

**CARIBBEAN EXAMINATIONS COUNCIL**

**REPORT ON CANDIDATES' WORK IN THE  
CARIBBEAN ADVANCED PROFICIENCY EXAMINATION®**

**MAY/JUNE 2014**

**FOOD AND NUTRITION**

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## GENERAL COMMENTS

This subject consists of two units — Unit 1 and Unit 2. Each unit comprises two papers.

Overall performance on Unit I was comparable with that of 2013 with 99.34 per cent of candidates achieving Grades I–V. Candidates’ performance on the School-Based Assessment (SBA) improved. Candidates performed better on Module 2 (Food Selection and Meal Planning) and Module 3 (Food Preparation and Service: Principles and Methods) than on Module 1 (Principles of Nutrition and Health).

In Unit 2, overall performance was comparable with that of 2013 with 99.37 per cent of candidates achieving Grades I–V. Candidates’ performance on the SBA improved. Candidates performed similarly on Module 1 (Caribbean Food Ways and Food Systems), Module 2 (Food Science and Technology) and Module 3 (Food Preparation and Service: Large Quantity and Commercial).

## DETAILED COMMENTS

### UNIT1

#### **Paper 01 – Multiple-Choice Questions**

Paper 01 consisted of 45 multiple-choice items with 15 items from each module. Candidates’ performance on this paper was good.

#### **Paper 02 – Structured Essay**

#### **Section I – Compulsory Question Modules 1, 2 and 3**

##### Question 1

This question tested candidates’ knowledge and understanding of the chronic diseases that affect teenagers; modifications which can prevent the occurrence of these chronic diseases; guidelines for safe and effective storage, handling and preparation of food; types of accidents that can occur in a kitchen; and ways that food safety can be achieved in the kitchen of food establishments. The question also tested the steps involved in the cleaning of a blender and the appropriate use of different types of knives.

The compulsory question was attempted by all the candidates. Overall performance on this question was good.

In Part (a) (i), the majority of candidates was able to identify chronic diseases and suitable modifications to prevent the occurrence of chronic diseases. Some candidates were not awarded maximum marks because they did not discuss how the modifications would result in the prevention of the diseases. Expected responses were:

- *Increase physical activity in order to maintain energy balance*
- *Replace meat with pulses and beans to facilitate low calorie and fibre intake*
- *Increase the use of complex carbohydrates to promote the feeling of fullness therefore discouraging overeating*
- *Increase intake of low calorie foods to maintain energy balance*
- *Decrease the amount of alcohol consumed, lowering the caloric intake*

For Part (a) (ii), candidates were required to examine a menu and make modifications suitable for teenagers with HIV/AIDS. In most cases, candidates gave modifications such as replacing the pork with other meat, replacing orange juice with fruit punch and adding more vegetables to the menu. However, they had challenges giving reasons for the modifications.

Part (b) (i) was well done as evidenced by the ability of candidates to correctly discuss guidelines that should be considered to ensure that food is stored, handled and prepared in a safe manner. In Part (b) (ii), most candidates were able to identify accidents that can occur in the kitchen of a food establishment and explain ways in which food safety can be achieved in the kitchen.

In Part (c), the majority of candidates was able to state five steps that should be taken when cleaning a blender, and in Part (c) (ii), candidates correctly suggested appropriate activities for the various types of knives. However, some candidates were unable to adequately explain reasons for the suggestions.

## **Section II – Optional Questions**

### **Module 1**

#### Question 2

This question tested candidates' understanding of how the factors anxiety, poverty and the loss of an elderly spouse may affect eating behaviour; the synergistic relationship between diarrhoea and malnutrition in young children; and the assessment of the nutritional status of individuals.

Fifty-three per cent of candidates responded to this question and overall performance was satisfactory.

In Part (a), the majority of candidates correctly suggested how anxiety, poverty and loss of an elderly spouse may affect eating behaviours.

For Part (b), explaining the synergistic relationship between diarrhoea and malnutrition in young children was challenging for candidates. They gave brief definitions of each term and could not be awarded maximum marks. An expected response was:

*A cycle is created in which the young child with diarrhoea may not be fed with milk and other nutrient dense foods. This creates a deficiency of calories and nutrients resulting in under-nourishment. Malnourishment also results from depletion of fluids and nutrients through diarrhoea. Malnourished children in turn have a low resistance to infectious diseases, including food-borne illnesses which cause diarrhoea and vomiting.*

In Part (c), the majority of candidates was able to adequately explain methods of assessing the nutritional status of an individual and provide suitable examples. In Part (c) (ii), candidates were able to identify tools used to determine the growth of young children.

### Question 3

This question tested candidates' understanding of the advantages of breastfeeding to babies; factors which affect the basal metabolic rate; and follow-up actions that a family may take to ensure the improvement of children's health and nutrition.

This question was attempted by 38 per cent of the candidates. Performance on this question was good.

In Part (a), candidates demonstrated that they were familiar with the advantages of breastfeeding to babies.

In Part (b), most candidates were unable to define basal metabolic rate (BMR) and discuss factors which may raise or lower the rate. An expected response was:

*Basal metabolic rate is the minimum amount of energy (calories) the body uses to carry out its functions when at rest, for example, circulation and respiration.*

### **Factors Which Affect BMR**

- Increase in weight and height.
- Body composition: Fat tissue has a lower metabolic activity than muscle tissue. As lean muscle mass increases, metabolic rate increases.
- Health: Fever, illness, or injury may increase resting metabolic rate two-fold.
- Climate and body temperature: The BMR of people in tropical climates is generally 5 to 20 per cent higher than their counterparts living in more temperate areas because it takes energy to keep the body cool.
- Age: In youth the BMR is higher; age brings less mass and lower BMR.
- Growth: During periods of rapid growth such as growth in children or in pregnancy, BMR increases.
- Exercise (physical activity) uses up energy and increases the BMR.
- Increased intake of food requires the digestive system to process more material which requires more energy.
- Increased stress and anxiety requires an increase of energy.
- Fasting and malnutrition: When individuals desist from eating, the BMR is lowered.
- Gender: The basal metabolic rate (BMR) averages 5 to 10 per cent lower in women than in men. This is largely because women generally possess more body fat and less muscle mass than men of similar size.
- Thyroxine: the more thyroxine produced the higher the BMR; if thyroxine production is reduced, the BMR will be lowered.

For Part (c), most candidates were able to outline the follow-up actions that a family may take to ensure improvement of children's health and nutrition.

### **Section III – Optional Questions**

#### **Module 2**

#### Question 4

This question tested candidates' understanding of the roles and negative impacts of Vitamin A in the diet as well as the advantages and disadvantages of using genetically engineered foods.

This question was attempted by 25 per cent of candidates. Overall, performance was poor.

Performance on Part (a) was poor. While candidates were able to adequately outline the roles of Vitamin A in the diet and give examples of Vitamin A food sources, many had challenges

explaining the negative impacts of consuming a diet high in Vitamin A. Expected responses included:

- *When a diet is high in Vitamin A, the carotenoids turn the skin to a yellow colour. The retinol converts to this yellow colour.*
- *Excess intake of vitamins is known as hypervitaminosis which leads to problems with the digestive system causing nausea, loss of appetite, vomiting, abdominal pain, diarrhoea and weight loss.*
- *Too much Vitamin A in the diet is poisonous or toxic as it is stored in the body and can seriously affect the skin and the joints especially in children.*
- *A diet rich in Vitamin A may cause lower bone density, increasing the risk of osteoporosis.*

Part (b) was well done as evidenced by candidates' ability to discuss the advantages and disadvantages of using genetically engineered foods to increase food supply.

#### Question 5

This question tested candidates' understanding of food storage; the need for persons with high cholesterol and cardiovascular disease to read nutrition information on food labels; and conserving nutrients during the preparation and cooking of meat and vegetables.

This question was attempted by 75 per cent of candidates. Overall, performance was fairly good.

Performance on Part (a) was good. The majority of candidates responded well as they gave suitable responses for the guidelines to be followed when storing food in the freezer; however, some candidates had challenges justifying the responses given, and were not awarded maximum marks. Expected responses included:

- *Foods should be properly wrapped or packaged to prevent freezer burn and to prevent contamination of other foods.*
- *Storage time and First-In, First-Out (FIFO) principle should be observed in order to avoid freezer burn.*
- *Do not freeze large quantities of unfrozen foods at the same time. This can raise the temperature of the entire unit and damage stored foods.*
- *Defrost freezer regularly to keep an inventory of foods and for the compartments to function effectively.*
- *Set freezer to correct temperature to ensure food is not in the danger zone.*

In Part (b), some candidates were able to explain the importance of persons suffering from high cholesterol and cardiovascular diseases reading nutrition information on labels. However, only a few of them made the connection between the two conditions and the caloric content of food and recognized that both conditions require persons to maintain a healthy body weight.

In Part (c), most candidates adequately explained the guidelines used to conserve nutrients in vegetables during preparation and cooking; however, outlining similar guidelines for meat proved to be challenging. Expected responses for the guidelines used to conserve nutrients in meat during preparation and cooking included:

- *Steaming meats rather than boiling, or broiling rather than frying, can significantly reduce the loss of nutrients when meats are being cooked.*
- *Shortening the cooking time since potassium can be lost when meat is cooked.*
- *Selecting appropriate methods for cooking certain cuts of meats because different cuts of meats require different times for cooking and if these times are exceeded then the nutrients will be lost.*
- *Minimizing cooking time because Vitamin A is heat liable (sensitive to heat) and can be lost during cooking.*
- *Using the fat from pan drippings from meat and poultry to make gravy or soup because the nutrients will be contained in the drippings.*
- *Washing or soaking meats and poultry for long periods may result in significant loss of nutritive value and flavour therefore wiping with a damp cloth is sufficient.*
- *Avoiding the use of water directly on frozen meats to hasten thawing because this promotes the leaching of nutrients.*

## **Section IV – Optional Questions**

### **Module 3**

#### Question 6

This question tested candidates' understanding of sweet and savoury; garnishes and decorations; and guidelines for frying fish using pan/shallow frying. Performance on this question was fairly good. The question was attempted by 85 per cent of candidates.

In Part (a) (i), the majority of candidates was able to provide suitable suggestions for both savoury and sweet dishes, however, some candidates did not clearly identify the sweet or savoury dishes and were not awarded maximum marks. For Part (a) (ii), the majority of candidates did not

receive maximum marks because they did not describe two ways in which the selected foods may be used as either a garnish or decoration; instead, they identified suitable foods that can be garnished or decorated with the selected foods.

Part (b) was well done; most candidates were able to explain the guidelines for frying fish using the pan-frying or shallow-frying method.

### Question 7

This question tested candidates' understanding of the preparation of a chicken salad; modifications needed to make the salad suitable for a person on a low calorie diet; and changes that may occur in beef when cooked by a moist method.

Performance on this question was below average. The question was attempted by 14 per cent of the candidates.

Performance on Part (a) was good as some of the candidates were able to provide a sequence of activities to be followed before preparing a chicken salad. However, some candidates rather than providing pre-preparation activities gave actual preparation activities such as combining all ingredients in a mixing bowl.

Part (b) was fairly well done as evidenced by the ability of candidates to adequately suggest suitable modifications that would make a chicken salad suitable for a person on a low calorie diet. Some candidates gave general modifications to improve the aesthetics of the salad and were not awarded maximum marks.

Part (c) required candidates to discuss changes that may occur in beef when cooked using a moist method. Some candidates were able to provide an accurate response.

**UNIT 2****Paper 01 – Multiple Choice Questions**

Paper 01 consisted of 45 multiple-choice items with 15 items from each module. Candidates' performance on this paper was good.

**Paper 02 – Structured Essay****Section I – Compulsory Question****Modules 1, 2 and 3**Question 1

This question tested candidates' knowledge and understanding of factors that influence food customs and practices in the Caribbean; strategies to be considered by food and health agencies to ensure that persons are adequately nourished after a natural disaster; food preservation techniques; and planning meals using the multi-mix principle.

Overall, performance on this question was very good.

In Part (a) (i), most candidates were able to adequately explain factors that influence food customs and practices in the Caribbean but in Part (a) (ii), most candidates were unable to explain strategies that should be considered by food and health agencies to ensure that people are adequately nourished after a natural disaster. Expected responses included:

- *Ensure the safety of all food so that it is of a high quality and fit for human consumption so as to prevent food poisoning.*
- *Ensure that persons belonging to vulnerable groups (children, elderly persons and persons suffering from chronic diseases) are provided with adequate foods suited for their special needs since without their food, several consequences can occur. Special kitchens can be set up to feed such persons.*
- *Ensure nutrient dense foods are distributed as a means of providing persons with adequate nutrients to prevent undernutrition.*
- *Provide potable water to prevent persons from consuming unsafe water which can cause food-borne diseases.*

- *Provide a help hotline to ensure that those who cannot reach centres still have a means of accessing food and medical supplies.*
- *Provide immunization to prevent water-borne diseases.*
- *Provide medication to persons with chronic diseases or other persons who need to access to medication.*
- *Set up mobile clinics to monitor the health status of those affected.*

Performance on Part (b) (i) was generally weak as evidenced by candidates' inability to provide an accurate explanation for the terms *fortification* and *enrichment*. However, a significant number of candidates were still able to provide suitable examples of both terms. For Part (b) (ii), most candidates were unable to outline reasons for food spoilage and a significant number incorrectly gave food storage as a cause. Additionally, most candidates had challenges interpreting the question; many identified freezing as a method of preservation even though the question specifically asked for the use of methods *other than* low temperatures. Canning was also given as a popular response to methods of preservation that can be done in the home. Expected reasons for food spoilage included:

- *Moisture Loss – This occurs mainly in fruits and vegetables which contain large amounts of water. Fruits and vegetables continue to respire after harvesting and therefore lose water through their leaves and skin. After harvesting, there is no way that the lost water can be replaced, so the vegetable or fruit shrinks in size, becomes limp and the skin becomes wrinkled and leathery. Moisture loss occurs in other foods such as meat, fish and cheese due to the evaporation of water from the surface.*
- *Enzyme Action in Food – Enzymes are chemicals which are present in all foods. They speed up chemical changes that result in the loss of flavor, colour and texture.*
- *Micro-organisms – The micro-organisms responsible for the contamination of food are bacteria, moulds and yeasts. They are capable of multiplying rapidly in the correct moisture, food and temperature conditions. These conditions must be avoided if the risk of food spoilage is to be reduced.*
- *Insects, worms and rats – Insects or rodents invade food items and make holes in the food items, spreading bacteria. The food becomes unfit for human consumption.*

In Part (c), candidates were required to use the three mix principle to plan a five-course menu for a graduation dinner. Some candidates planned interesting menus while others eliminated either the Fish/Salad or soup courses and were not awarded maximum marks. Additionally, some menus did not reflect variation in shape, colour or texture.

## Section II – Optional Questions

### Module 1

#### Question 2

This question tested candidates' ability to create original recipes and to evaluate sanitation conditions of food facilities.

Overall, performance on this question was very good. The question was attempted by 27 per cent of the candidates.

Part (a) was done well as most candidates were able to create an interesting recipe using the stated ingredients. However, some recipes lacked proportions and the use of appropriate herbs/marinade to improve the flavour of the dish. Some candidates had challenges sequencing tasks and outlining the preparation methods of the dish. A small number of candidates wrote a menu instead of a creating a recipe.

In Part (b), candidates were required to design a food premises inspection checklist to evaluate the sanitation conditions of a cafeteria facility. Some candidates misinterpreted the question and supplied personal hygiene rules. Additionally, some candidates did not supply the reason for the items given on the checklist. Expected responses included:

- *Are all foods stored off the floor? This prevents water, dust or other contaminants from soaking through bags or otherwise contaminating the food.*
- *Is the FIFO method of inventory being practised? This ensures that stocks are rotated and remain fresh, new and in good condition for the consumer.*
- *Is there a three-compartment sink for washing, rinsing and sanitizing set up? This is necessary because cleansing alone does not kill microbes, and microbes contaminate food.*
- *Are all refrigerators, freezers and holding equipment commissioned and operational? This is to ensure that items are kept at a temperature that prevents the growth of microbes.*
- *Is a working thermometer available at the premises? This is important so that staff can check and make sure food is below the temperature danger zone.*

#### Question 3

This question tested candidates' knowledge and understanding of dietary guidelines for promoting good health and reducing the risk of chronic diseases as well as the nutritional facts concerning

food beliefs. This question was attempted by 73 per cent of the candidates. The performance on this question was good.

In Part (a), the majority of candidates was able to outline dietary guidelines that can be used by family members to promote good health and reduce the risk of chronic diseases.

In Part (b), while some candidates adequately provided popular beliefs from the different territories they were unable to explain the nutritional facts in relation to each belief. Additionally, some candidates gave nutritional facts rather than popular beliefs, for example, ‘milk is an excellent source of calcium’. In such cases, candidates were not awarded maximum marks. It was expected that candidates would have explained the correct nutritional facts associated with the belief. Expected examples included:

- ***Fish is a brain food.*** *There is no scientific evidence to suggest that fish is particularly useful for the brain. The statement can be misleading. Nutritionally, fish is an excellent source of protein of high biological value. The omega-3 fatty acids present in fatty fish have been found to be beneficial in the prevention and management of cardiovascular disease.*
- ***Skimmed milk powder results in diarrhoea.*** *Skimmed milk powder is rich in calcium and potassium. It contains no fat making it low in calories. Persons may be lactose intolerant which may lead to diarrhoea. Hence the belief as given is not true.*
- ***To cure asthma tie children to a paw paw tree.*** *Paw paw is rich in carotene and carbohydrates. The enzyme papain found in paw paw is an excellent meat tenderizer. There is no proof that the fruit will cure asthma.*

### **Section III – Optional Questions**

#### **Module 2**

##### Question 4

This question tested candidates’ knowledge of *denaturation* and *coagulation*; the challenges faced by farmers when supplying food to consumers; and ways to reduce spoilage of food during transportation from the farm to the manufacturer.

This question was attempted by eight per cent of the candidates. The overall performance on this question was good.

Performance on Part (a) was poor as the majority of candidates was unable to clearly differentiate between denaturation and coagulation. Additionally, the majority of the candidates had challenges explaining methods of denaturation and providing suitable examples. Expected responses included:

*Denaturation is a physical alteration of the shape of a protein molecule or the breaking of hydrogen bonds that allow the molecule to unfold.*

*Coagulation is the change of liquid into a soft semisolid clots or solid mass.*

*Methods of denaturation*

1. *Heat- how much and how fast the protein denatures depends on both the temperature and structure of the protein. Examples: egg white, meat, poultry and fish*
2. *Mechanical treatment and agitation such as beating or whipping foods into foam. Examples: eggs, kneading of bread, pounding of meat, grinding of food*
3. *Certain salts cause protein to precipitate. Examples: ammonium sulphate, sodium chloride, vinegar and lemon juice.*

In Part (b) (i), most candidates outlined challenges faced by farmers when supplying food to consumers but did not discuss them; hence, they were not awarded the maximum marks. For Part (b) (ii), the majority of candidates gave suitable methods of reducing the spoilage of food during transportation from the farm to the factory.

Question 5

This question tested candidates' knowledge of food preservation; understanding of the steps used to preserve freshly harvested green peas by freezing; and disadvantages of consuming genetically engineered foods.

This question was attempted by 92 per cent of the candidates. Overall, performance on this question was very good.

Part (a) required candidates to define the term *food preservation* and explain reasons for preserving food. This part was very well done. Performance on Part (b) was good. Candidates were required to discuss the steps for preserving freshly harvested green peas and they were able

to provide accurate responses. For Part (c), most of the candidates were able to adequately discuss the disadvantages of consuming genetically engineered foods.

## Section IV – Optional Questions

### Module 2

#### Question 6

This question tested candidates' ability to evaluate the nutritional suitability of a menu for persons with diabetes and heart conditions, and their knowledge of factors to consider when calculating the real cost of a menu.

This question was attempted by 49 per cent of the candidates. Overall, performance on this question was poor.

In Part (a), candidates were required to evaluate a menu which was planned for a banquet at the end of Diabetes and Heart Health Week. The majority of candidates had challenges evaluating the nutritional suitability of the menu. In most instances, emphasis was placed on aesthetics and flavour rather than evaluating the nutritional content and suitability for the chronic diseases given. Others developed alternative menus which indicated better choices for the special group. Expected responses included:

- *Contains food from all the food groups but not in the correct balance. Persons with chronic diseases should consume a well-balanced diet.*
- *Foods in the category of carbohydrates/staples are all prepared with too much fat. A large consumption of saturated fats and cholesterol complicates the conditions of diabetes and hypertension.*
- *Protein dishes are low in fat. This will help persons to consume the recommended 12-15 per cent protein intake.*
- *Adequate vegetables are not provided. Pasta and potato salad are not good sources of vegetables. A diet rich in vegetables is advocated for persons with chronic diseases since they are nutrient dense.*
- *Two of the desserts are high in fat and sugar; only one healthy choice was given which was the fruit salad. Persons who choose the first two items will consume several calories and this can lead to obesity, high cholesterol and heart disease.*

Part (b) was not well done as the majority of candidates had challenges explaining factors to consider when calculating the real cost of the menu. Most candidates gave responses in relation to selecting and purchasing ingredients, tools and equipment. Expected responses included:

- *Establishments either rent or have a mortgage on their facility. If they own the property, land tax must be paid.*
- *In most Caribbean territories businesses must pay to government some form of tax.*
- *Businesses cannot operate without paying a number of utilities, including water, electricity, and telephone.*
- *Staff salaries or wages must be generated and paid from the profits of the business.*
- *Equipment must be replaced occasionally and new ones purchased as the menu is extended. Supplies such as containers, napkins and sanitizers are used daily and must constantly be replaced.*
- *Food ingredients constitute a large cost to any establishment and must be purchased regularly.*
- *Establishments are in business to make profits, therefore mark-up percentage must be calculated.*

#### Question 7

This question tested candidates' understanding of HACCP as well as maintaining a safe environment during the preparation of meat products.

This question was attempted by 51 per cent of the candidates. Overall, performance on this question was good.

Part (a) (i) was well done as the majority of candidates was able to identify critical control points and gave sound reasons for their choice. Performance on Part (a) (ii) was good as the majority of candidates correctly suggested how the monitoring of critical control points was conducted and identified the person responsible for monitoring each point.

In Part (b), the majority of candidates was able to provide guidelines to ensure that a safe environment is maintained during the preparation of meat patties.

### **Paper 03 – School-Based Assessment (SBA)**

This paper consisted of a portfolio comprising two pieces of work which tested objectives across all modules. Students, in consultation with the teacher and the guidelines provided by the Caribbean Examinations Council, selected the activities.

The first assignment was marked out of 30, while the second was marked out of 60. Overall, candidates' performance has shown great improvement.

The majority of portfolios was very well presented. Most of the illustrations were clear and creative. In some cases the quality of the assignments was appropriate for the CAPE level while others were not of the standard expected at this level. It is imperative that teachers are aware that a portfolio should be submitted, and not two distinct pieces.

This year there was an increase in the number of exemplary portfolios students submitted. This indicated that more teachers are following the recommendations outlined in the feedback reports.

One major area of concern continues to be the communication of information. While some students were able to communicate information in a logical manner with few grammatical errors, several students continue to present information with numerous grammatical errors. This reduced the overall quality of the portfolios.

#### **Module 1 - Research**

Most candidates selected appropriate topics and demonstrated knowledge of relevant facts. In some cases, literature reviews were not comprehensive, some students often did not utilize appropriate formats for citations and, in some cases, the sources used were not always cited. In addition, a variety of sources were not utilized.

Data were well presented but very little reference was made to the data. The discussion of findings lacked depth of interpretation. In some cases, findings were not based on the research conducted. Instead, students used the literature or guidelines and made generalizations regarding the topics.

In several cases, no inferences, predictions, or conclusions were attempted by students. Sometimes the conclusions and recommendations were not accurately or scientifically based and did not support the analysis of data.

Although the communication of information was satisfactory in some cases, the standard of communication for this level is extremely poor. Spelling and grammatical errors that can be easily corrected using the spell check on a computer were often overlooked.

## **Module 2 - Experimental and Recipe Modification**

Many creative products and modifications were attempted and most students utilized sensory evaluation to determine the quality of the product. Students selected appropriate experiments and demonstrated knowledge of relevant facts.

Many reports were not well written and presented. Most students formulated hypotheses but they were not always realistic. The procedures for experiments were in most cases not clearly documented. Students who modified products more than three times must be commended. Some students did not modify the product until a good quality was maintained or the requirements of the hypothesis were met. For a large majority of candidates, there was very little evidence to prove that they modified the product after critical or unexpected outcomes.

### **Recommendations to Teachers**

Students should be encouraged to:

- Read questions carefully, paying attention to key words.
- Place emphasis on comprehending the reasons for certain principles and procedures, rather than just learning by rote.
- Develop responses fully, paying attention to the marks allocated for each part of the question.
- Practise answering questions with a variety of key words, namely: discuss; explain; list; describe; and define. Ignoring these command words and simply listing responses when required to explain, for example, resulted in students' inability to gain as many marks as possible.

Participate in mock examinations using past examination papers. These should be administered under examination conditions in order to develop good examination techniques.

Utilize different media to become familiar with current nutrition issues.

Place emphasis on research techniques, case studies and problem solving.

Engage in field trips and work attachments to help them fully understand many nutrition concepts such as methods for assessing the nutrition status of children, complementary feeding and breast feeding, nutrition related disorders, and practices and procedures for ensuring safety of food.

Develop ideas and demonstrate clarity of expression. In many cases, students showed some knowledge of the concept being tested but could not adequately respond to questions to the standard that is required for CAPE.

Seek guidance in choosing topics for projects as well as throughout the entire exercise.

Select topics that are of interest to them and that relate to a problem in the region or community. This should ensure that there is ownership and motivation for the project.

Note that literature reviews for each assignment do not have to be extensive but should be thorough enough to outline the problem and guide relevant research. This cannot be adequately done in two or three pages; literature reviews must be no less than two thousand words.

Utilize a variety of sources: there was a heavy reliance on the internet and in many cases, this was the only source cited.

Use the correct method of citing references. It is suggested that students be taught the APA referencing style for citing sources and developing a reference list. At this level of examination, this is critical.

Develop rationales and explain the significance of the topic.

Present and discuss the data for the research project. Students are not expected to present data on all of the questions but a discussion of all the questions asked on the questionnaire

or interview is necessary. Field observations must be adequately highlighted and discussed.

Provide a summary or conclusion at the end of the project.

Write a detailed report which accurately records and reports all observations for the experimental and recipe modification.

Repeat and modify experimental methods after critical or unexpected outcomes.

Explain each modification in detail, giving reasons why the particular modification was done. After an unexpected outcome, changes should be noted by making a statement concerning the specific modification. For example, *when making a jam, the product did not set; therefore more lime juice was added to the next modification*. Examiners are not expected to compare the recipes to verify changes that were made.