

**SISFFIT005 Provide healthy eating information**



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## ASSESSMENT FOR SISFFIT005

|                                      |                                                                                             |
|--------------------------------------|---------------------------------------------------------------------------------------------|
| <b>Student name</b>                  | Jack Low                                                                                    |
| <b>Date of assessment submission</b> | 14/10/2018                                                                                  |
| <b>Trainer/Assessor's name</b>       | Kymberley Sant                                                                              |
| <b>Date of assessment marking</b>    | 31/10/2018                                                                                  |
| <b>Outcome for units</b>             | <input type="checkbox"/> Competent<br><input checked="" type="checkbox"/> 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                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| <p>1. The six (6) essential nutrients can be classified as...</p> <p><input checked="" type="checkbox"/> Carbohydrates, Fats, Proteins, Vitamins, Minerals, Water</p> <p><input type="checkbox"/> Water, Meat, Vegetables, Breads, Grains, Fats</p> <p><input type="checkbox"/> Fruit, Vegetables, Proteins, Water, Carbohydrates, Fluids</p> <p><input type="checkbox"/> Carbohydrates, Fats, Proteins, Fibre, Minerals, Milk</p> | <input checked="" type="checkbox"/> |
| <p>2. Generally, where does the main source of energy from food come from?</p> <p><input type="checkbox"/> Fats</p> <p><input checked="" type="checkbox"/> Carbohydrates</p> <p><input type="checkbox"/> Oxygen</p> <p><input type="checkbox"/> Protein</p>                                                                                                                                                                        | <input checked="" type="checkbox"/> |
| <p>3. What is the basic daily percentage requirements for carbohydrates?</p> <p><input type="checkbox"/> 10-15%</p> <p><input type="checkbox"/> 33%</p> <p><input type="checkbox"/> 20-35%</p> <p><input checked="" type="checkbox"/> 45-65%</p>                                                                                                                                                                                   | <input checked="" type="checkbox"/> |
| <p>4. What does GI stand for?</p> <p><input checked="" type="checkbox"/> Glycaemic Index</p> <p><input type="checkbox"/> Glycaemic Indicator</p> <p><input type="checkbox"/> Glyogen Index</p> <p><input type="checkbox"/> Glycolytic Indication</p>                                                                                                                                                                               | <input checked="" type="checkbox"/> |
| <p>5. 15% to 25% of kilojoules consumed in a balanced diet should come from...</p> <p><input type="checkbox"/> Vitamins and minerals</p> <p><input type="checkbox"/> Water</p> <p><input type="checkbox"/> Fats</p> <p><input checked="" type="checkbox"/> Protein</p>                                                                                                                                                             | <input checked="" type="checkbox"/> |
| <p>6. What are considered the building blocks of life?</p> <p><input type="checkbox"/> Carbohydrates</p> <p><input type="checkbox"/> Proteins</p> <p><input type="checkbox"/> Fluids</p> <p><input checked="" type="checkbox"/> All of the above</p>                                                                                                                                                                               | <input type="checkbox"/>            |

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

|                                  |                                                                                               |
|----------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Outcome for Quiz</b>          | <input type="checkbox"/> Satisfactory<br><input checked="" type="checkbox"/> Not satisfactory |
| <b>Trainer/Assessor comments</b> | So close Jack!                                                                                |

## SHORT ANSWER ACTIVITIES

**A.**

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

### Brief description

The aim to promote health and wellbeing, reduce the risk of diet-related conditions and reduce the risk of chronic disease.

**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 the rate of which a human burns calories. Somebody with a high metabolism will burn calories/ kilojoules faster than somebody with a low metabolism.

**Role of metabolism**

Human body composition can be directly related to metabolism and the rate of metabolism. Having a high metabolism will cause the body to burn more energy therefore affecting overall composition. Muscles need energy to contract, muscle metabolism is the deciding factor as to how these muscles do this.

**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, occurring when a person does have a properly functioning pancreas. Type 1 requires insulin.

Type 2 is not an autoimmune condition, therefore the person will develop this condition through age and poor nutrition

**Role of nutrition in symptoms and treatment**

People with type 1 diabetes may benefit from controlling and counting the amount of carbohydrates they eat because carbohydrates are the body's primary source of glucose. People with diets that consist of low blood sugar may experience the symptoms of diabetes, these diets will allow diabetics to realise that they are infact diabetic due to lightheadedness, numbness or tingling legs.

**Outcome for Activity 3**

- ☐ Satisfactory  
☒ Not satisfactory

**Trainer/Assessor comments**

Great start, please also answer how nutrition plays a role in the symptoms and treatment of Type 2 diabetes.

**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**

They are allowed to make general suggestions about the kinds of foods that are likely to support their clients goals.

**Other advice sources**

Nutritionists, dieticians, GP.

**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 purpose of a glycaemic index (GI) diet is to eat carbohydrate-containing foods that are less likely to cause large increases in blood sugar levels.

**How foods are rated**

Food ratings are determined by feeding 10 or more healthy people a proportion of the food containing 50 grams of digestible carbohydrate and then measuring the effect on their blood glucose levels over the next two hours.

**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 the reduced ability of the body to break down and digest lactose which is a milk sugar due to insufficient gut enzyme called lactase.

**Foods to avoid**

Milk and Dairy products including yoghurt and soft chesses like Brie.

**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**

The human body requires water for cell life, body temperature regulation, to transport nutrients and remove waste and metabolic reactions.

**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**

Bloating in the stomach, wind, abdominal pain, constipation, and diarrhea.

**Treatments**

Nexium and Somac are often prescribed by a GP as they can help reduce the level of acid the stomach produces. For constipation laxatives may be required, and for diarrhea gastro stop can be used. Eating smaller meals more frequently relieves symptoms of irritable bowel syndrome by giving the digestive system a break and limit caffeine. Exercise is an excellent natural treatment for constipation as it gets things moving in the digestive tract.

**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**

|  |
|--|
|  |
|--|

**Guiding clients**

- A) Answer for above box – It is recommended that anyone partaking in Ramadan is to limit physical activities to a minimum, health precautions must be taken to eliminate the chance of injury and sickness.
- B) My role would be to construct a low energy burning exercise routine.

**Outcome for Activity 9**

- ☐ Satisfactory  
☒ Not satisfactory

**Trainer/Assessor comments**

A little more detail for b) please- taking into consideration training times, etc.

**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**

Discussing realistic goals with each individual client. Challenging the assumption that physical fitness and appearance go hand in hand.

**Fitness industry**

Emphasizing fitness as a process rather than a means to an end can help clients with common body image hang ups.

**Outcome for Activity 10**

- ☐ Satisfactory  
☒ Not satisfactory

**Trainer/Assessor comments**

Please go into more detail for **b)** elaborating more on the steps you can take as a fitness professional, for example positive role model, 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 educate the clients in regards to the benefits and disadvantages of each of the main Fad diets on the market And advise that most Fad diets have been shown to have short term success rates and over time will not be healthy or sustainable.

**Referral for advice**

GP, nutritionist, Dietitian, Hospital specialists.

**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 |
|-------------------------------|
|                               |

|                           |                                                                                                                                                                                                                                               |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Outcome for Activity 12   | <input type="checkbox"/> Satisfactory<br><input checked="" type="checkbox"/> Not satisfactory                                                                                                                                                 |
| Trainer/Assessor comments | Great article Jack, however your answer needs to be in your own words, a summary of the findings in the article.<br><a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2738337/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2738337/</a> |

## 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                        |
|------------------|-----------------------------------------------------------------------------------------------|------------|----------------------------------------|
| <b>Breakfast</b> |                                                                                               | 0          | 0                                      |
| <b>Lunch</b>     | Chicken and vegetable Stir-fry w/rice                                                         | 800        | Lean chicken breast, green vegetables. |
| <b>Dinner</b>    | Rump steak, boiled potatoes and green vegetables                                              | 1500       |                                        |
| <b>Snacks</b>    | 1 slice of vanilla cake<br>1 Jazz Apple<br>2 Glasses of Full cream milk<br>1 White bread Roll | 1200       | Fruit, Calcium, Carbohydrates.         |

| <b>DAY 2</b>     |                                            |                   |                            |
|------------------|--------------------------------------------|-------------------|----------------------------|
| <b>Meals</b>     | <b>Food consumed</b>                       | <b>Kilojoules</b> | <b>Major nutrients</b>     |
| <b>Breakfast</b> | Porrige W/ honey                           | 600               | Oats                       |
| <b>Lunch</b>     | Crumed Cod, Calamari, Hot Chips            | 1500              |                            |
| <b>Dinner</b>    | Homemade Chipotle chicken and beef Buritos | 1500              | Chicken breast, Vegetables |
| <b>Snacks</b>    | Popcorn<br>2 Glasses of milk               | 500               | Calcium                    |

| <b>Your daily food intake</b>                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5.5 Vegetables and Legumes<br>2 Fruit<br>7 Grains<br>2.5 Lean meat, fish, poultry, eggs, nuts, seeds, legumes, beans<br>3.5 Milk, Yoghurt cheese<br><br>numbers in Servings * |

| <b>Societal and cultural beliefs</b>                                                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Non Religious                                                                                                                                                 |
| <b>Role of essential nutrients</b>                                                                                                                            |
| 1. Building all parts of the body such as muscle, bone, teeth, and blood<br>2. Producing energy (power and heat)<br>3. Keeping the body in good working order |

|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Outcome for Case Study 1</b>  | <input type="checkbox"/> Satisfactory<br><input checked="" type="checkbox"/> Not satisfactory                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Trainer/Assessor comments</b> | <p><b>a)</b> Please review answers for Major Nutrient column, Please review answers for kilojoule- some are a bit off. I use my fitness pal for reference and convert the calories to kilojoules.<br/> <a href="https://www.myfitnesspal.com/food/search">https://www.myfitnesspal.com/food/search</a></p> <p><b>b)</b> Please go into more detail- 300 word discussion on your daily intake, answering the points asked above.</p> <p><b>c)</b> Answer generically- What societal and cultural beliefs and activities have an impact on people's food choices?</p> <p><b>d)</b> Please go into more detail about essential nutrient's role in digestion and more detail about the body function.</p> |

**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.

|           | <b>Response</b>                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>a)</b> | The key way to lose weight is to be in a calorie deficit, however Michael wants to gain lean muscle mass at the same time. I would recommend that Michael takes a calorie diary to allow him to keep track of how much he is eating. To increase lean muscle mass Michael must stick to a strict diet high in protein and low in carbs and fats. To improve his general wellbeing Michael must allow for 1 hour of exercise per day. |
| <b>b)</b> | The <b>digestive system</b> converts the foods we eat into their simplest forms, like glucose (sugars), amino acids (that <b>make</b> up protein) or fatty acids (that <b>make</b> up fats). The broken-down food is then absorbed into the <b>bloodstream</b> from the small intestine and the <b>nutrients</b> are carried to each cell in the body.                                                                               |
| <b>c)</b> | Advising Michael that fitness is a process rather than a means to an end and through hard work and time goals will be accomplished.                                                                                                                                                                                                                                                                                                  |
| <b>d)</b> | Information posted on internet forums may not be suitable or accurate for Michael's situation and body type. Having a consultation with a qualified fitness trainer will allow Michael to discuss what his specific goals are and to have a personal exercise plan with achievable milestones created with his specific goals in mind.                                                                                               |
| <b>e)</b> | Dietitians, Nutritionists and General Practitioners are the best people to talk to about nutritional advice. And the General Practitioners and Personal Trainers are the best people to get advice on training.                                                                                                                                                                                                                      |
| <b>f)</b> | <b>The Paleo Diet involves removing grains and legumes from your diet. The benefits of the Paleo Diet are:</b><br>You are more likely to eat a clean diet without additives, preservatives, or chemicals.                                                                                                                                                                                                                            |

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <p>There are <b>anti-inflammatory</b> benefits from the plant <b>nutrients</b> in fruits, vegetables, oils, nuts, and seeds you will be eating.</p> <p>If you are eating more red <b>meat</b> as part of this diet you will get more <b>iron</b>, zinc and Vitamin B12.</p> <p>I would also educate Michael about the benefits and disadvantages of all the main Fad diets on the market and advise that most Fad diets have short term success rates and over time.</p>                                                               |
| g) | <p>Poor nutrition leads to many chronic medical conditions for example a diet high in fat, calories and cholesterol increases your risk of Type 2 diabetes. A poor diet can lead to obesity another risk factor for Diabetes and other health problems. Eating a diet high in processed meats, saturated fats and salt has been proven to increase your risk of coronary artery disease. High blood cholesterol levels can lead to a buildup of plaque in your arteries which can increase your risk of a heart attack and stroke.</p> |
| h) | <p>The following exercises would be incorporated into Michael's plan.</p> <p>Compound weightlifting – Squats, deadlifts, bench press, clean and jerk, military press.</p> <p>Cardio circuit- Rowing machine, Military battle rope circuit, hill sprints.</p>                                                                                                                                                                                                                                                                           |

|                           |                                                                                                                                                                                                                                                                           |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Outcome for Case Study 2  | <input type="checkbox"/> Satisfactory<br><input checked="" type="checkbox"/> Not satisfactory                                                                                                                                                                             |
| Trainer/Assessor comments | <p>Re-answer using your own wording for questions <b>b)</b> and <b>f)</b> -first part of your response.</p> <p><b>h)</b> more detail please- outlining training methods of each exercise (rep, load, etc) to help Michael meet his goals of fat loss and hypertrophy.</p> |

## 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                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| <ol style="list-style-type: none"> <li>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:               <ol style="list-style-type: none"> <li>1. Collaborate with the client to implement healthy eating habits, showing sensitivity to cultural and social differences influencing food choices</li> <li>2. Refer to current healthy eating information resources, answering client queries/concerns regarding the interpretation of such resources</li> <li>3. Explain the adverse effects of poor nutrition</li> <li>4. Identify and prepare a referral to an accredited practising dietitian, accredited sports dietitian and/or general practitioner</li> </ol> </li> </ol> | <input type="checkbox"/> |

|                                   |                                                                                    |
|-----------------------------------|------------------------------------------------------------------------------------|
| <b>Outcome for Practical Task</b> | <input type="checkbox"/> Satisfactory<br><input type="checkbox"/> Not satisfactory |
| <b>Trainer/Assessor comments</b>  |                                                                                    |