, probiotics, and therapies for mental health problems. Diet adjustment may also help. Changes typically include reductions in alcohol and caffeine, as well as dairy, spicy and fatty foods. Eating more fiber (such as linseeds and fresh vegetables and fruit) is also important.

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
Ramadan lasts for about a month and during this time, people are not supposed to eat or drink anything from sun up till sun down. If people want to train during this time, they very often will train with reduced energy reserves, which will make them feel fatigued due to low blood sugar
Guiding clients
As a trainer I would advise the client to switch their workouts to a time that's closer to the evening. That way, when they are finished working out, it will be close to the time of the evening meal. Also, I would recommend adjusting the volume and intensity of exercise of cardio and strength training, because the client has due to the fasting a reduced capacity.

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

When speaking to clients a trainer should use body positive and body neutral language. To speak about body size, shape and looks does not help a client. It would make the clients feel bad about their body image and makes them think that only the scales count for a good body image. A trainer should speak about how the body is performing and speak about other measures that make a client feel good about themselves such as improvements in energy, strength and freshness. Furthermore, it is important to work out with the clients realistic goals and expectations for themselves and their bodies. only the scale and tape measure can give permission to feel good about oneself. It may be that other, more comfortable measures should be included at the outset to take the focus off size, shape and appearance. Helping clients focus on their own performance, progress and reality is most helpful.

Fitness industry

The focus on the perfect body is harmful to the fitness industry and the clients. It is important that trainers learn and educate themselves on how to create a positive body image. The focus should not be on shape and kilograms but on healthy wellbeing. Healthy wellbeing can be achieved through healthy living in and outside of the gym and regular training. If these things can be achieved the clients will feel good about themselves and the industry can get a better image in the public.

Outcome for Activity 10

- ☒ Satisfactory
☐ Not satisfactory

Trainer/Assessor comments

Perfect answer!

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

There are many diets in the social media that promise fast weight loss and other health advantages. Most of them are not backed by science. Many scientists say that these diets are often highly restrictive. They are missing vital nutrients, in some cases have no whole foods such as dairy or grains. They often consist of unusual, expensive and unnecessary food products and ingredients. A successful weight-loss program looks at many aspects such as nutrition, exercise, healthy living etc.

Referral for advice

Generally speaking there is probably no diet that is successful over a long period of time. In case a person wants to try a diet, I would advise him to go to a nutritionist or accredited sports dietitian to find out about the pros and cons of a particular diet, what nutrients are missing and what the focus of the diet is on

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

Indian J Psychiatry. 2008 Apr-Jun; 50(2): 77–82.

Understanding nutrition, depression and mental illnesses

The article explains the connection between nutrition and depression. A notable feature of the diets of patients in many Asian and American suffering from mental disorders is the severity of deficiency of nutrients especially essential vitamins, minerals, and omega-3 fatty acids. The most common nutritional deficiencies seen in patients with mental disorders are of omega–3 fatty acids, B vitamins, minerals, and amino acids that are precursors to neurotransmitters.

Furthermore, the article explains the beneficial effects of carbohydrates for the brain (triggering the production of brain chemical serotonin that promotes the feeling of wellbeing), proteins (amino acid for brain functioning), Vitamins and Minerals. Finally, the article expresses that the findings may lead to greater acceptance of the therapeutic value of dietary intervention addressing depression and other psychological disorders.

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 oats with milk	1190	carbohydrates
Lunch	Grilled chicken wrap/McDonalds Smoothie	1213 800	Protein, carbohydrates sugars
Dinner	Chicken breast with vegetable Orange juice	520 and 913 470	Protein and carbohydrates sugars
Snacks	1 apple 1 can of tuna 1 orange	264 536 287	Carbohydrates, vitamins protein carbohydrates, vitamins

DAY 2			
Meals	Food consumed	Kilojoules	Major nutrients
Breakfast	2 weet-bix 1 banana and milk	1100	Carbohydrates, protein
Lunch	Mushroom, spinach omelette Boost juice	3700 1000	Protein, dietary fibre Carbohydrates, sugars
Dinner	beefsteak frozen green vegetable 1 Chai latte	916 334 441	protein dietary fibre, carbohydrates sugars
Snacks	Goji berries nuts 1 ice cream	123 771 329	Carbohydrates, protein Protein, carbohydrates, dietary fibre sugars

Your daily food intake

On the first day the kj intake was 6193, on the second 8814. I think the kj intake was not too high. I have eaten 'good' carbohydrates, proteins and vitamins. They are good for your health. A high carbohydrate diet is essential for optimum sports performance as it provides stores of muscle glycogen and provides energy. The proteins I have eaten came from meat, eggs, milk. Proteins are important as they are broken down into the 8 essential amino acids. Vitamins and minerals I have taken in by fruits and vegetable. They are vital for the functioning of the body.

Obvious though is, that I have taken in too many 'bad' carbohydrates sugars. Boost juice, chai latte, ice cream, canned orange juice, smoothie do not have any nutritional value. They are actually bad for your health. They contain high amounts of rapidly absorbed carbohydrates that spike blood sugar levels. Eating too much of these can cause obesity and gastro disorders.

Having analysed my nutrition I would say I should substitute the soft drinks with 'real' fruit juices. Also, instead of ice cream I should take for example a fruit bowl that has essential vitamins. Furthermore, I should not eat junk food or too many sauces as it is high in fat and sugars. Finally, I should pay attention to the intake of fish. Fish is considered to be high-protein and low-fat food.

Societal and cultural beliefs

Social and cultural beliefs such as from culture, family, peers have an influence on food choices. Studies have shown that different social classes make different food choices. Cultural influences such as food preparation, tradition and food preferences also have an impact on food choices. For example, some cultures exclude milk and meat from their diet. The family is recognised as being most important in food decisions. What we learn to eat at home will shape our food choices. However, food choices are also influenced by the outside. What is offered at school and at work often limits the food choices.

Role of essential nutrients

There are six main groups of essential nutrients:

Proteins: provides the building blocks of the body, and not just for muscle. Every cell, from bone to skin to hair, contains protein

Carbohydrates: Carbs fuel your body, especially your central nervous system and brain, and protect against disease. Carbohydrates should make up 45 to 65 percent of your total daily calories. Some carbs are healthier than others. Whole grains, beans, and fiber-rich vegetables and fruits are better than refined grains and products with added sugar. They are lower in GI and can therefore be better digested. The body breaks them down into the simple sugar glucose. If not used directly consumed by the body cells for energy they will be stored in the muscle for later use.

Fats: fat is high in calories, but it supports many of your body's functions such as vitamin and mineral absorption, blood clotting, building cells, and muscle movement. Saturated and un-saturated fats are essential. They help the body absorb vitamins, and promotes proper growth and development

Vitamins: They are vital to the functioning of the body, especially the antioxidants vitamin A, C, E, they can attack tissue damaging free radicals. Vitamins especially the vitamin B complex also have a highly important role in keeping one's digestive system working efficiently.

Minerals: Minerals help support the body. They are essential for many body functions, including building strong bones and teeth, metabolism, healthy muscle and nerves and staying properly hydrated. Some of the most common minerals are calcium, iron, and zinc.

Water: About 60 percent of your body weight is water. Water improves your brain function and mood. It helps flush out toxins, carry nutrients to cells, hydrate the body, and prevent constipation.

Outcome for Case Study 1

- ☒ Satisfactory
☐ Not satisfactory

Trainer/Assessor comments

Perfect! 😊

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)	
	To lose body fat, increase muscle mass and wellbeing it is important to have a balanced lifestyle. To follow a training regime regularly, to have a balanced diet and a healthy lifestyle will help to achieve that goal. Resistance training is very helpful as it increases your metabolism. Naturally, the diet should have fruits, vegetables, lean protein and whole grains. Generally speaking, the diet should have all the important building blocks the body needs.
b)	We need food to fuel our bodies for energy, growth and repair. The digestive system converts the foods we eat into glucose (sugars), amino acids or fatty acids. The broken-down food is then absorbed into the bloodstream from the small intestine and the nutrients are carried to each cell in the body. Digestion begins in the mouth. From there it goes into the stomach, where it is broken down. From there it goes into the small intestine, where it is mixed with enzymes (pancreas) and bile (liver) and nutrients. After that the waste products end in the large intestine. c) Michael is not happy about his body image and is frustrated. As a trainer it is important to

	have a positive attitude and find a different way for Michael to look at himself. Instead of focusing on his 'fat' Michael should learn to focus on how the body is performing, how he is getting fitter and better. The scale is not the only measure for wellbeing.
c)	
d)	Internet forums and online advice is often given by people without proper qualification. A training program should be based on scientific evidence and should be tailored to a person's need. It is better to consult an expert and work out what is best.
e)	Accredited Sports Dietitians, professional nutritionists, GP's, personal trainers in Gyms, listening to university lectures.
f)	Paleo focuses on eating whole, unprocessed foods like grass-fed meat, free range poultry, wild fish, vegetables, fruit, berries, some nuts and seeds. It avoids grains, legumes, refined sugars and dairy. Even though it does not have too many carbohydrates in it, it does recommend eating good carbohydrates from vegetables, fruits, nuts and dairy. Compared to fad diets it is well-balanced. Fad diets often eliminate total essential food groups. That can lead to deficiencies and illness.
g)	Research has shown that nutrition is directly associated with the development of multiple chronic diseases over time. Having an unbalanced nutrition makes it more likely to develop a chronic disease. People should eat less high-calorie foods, especially foods high in saturated or trans fats and sugar, be physically active, prefer unsaturated fat and use less salt; enjoy fruits, vegetables and legumes; and select foods of plant and marine origin.
h)	As Michael wants a fresh start a new program is designed, new movement patterns are learned. Diet and nutritional strategies are also designed. The first phase focuses on learning, the volume for this phase is 1 or 2 sets per exercise for about 10 to 12 repetitions. This is followed by a phase that has lower intensity and higher volume routines. The focus lies here on muscular and cardiovascular endurance. It follows a phase with high intensity and volume in order to achieve muscle hypertrophy. The increased intensity and the still high volume will have a big impact on bodyfat reduction as well as on hypertrophy.

	Exercises that train the upper body such as dumbbell bench press, shoulder press, lateral pulldown, pull-ups and exercises for the lower body such as squats, deadlifts, leg press and dumbbell lunges should be performed according to the above plan.
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Outcome for Case Study 2	☒ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

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	