

CARIBBEAN EXAMINATIONS COUNCIL

**REPORT ON CANDIDATES' WORK IN THE
CARIBBEAN ADVANCED PROFICIENCY EXAMINATION
MAY/JUNE 2006**

FOOD AND NUTRITION

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ADVANCED PROFICIENCY EXAMINATION

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GENERAL COMMENTS

The Caribbean Examinations Council administered its fourth open examination in Unit 1 Food and Nutrition and its third open examination in Unit 2 in May 2006. There were some good responses to questions in both Units.

There are some areas of the syllabus where greater depth of coverage is required. These areas are highlighted in the detailed comments on individual questions.

Paper 01 - Short Answer Questions

Paper 01 in both Units consisted of nine compulsory short-answer questions. Candidates were required to answer all questions. There were three questions on each of the three Modules in the Unit. Paper 01 tested the grasp of critical nutrition principles and mastery of relevant skills. Candidates' performance was satisfactory. The maximum possible mark was 90. In Unit 1, the marks ranged from 19 to 69 and the mean mark was 48.44. In Unit 2, marks ranged from 24 to 74 and the mean mark was 48.06.

Paper 02 - Structured Essay

In Unit 1 and 2, Paper 02 consisted of seven essay question which tested objectives across all Modules. It was divided into four sections. Section I consisted of one compulsory question spread across all the Modules. Section II to IV each comprised two optional questions and candidates were required to answer one question from each section. Questions in Section II were based on Module 1, those in Section III on Module 2, while questions in Section IV were based on Module 3.

The compulsory question in Section I was worth 45 marks and all others were worth 25 marks each. Overall, candidates' performance was good. The maximum possible mark was 120. The marks for Unit 1 Paper 02 ranged from 19 to 103 and the mean was 52.99. The marks for Unit 2 Paper 02 ranged from 29 to 83 and the mean mark was 60.67.

DETAILED COMMENTS

UNIT I

Paper 01

Short Answer Questions

Question 1

This question tested candidates' understanding of the factors that may cause the Basal Metabolic Rate to vary between individuals, how energy requirements are calculated and the chronic diseases associated with positive energy balance.

The overall performance of this question was satisfactory.

Part (a) of the question was fairly well done. Most candidates were familiar with factors which affect the Basal Metabolic Rate (BMR), even though some responses were vague and could not be awarded marks. Some vague responses were, 'hormones' 'weight' and 'social status'. Expected responses were 1. Thyroxine, the hormone that regulates energy levels in the body. 2. Body composition: the more the lean tissue, the higher the BMR. 3. Physical activity level. It is always to the candidates' advantage to cite an example in responding to questions - physiological state, for example, pregnancy raises the BMR.

Part (b) was poorly done. Candidates did not know how energy requirements are calculated; however, some did know that physical activity level was a component. The expected response was BMR multiplied by physical activity level.

In part (c) (i), candidates did not understand the concept of "positive energy balance" and as such gave incorrect responses. In learning about energy balance candidates need to be taught that a positive energy balance means weight gain which eventually will lead to obesity, while negative energy balance means weight loss.

Performance on part (c) (ii) was good. Most candidates correctly listed chronic diseases.

Question 2

This question tested candidates' understanding of the synergistic relationship between infection and malnutrition in children, and uses of growth charts.

In general, this question was weak. Candidates did not critically analyse the stimulus information and use it to their advantage when responding to the question.

Part (a) was not done well by the majority of candidates. In response to purposes of a growth chart, they could have used the information given in the stimulus to note that the chart is used to:

1. determine whether a child is growing well;
2. assess the rates of malnutrition in a given community;
3. provide data for use in designing nutrition programmes for the community;
4. educate parents about malnutrition.

Part (b) posed the greatest challenge as candidates were unable to fully explain the synergistic relationship between food poisoning and malnutrition. They were required to state that malnutrition can halt growth by (i) reducing food intake; (ii) increasing the need for nutrients to boost the immune system; (iii) reducing absorption of nutrients due to damage done to the gut by food poisoning bacteria and (iv) expulsion of food in the form of vomiting and diarrhoea before digestion can take place. In addition, the period of illness lowers the child's resistance to infection, making him/her susceptible to other infections. The resulting loss of weight can cause the child to begin to show signs of malnutrition.

Question 3

This question tested candidates' understanding of the factors responsible for malnutrition in the Caribbean and energy-dense complementary foods for babies.

This question was answered satisfactorily.

In part (a) (i), most of the candidates correctly responded that the publication "The State of the World's Children" was produced by UNICEF.

In part (a) (ii), candidates correctly named factors such as poverty, lack of education and poor availability of nutritious foods.

In part (b), most candidates were unable to identify 'babies having small stomachs' as the reason for feeding them with energy-dense foods; instead they focussed on the fact that babies need energy to grow. Many were able to identify foods that could be added to the babies' porridge to make it energy-dense; however, foods such as cereals or milk were not awarded marks, since they are already components of the porridge. Candidates who indicated that it was an extra addition, for example, condensed milk or breast milk were awarded the marks. Possible allergens such as 'peanuts' were not accepted as foods that could be added to babies' porridge.

Question 4

This question tested candidates' understanding of nutritionally sound practices, use of artificial sweeteners, conservation of nutrients, and complementary proteins.

Performance on this question was very good.

In part (a), most candidates associated diabetes with a reduction of sugar; however, they did not identify artificial sweeteners as being 1) non-nutritive and therefore not metabolized in the body; 2) extremely sweet thus the ability to be used in very small amounts; 3) not recognized by the body as carbohydrates and 4) not affecting insulin levels though they provide a sweet taste.

Responses in part (b) indicated that candidates were familiar with nutritionally sound reasons for preparing raw salads just before serving.

Part (c) was generally well done as most candidates indicated that legumes were good sources of proteins and therefore they are very useful in the diet of vegetarians or that they form a part of many complementary proteins.

Parts (d) and (e) attracted maximum scores as most of the candidates were aware that water soluble nutrients from a can of spinach are leached into the liquid in which they are canned, and that dark green and leafy vegetables are sources of iron and are, therefore, useful in the diet of an anaemic child.

Question 5

This question tested candidates' understanding of menu planning and the role of seasonings and colourful vegetables in the diet of elderly persons.

The overall performance of this question was good.

Performance on part (a) was fairly good. The majority of the candidates correctly indicated that seasonings and colourful vegetables would encourage the elderly to eat or improve the taste or the appetite. However, some were unable to link this with the physiological changes in the elderly associated with aging, namely, that with increasing age, the replacement of taste cells slows down and there is a gradual loss of taste.

Breakfast menus in part (b) were generally balanced nutritionally, however, they did not always follow the breakfast meal pattern.

Question 6

This question tested candidates' understanding of different categories of convenience foods and planning packed lunches for adolescents.

The overall performance of the question was very good.

Performance on part (a) was excellent and it was evident that candidates enjoyed responding to this question.

In part (b), most of the candidates correctly planned adequate menus but did not always include examples of the convenience foods they named at (a) as requested.

Question 7

This question tested candidates' understanding of kitchen layouts and sequence of work activities to facilitate efficient meal preparation.

In general, this question was answered well.

Part (a) was satisfactorily answered by most of the candidates while some could not adequately provide the logical sequence of work activities even though they knew the work centres in the kitchen.

Performance on part (b) was good as the majority of candidates correctly sketched kitchen layouts and labelled them appropriately.

Question 8

This question tested candidates' understanding of the use of knives and the ingredients that should be reduced or omitted when preparing items for overweight teenagers.

The overall performance of the question was satisfactory.

In part (a) it was surprising that most candidates were able to identify only one of the knives suitable for preparing fruit and vegetable salads.

Part (b) was not done well. Candidates' knowledge of the procedure for chopping a large quantity of parsley was limited. 1.) They needed to mention the names of the tools used, namely, the chopping board and the chef's knife. 2.) The bunch of parsley is held in position while the cook works the blade of the knife up and down to cut the parsley into shreds. 3.) The tip of the blade is held with one hand while the other hand holds the handle of the knife and works it up and down in a semi-circular movement across the parsley to chop it into tiny pieces.

Part (c) was answered very well as candidates provided correct responses.

Question 9

This question tested candidates' knowledge of the preparation of roast beef and the role of aesthetics and palatability when preparing meals.

The overall performance on this question was weak.

Performance on part (a) (i) was fairly good. Most candidates were familiar with either chemical or biological methods for tenderizing beef.

Part (a) (i) was generally weak as several candidates were unable to clearly outline guidelines to follow when roasting beef.

In part (b) the majority of the candidates were able to discuss reasons why stewing was an excellent method for cooking tough cuts of meat.

Part (c) was not well done as many candidates misinterpreted the words 'palatability' and 'aesthetics'.

Paper 02

Structured Essay

Section I

Compulsory Question, Modules 1, 2 and 3

Question 1

This question tested candidates' understanding of the importance of energy to the body, strategies for reducing fats and oils, nutrition information on food labels that relate to fat content, guidelines for preparing, cooking and serving grilled fish, and the method of heat transfer that applies to cooking grilled fish.

The compulsory question was attempted by all the candidates.

The overall performance of this question was satisfactory.

Part (a) was done well. Candidates named the energy-yielding nutrients and outlined the role of energy in the diet; however, some were not familiar with the term 'energy-yielding nutrients' and primarily focussed on the role of physical activity.

Performance on part (b) was fairly good as candidates gave effective strategies to reduce fats and oils in fast food establishments. Some candidates listed the use of 'olive oils' or 'vegetable shortening' when in fact these products are high in fats.

Although candidates were familiar with nutrition on food labels that relate to fat content they could not always explain what each meant.

Part (c) was generally well done. Candidates were able to formulate guidelines to be followed when preparing, cooking and serving grilled fish. However, not all candidates were familiar with the methods of heat transfer. Some were able to name the methods - conduction and radiation - but could not offer any explanation of these methods.

Section II

Module 1

Question 2

This question tested candidates' understanding of determining nutrition status of the elderly, and enzymatic actions that occur in the digestive process.

This question was attempted by 13 percent of the candidates. The overall performance on this question was good.

Performance on part (a) was good. Most candidates correctly listed methods for assessing the nutritional status of the elderly, but could not always explain these methods.

In part (b), candidates were able to identify enzymes responsible for the breakdown of proteins, fats and carbohydrates but concentrated too much on the parts of the digestive tract and other digestive processes apart from enzymatic actions.

In part (c) in response to the question of explaining the factors that may affect the digestion of a meal of hamburger and milk shake, candidates identified physical limitations that the elderly may have, such as difficulty in chewing because of lack of teeth. However, they did not focus on factors relating to digestion itself. Expected responses include lactose intolerance, decreased bile secretions, malabsorption due to intestinal diseases and malfunctioning of digestive organs, such as the liver and pancreas.

Question 3

This question tested candidates' understanding of Vegetarianism.

This question was attempted by 87 per cent of the candidates.

Performance on this question was unsatisfactory.

Performance on part (a) was weak. Some candidates outlined health benefits of the vegetarian diet such as high in fibre, thereby, preventing constipation, low in fat which should reduce the risk of obesity, or low in cholesterol, thereby, reducing the risk of cardiovascular disease. Other candidates gave some popular unsubstantiated claims such as vegetarians live longer, have healthy skin, or consume healthier diets.

In Part (b), candidates listed general factors to be considered when planning meals but could not specifically relate them to the lacto vegetarian. Expected responses are given below.

- Make use of complementary proteins to ensure adequate high quality protein intake.
- Use low fat dairy products in adequate amounts to ensure intake of calcium and vitamin D.
- Use iron-rich vegetable foods with vitamin C rich foods to ensure adequate iron intake.
- Use fortified cereals and yeast to ensure adequate intake of B complex vitamins.
- Use meat alternatives to replace flesh products.

In Part (c), candidates experienced difficulty outlining guidelines for ensuring that the energy requirements of a toddler who is a vegan is achieved. Expected responses are given below.

- Use vegetable oil or honey in porridges to increase energy density.
- Feed at least 5 times daily.
- Use fortified soy milk, shakes and smoothies.
- Use nut paste and avocados in spreads.
- Limit bulk in diet.
- Use energy-dense meals.
- Use supplements.

Section III

Module 2

Question 4

This question tested candidates' understanding of the effectiveness of storage conditions for storing perishable foods and the role of regulatory agencies in ensuring the safety of stored foods.

This question was attempted by 61 per cent of the candidates. The overall performance was unsatisfactory.

Performance on part (a) was weak. Many candidates discussed methods of food preservation instead of storage conditions for perishable foods.

In part (b) some candidates gave suitable responses for the role of food-regulatory agencies.

Question 5

This question tested candidates' understanding of the hazards associated with consuming excessive levels of micro-nutrients, use of food exchange lists and the role of major nutrients supplied by the six Caribbean food groups.

This question was attempted by 39 per cent of the candidates.

Performance on part (a) (i) was good. While the majority of the candidates could state that excessive consumption of micro-nutrients caused toxicity they were unable to explain the signs of toxicity that result from each of the nutrients calcium, iron, and vitamins A, C and D.

In part (a) (ii), candidates were aware that with the use of exchange lists, healthy substitutions can be made. Not many candidates considered that cheaper alternatives could be substituted or that balanced meals could be planned using the exchange lists.

Part (b) was generally well done. Most candidates were able to name the major nutrients and clearly explain their role.

Section IV

Module 3

Question 6

This question tested candidates' understanding of recipe modification to increase yield, and nutrient content, and sensory evaluation.

Performance on this question was unsatisfactory. The question was attempted by 62 per cent of the candidates.

Performance on part (a) was weak. Many of the candidates were able to correctly identify the proportions of the major ingredients used in the creaming method. However, they were unfamiliar with the method of calculating the conversion factor. In most cases, even those who understood the conversion were unable to apply it correctly to the standard recipe.

Part (b) was fairly done as candidates were able to name sensory characteristics that they would evaluate in the recipe modification, but did not always outline the steps correctly.

Question 7

This question tested candidates' understanding of the scientific principles involved in yeast cookery.

Performance on this question was unsatisfactory. The question was attempted by 38 per cent of the candidates.

Performance on part (a) was fair. Most of the candidates were able to list the main ingredients used in a yeast mixture. However, very few of them described the conditions necessary in order for yeast to grow, or the mixing process.

Part (b) was well done as most of the candidates gave appropriate alternative methods of cooking yeast mixtures.

UNIT 2

Paper 01

Short Answer Questions

Question 1

This question tested candidates' understanding of indigenous dishes and tools and the impact of the use of calaloo or spinach on health.

The overall performance on this question was good.

Part (a) was well done. Candidates enjoyed responding to this question and they responded fairly well in part (b) as well. Most of the candidates listed iron as a nutrient present in calaloo or spinach and discussed the functions of iron in the body. However, in assessing the impact of the vegetable, other nutrients present such as carotene, calcium, and dietary fibre should have been identified .

Question 2

This question tested candidates' understanding of the factors that have influenced food choices in the Caribbean as a result of globalization, and guidelines to be followed to ensure the safety of rechauffé foods.

The overall performance on this question was good.

In part (a), the majority of candidates focussed their attention on food choices while ignoring the term 'globalization'. As a result, the responses given were not always appropriate. Expected responses were international trade, migration, arrival of technocrats, mass media, and tourism.

In part (b), most candidates concentrated on food safety and did not seem to be aware of 'rechauffé' being a key factor.

Question 3

This question tested candidates' understanding of factors that should be considered by disaster relief organizations in order to meet nutritional needs of persons housed in a shelter after a natural disaster, and vulnerable groups who would need special care in the shelter.

The overall performance on this question was good.

Candidates responded well to part (a). However some of them focussed on factors not directly pertaining to shelters.

In part (b), candidates showed their understanding of the term vulnerable by giving appropriate responses.

Question 4

This question tested candidates' understanding of the production and enrichment of cereal flour.

The overall performance on this question was good.

Performance on part (a) was fairly good. Most candidates were able to list the processes involved in producing the flour but explanations were not always clear.

In part (b), many candidates were able to list nutrients that are added to cereals even though some gave vague answers such as vitamins or minerals. The majority gave excellent explanations for the addition of the nutrients to the cereal flour.

Question 5

This question tested candidates' understanding of qualities that should be present in guavas that are to be processed into guava cheese, characteristics of ideal floor surfaces in food processing units, and personal hygiene practices of food handlers.

The overall performance on this question was good.

Parts (a) and (c) were generally well done.

In part (b), many candidates seemed to have misread the question since they referred to the cleanliness of the floor surface rather than characteristics of an ideal floor.

Question 6

This question tested candidates' understanding of benefits of styrofoam as packaging for food, and the comparison of different preserves made from pineapples.

The overall performance on this question was unsatisfactory.

Performance on part (a) was fairly good as candidates gave appropriate responses.

Part (b) presented some difficulty as candidates were not familiar with the type of preserves that can be made from pineapples. Even when preserves were named, the comparisons made were poor. In many cases no comparisons were attempted.

Question 7

This question tested candidates' understanding of planning four-course menus and portion control of food.

The overall performance on this question was good.

The majority of candidates performed well in part (a). However, some candidates had the incorrect format for the four-course lunch, or listed only three courses.

Performance on part (b) was fair. Many candidates gave appropriate responses while others interpreted portion control to mean how to keep the portions small and therefore gave responses such as 'use a smaller serving utensil' or 'cut smaller portions'.

Question 8

This question tested candidates' understanding of pre-preparation and batching of fish in a commercial kitchen, and the prevention of pest infestation.

Part (a) was weak. Candidates omitted several steps in the procedure. Expected responses are listed below.

- Clean and marinate fish.
- Marinate using suitable fish marinade.
- Portion into batches according to needs.
- Wrap portions individually in plastic wrap for ease of separation if freezing.
- Pack by batch into suitable containers.
- Freeze or refrigerate depending on when fish is to be cooked.
- Cook designated batches at time intervals or in batches based on demand.

Part (b) was fairly well done as candidates gave appropriate responses.

Question 9

This question tested candidates' understanding of cycle menus for toddlers based on a multi-mix plan, and formulation of meal planning guidelines.

The overall performance on this question was good.

Performance on part (a) was fairly good. Most candidates developed appropriate menus but did not always give a five-day menu.

In part (b), the majority of candidates did very well on this question. Some candidates gave general guidelines to be considered when planning meals, without giving special consideration to toddlers. Expected responses are given below.

- Meals should be free of bones and seeds.
- Meals should be nutrient-dense.
- Meals should have a variety of textures.
- Foods that may cause allergies should be avoided.
- Avoid foods that cause choking.
- Meals should be nutritionally balanced.

Paper 02

Structured Essay

Section 1

Compulsory Question, Modules 1, 2 and 3

Question 1

This question tested candidates' understanding of the how food choices and dietary practices have been influenced by changes in family lifestyles, values, priorities, nutrition education; their understanding of the need for increased food availability, the impact of food technology on the increase of the Caribbean food supply, the procedure for making a white sauce by the roux method and guidelines aimed at ensuring food safety when preparing and serving sauces in large quantities.

serving sauces in large quantities.

This compulsory question was attempted by all candidates.

The overall performance on this question was satisfactory.

In Part (a), candidates gave very good responses, and discussed the issues of family lifestyles and nutrition education from the negative and positive perspectives. However, they struggled to find points regarding the values and priority issues, and centred their discussions around religion. Other possible points are listed below.

- Eating out, even though it costs more.
- Persons enjoy the time they spend preparing meals while others would prefer to spend that time on other activities.
- Shift from spending money on food to material things at the expense of nutritious meals.
- Teaching children to prepare nutritious meals is not seen as a priority.
- There is a change in how families view the use of time, money and energy in relation to preparing meals.

Performance on part (b) was good, as candidates identified several reasons for increase in food availability. Apart from stating that biotechnology and genetically engineered modified foods can increase food availability there was very little discussion on how advances in food technology have resulted in an increase in the food supply in the Caribbean.

Part (c) was poorly done as most candidates were not familiar with the roux method of making sauces.

Section II

Module 1

Question 2

This question tested candidates' understanding of food storage, and main meal salads.

This question was attempted by 79 per cent of the candidates.

Part (a) was generally well done, even though some candidates interpreted storage to mean methods of preservation.

In part (b), the majority of candidates included local fruits and vegetables in the recipe; however, they were not familiar with the concept of 'main meal salads' as few of them included protein in the recipe.

Question 3

This question tested candidates' understanding of how environmental factors have helped to shape food customs in the Caribbean, and food legislation.

This question was attempted by 21 per cent of the candidates. The overall performance of this question was acceptable.

In part (a) many candidates experienced difficulty explaining how environmental factors have helped to shape food customs. Most of them could only list two factors.

In part (b) the majority of the candidates who attempted the question were able to name an agency responsible for food legislation and to discuss why food legislation is important.

Section III

Module 2

Question 4

This question tested candidates' understanding of denaturation and coagulation of protein, and food labelling.

This question was attempted by 28 per cent of the candidates.

The overall performance of this question was fairly good.

Performance on part (a) was poor. Most of the candidates were unable to fully define the terms denaturation and coagulation or establish a relationship between them.

Candidates performed better in part (b) as they were able to explain the information provided on the label.

Question 5

This question tested candidates' understanding of the method of dehydration for food preservation and factors to be considered when costing preserves.

This question was attempted by 72 per cent of the candidates.

The overall performance of this question was good.

Part (a) was fairly well done. Although many candidates were familiar with dehydration as a method of preservation they were unable to evaluate its effectiveness in terms of the benefits and disadvantages.

In part (b), most of the candidates were able to select a suitable food for dehydration and list the steps in the procedure.

Part (c) was well done as candidates were able to list the factors to be considered when costing preserves.

Section IV

Module 2

Question 6

This question tested candidates' understanding of quality assurance measures that the management of a restaurant needs to implement to ensure consumer satisfaction, and purchasing commodities.

This question was attempted by 71 per cent of the candidates.

The overall performance of this question was satisfactory.

In part (a), the majority of candidates gave excellent responses for common complaints of patrons in a restaurant, as well as quality assurance measures that management should implement.

Part (b) was poorly done. The majority of candidates found difficulty in outlining the procedure for purchasing commodities in bulk. They were not familiar with the word 'commodities'. The procedure for purchasing commodities are listed below.

- Conduct stocktaking to ensure an accurate record of inventory.
- Acquire requisition from chef/manager.
- Place orders.
- Check products with invoice upon delivery.
- Apply HACCP principles at delivery.
- Update inventory.
- Store items.
- Arrange and distribute commodities using first in first out FIFO method.

Question 7

This question tested candidates' ability to compare meal planning principles in family and commercial settings, and types of meal service.

This question was attempted by 29 per cent of the candidates.

The overall performance in this question was acceptable.

Part (a) was widely known. Candidates were able to list principles of meal planning for the family. However, they did not make the comparison with the commercial setting well. Instead, candidates listed the factors in isolation. Examples of expected responses are given below.

- In both the commercial and family settings the occasion influences the types of menus - 'Christmas', 'national celebrations' or other 'religious festivals'.
- In the family there is a greater emphasis on nutrition, whereas in the commercial setting even though nutritional balance is considered, the focus is on making sure the patrons enjoy the meal so that the company makes a high profit.

Candidates responded fairly well to part (b) even though some had difficulty explaining the rationale for the types of meal service.

INTERNAL ASSESSMENT

This paper consisted of a portfolio comprising two pieces of work which tested objectives across all Modules. Candidates, in consultation with the teacher, and using 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. The overall performance of the candidates has shown great improvement.

The majority of portfolios exhibited a high level of professionalism in organization and were very well presented. Most of the illustrations were clear and creative. The quality of the assignments was appropriate for the Advanced Proficiency Level. It is imperative that teachers are aware that a portfolio should be submitted, instead of two distinct pieces.

Some candidates submitted exemplary portfolios. The work of these candidates was scientifically-based and rigorous. These candidates are to be highly commended for their effort

Several teachers seemed to use the old syllabus. However, teachers are asked to ensure that the current syllabus is used in the preparation of candidates.

Assignment 1

Research

Most of the candidates selected appropriate topics and demonstrated knowledge of relevant facts. In most cases, literature reviews were comprehensive, but sources used were not always cited. Data were well presented, but very little reference was made to the data. In several cases, inferences, predictions, or conclusions were not attempted by the candidates. The conclusions and recommendations were not accurately or scientifically-based. Similarly, they did not support the analysis of data.

Assignment 2

Experimentation and Recipe Modification

Candidates selected appropriate experiments and demonstrated knowledge of relevant facts. Reports were well written and presented. Most of the candidates developed rationales, but many hypotheses were not clearly formulated. The procedures for experiments were, in most cases, clearly documented. A large majority of the candidates modified the products after critical or unexpected outcomes.

RECOMMENDATIONS TO TEACHERS

Overall, the performance on the examinations was satisfactory. This performance can be improved if recommendations to teachers are used as guidelines to help address weaknesses of candidates. Although candidates had an understanding of concepts they did not elaborate and fully develop answers as was expected at the Advanced Proficiency Level. Some candidates were not fully prepared for this level of examination. It was also clear that they were not familiar with some areas of the syllabus and so they performed poorly or omitted parts of questions. Candidates should, therefore, cover the entire syllabus so that they can satisfy the requirements of the examination. Greater emphasis must be placed on those concepts which can be regarded as current areas of nutrition.

Candidates should be encouraged to follow the procedures outlined below.

- Read questions carefully, paying attention to key words.
- Place emphasis on comprehending 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.
- Answer 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 candidates' inability to gain as many mark as possible.
- Participate in mock examinations using past examination papers and 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.
- Participate in field trips and work attachments which will help students to understand fully many nutrition concepts such as methods for assessing nutritional status of children; complementary feeding and breast feeding; nutrition-related disorders; and practices and procedures for ensuring safety of food.
- Engage in practical exercises in the identification and use of the nutritive value of food not categorized in the food groups, namely functional/genetically engineered foods, fat replacers, sugar, salt and other substitutes, and convenience foods.
- Develop ideas and demonstrate clarity of expression. In many cases, candidates showed some knowledge of the concept being tested, but could not adequately respond to questions to the standard that is required at the Advanced Proficiency Level.
- Adhere to general instructions. Many candidates ignored the instruction to begin each question on a new page. They started new answers sometimes without even skipping a line. In some cases, candidates did not keep parts of a question together. They should be advised to leave a blank page in the workbook when going on to a new question, if the previous question has not been completed. Also, the question number must be written in the space provided.

INTERNAL ASSESSMENT

Candidates should be encouraged to follow the guidelines below:

- Seek guidance in choosing topics for projects as well as throughout the entire exercise.
- Select topics that are of interest 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 research relevant to the same. This cannot be adequately done in two to three pages. Students must utilize a variety of sources and should be taught the APA referencing style for citing sources and developing a reference list.
- Develop the rationale and explain the significance of the topic.

Assignment 1

Research

Candidates must not only present the data but they should discuss the data clearly. They are not expected to present data on all of the questions, but should discuss all of the questions asked on the questionnaire or interview.

Efforts should be made to guide students in making simple inferences, and drawing conclusions from the data obtained. Give a summary or conclusion at the end of the project.

Assignment 2

Experimentation and Recipe Modification

Candidates should be advised that a detailed report must be written, which accurately records and reports all observations.

Efforts should be made for students to understand that experiments are not completed on a one-shot basis. It is necessary to repeat and modify experimental methods after critical or unexpected outcomes.

Efforts should be made to introduce students to the role of product development and recipe modification. In addition, demonstrations should be completed before students engage in their individual assignments.

Candidates should be advised that product development or recipe modification is more than removing or changing one ingredient or just throwing ingredients together. This assignment entails detailed experimentation which usually necessitates several trials prior to reaching success. For this reason it should involve the altering of several ingredients, hence baked products is suggested as an example for modification. For example, at this proficiency it is unacceptable to modify the amount of fat or salt in “beef stew” and view this as competent work. Therefore, significant ingredients should be altered.

Each modification should be explained, 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 the changes that were made to the recipes.

At this proficiency variations of basic recipes is not expected as a modification. For example original recipe plain cake and a modified recipe coconut cherry cake.

Candidates should give the original recipe and then conduct at least two modifications.

Experiences must be provided for students to fully understand that a recipe is a formula, thus any change in an ingredient will necessitate a substitution of ingredients. Reliable and quality products cannot be achieved on a one shot basis.

Efforts should be made for students to understand the role of major ingredients used in recipes, especially baked items. For example, if you change the amount of sugar in a creamed mixture there must be a suitable substitute or the texture and flavour of the cake will be changed. The goal of recipe modification is to make changes to the ingredients yet retain the flavour, colour, shape, texture and acceptability of the product. Similarly, product development entails creating a product which is pleasing to consumers.

Candidates should be encouraged to use food composition tables to determine energy values for the original and new product.

Candidates should be encouraged to formulate valid hypotheses.

Candidates should be encouraged to record and report methods observations and results accurately, using tables or graphs.

Candidates should include the results from the sensory evaluation in their discussing.

Candidates should develop conclusions to summarize their findings.