

CARIBBEAN EXAMINATIONS COUNCIL

**REPORT ON CANDIDATES' WORK IN THE
SECONDARY EDUCATION CERTIFICATE EXAMINATION
MAY/JUNE 2009**

FOOD AND NUTRITION

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FOOD AND NUTRITION
GENERAL PROFICIENCY EXAMINATION
MAY/JUNE 2009
GENERAL COMMENTS

The Caribbean Examinations Council administered its twenty-eighth examination in Food and Nutrition in May/ June 2009.

Paper 01 – Multiple-Choice Questions

Paper 01 was a multiple-choice paper which consisted of 60 items for a maximum of 60 marks.

Paper 02 – Structured Essay Questions

This paper consisted of seven questions presented in two parts. Part A comprised three compulsory questions based on Module 3: Diet, Health and Nutritional Status, Module 6: Food Preservation and Module 11: Food Preparation Methods, respectively.

Part B comprised four optional questions, drawn from the remaining Modules of the syllabus. In addition to the compulsory questions, candidates were expected to answer two questions from the optional section. Candidates were therefore required to answer a total of five questions. Each question was worth 16 marks, for a total of 80 marks on the paper. Questions 4 and 6 were extremely popular while Questions 5 and 7 were less popular.

Overall the performance of candidates was good.

Paper 03 – School-Based Assessment

The School-Based Assessment consisted of three practical assignments. The first and third assignments were constructed and marked by the teacher. The second practical assignment was constructed by the teacher and assessed jointly by the teacher and an external moderator.

DETAILED COMMENTS

Paper 02 – Structured Essay Questions

Question 1

This question dealt with diet, health and nutritional status. Generally, the performance was satisfactory. Candidates were required to identify three factors, other than a knowledge of nutrition, that influence people's food choices; list three signs or symptoms of diabetes; outline three nutritional guidelines to be followed when planning meals for patients convalescing from major surgery; suggest three nutritional guidelines to be followed in specific cases; and explain why two statements concerning anemia and diabetes were incorrect.

In part (a) the majority of candidates were able to identify at least two factors that inform food choices. Popular responses were

- income
- availability of food
- peer pressure
- advertisement
- religious beliefs
- taste preferences

However, a few responses that included knowledge of nutrition were not considered because the question particularly stated **other than knowledge of nutrition**.

In part (b) many candidates stated correct signs and symptoms of diabetes, for example,

- frequent urination
- increased thirst
- always hungry
- frequent itching
- numbness of the feet
- blurred vision

In a few instances symptoms given were related to conditions such as hypertension and food poisoning rather than diabetes.

Part (c) was generally well done by a significant number of candidates. Many accurately specified guidelines such as

- obey doctor's instructions
- increase the amount of protein in the diet to repair worn out tissues
- avoid the use of leftover food
- consider likes and dislikes of the daughter
- food should be fresh and of the best quality
- reduce energy-giving foods.

A few gave points on preparing and serving meals instead.

In part (d) many candidates gave nutritional guidelines consistent with the problem Merle was experiencing with her teeth and blood respectively, such as the need to consume calcium-rich foods and foods rich in vitamin K for blood clotting. A few candidates did not fully comprehend the question and therefore identified iron for blood clotting and suggested proper hygiene for the teeth.

Parts (e) (i) and (e) (ii) were relatively well answered. A large percentage of candidates explained that a shortage of iron in the blood causes anemia and diabetes is caused by the inability of the pancreas to produce insulin for glucose metabolism and not an excessive intake of sugar.

Question 2

This question, dealt with food preservation. Candidates were required to define the terms 'bottling' and 'blanching'; state two qualities that must be considered when selecting fruits for making jam; identify features of utensils used for making jams and explain the importance of each feature identified; explain why pigeon (gungo) peas became soft after thawing; name one additive used by

In part (a) (i) a large percentage of candidates failed to give a precise definition of bottling, such as a process which involves the packing of fruit in clean bottles that are covered with water or syrup and sterilized. However, in many of the definitions given the word 'sterilize' featured prominently, for which candidates scored a point.

In part (a) (ii) a large number of candidates accurately defined blanching as a process in which food is brought to the boil or treated with boiling water and transferred to cold water. However, some candidates referred to the consequences of 'blanching', for example, the destruction of enzymes for which they earned a mark.

Part (b) was widely known. Most candidates were able to state two qualities that govern the selection of fruits for jam making and were therefore able to obtain full marks. Some responses were fruit should be

- firm
- rich in pectin
- free from blemishes
- have a low pH

In part (c) most candidates identified a feature of a pot as having one of these characteristics

- thick or sturdy base
- flat bottom and
- insulated handle

and the spoon as having a long handle made of wood or thermoplastic.

In most cases the reason corresponded with the feature given.

Part (d) was extremely challenging for most candidates. Few obtained full marks, and the majority failed to give the correct scientific explanation required: 'beans were frozen too slowly for a long period hence cells expanded to capacity and as a consequence collapsed on thawing'.

Many candidates responded well to parts (e) (i) and (e) (ii) respectively, earning at least 50 per cent of the marks. Examples of some additives in margarine are:

- vitamins A, D, E
- colouring agent
- salt
- BHA, BHT

and in mayonnaise

- oil
- vinegar
- lecithin/ egg yolk
- mustard

and almost all were able to state the function of the additive they identified.

Question 3

This question, designed to test food preparation methods, required candidates to define the term 'bake blind'; outline two advantages of boiling and grilling; state two ways in which eggs can be used in food preparation giving a relevant example; identify an appropriate method of cake making based on a quantity of ingredients given, describing three steps in the method selected and suggest one factor that may have contributed to (i) large tunnels, and (ii) poor flavour in muffins.

Although few candidates did not give a concise definition of 'bake blind' in part (a) they had a fair understanding of the information required. Some candidates were unfamiliar with the term, an acceptable definition of which is 'baking of pastry shell or single crust without a filling'.

Most candidates were able to state acceptable advantages of boiling as required in (b) (i); examples of answers were

- heat fairly rapidly and efficiently
- food is unlikely to burn
- healthy method
- requires little attention

Most candidates were able to state acceptable advantages of grilling as required in (b) (ii); examples of answers were

- quick method
- various foods can be cooked at the same time
- an attractive way of cooking
- healthy method, as fat is drained from meat

Part (c) was widely known. The majority of candidates indicated ways of using eggs and specified an item to correspond with each use such as:

- coating – rissoles
- glazing - pastries
- binding - croquettes
- as a main dish – egg mornay

However, some candidates stated methods of cooking eggs such as ‘boiling’ and ‘frying’

In part (d) many candidates were able to correctly identify the creaming method and listed the following steps.

- Cream sugar and margarine until light and fluffy.
- Beat eggs into the mixture.
- Stir or fold in flour preferably with a metal spoon.

However, a few candidates incorrectly named the ‘all in one method’.

Part (e) was reasonably well answered as many candidates were able to obtain full marks for both (e) (i) and (e) (ii). They attributed the large tunnels in (e) (i) to

- over- stirring
- over- mixing
- excess baking powder

and the poor flavor in (e) (ii) to insufficient or rancid cheese.

Question 4

This was a very popular question. Candidates were required to define the term ‘complementary feeding’; state three advantages to the infant of continuing breastfeeding during complementary feeding; state the main function of protein in an infant’s diet; suggest two foods that can be combined with potatoes to ensure a nutritionally adequate meal for a five-month-old baby; describe the method of preparation and cooking of the meal suggested; identify one vitamin that may be present in the meal suggested; state one function of this vitamin and suggest two nutritional guidelines that breastfeeding mothers should follow.

Generally the question was well answered. Part (a) was clearly and adequately answered by many of the candidates. A few of the candidates mentioned the introduction of foods without taking into account that breast feeding had to be continued.

Parts (b) and (c) were well done. Some advantages given by candidates included

- correct composition and proportion of nutrients are provided
- easily available and convenient
- virtually all the milk is digested by the baby
- immunity from certain diseases is passed on to the baby from the mother to help build the body's resistance.

In parts (d) (i) and (d) (ii) candidates correctly identified the foods and gave the requisite steps to be followed in the preparation of the meal. Consequently a large number of candidates earned 75 per cent of the marks.

Part (d) (iii) was well done. Most of the candidates were able to identify a vitamin in the meal for the baby and state its requisite function.

In Part (d) (iv) most candidates performed satisfactorily. However, some candidates gave guidelines for the baby instead of guidelines that would be beneficial to the lactating mother, such as

- increase protein for milk production
- provide an extra 500 kcal /day
- increase liquid consumption
- increase minerals such as iron and calcium.

Question 5

This question was not very popular. Candidates were required to define the term 'star rating' (star marking) as it related to the use of the refrigerator; state one purpose of the oven fan and the thermostat of a cooker or stove; list two factors other than an oven fan and a thermostat which customers should consider when selecting a cooker or stove; suggest two dishes or items that can be prepared using rice and carrots, identify a suitable small electrical appliance that can be used in preparing each dish or item; suggest two first aid measures used to treat burns and suggest four kitchen hygiene practices that must be followed when preparing foods.

Part (a) proved quite a challenge to most of the candidates. The definition given lacked the requisite information. An adequate definition is as follows:

'Stat-rating' indicates the recommended storage time and temperature for frozen food.

In parts (b) (i) and (ii), most candidates were able to explain that the thermostat controls oven temperature while a few perceived the oven fan as a feature which provides even cooking on all shelves.

Some candidates incorrectly indicated that the purpose of the oven fan is to cool the oven.

Part (c) was well done by candidates, as most were able to list valid factors such as:

- size in relation to family's needs
- colour to complement decor
- brand name
- easy to clean and operate.

In (d) (i), most candidates were able to suggest two dishes /items that could be prepared from rice and carrots and correctly identified a small electrical appliance that could be used in preparing each dish or item as required in (d) (ii).

Part (d) (iii) was also well done, as most candidates were able to outline the correct measures for treating burns. These are:

- immerse in cold water for several minutes to ease the pain
- protect area with sterile cloth to reduce risk of infection.

Part (d) (iv) was well done and most candidates were able to score full marks. However, some candidates stated personal hygiene rules instead of kitchen hygiene practices such as cover bins tightly and do not use dish cloths to wipe the floor.

Question 6

This question was very popular and manageable. Candidates were required to state two advantages of purchasing foods in large supermarkets; identify two 'convenience foods'; and to state one advantage and one disadvantage of using convenience foods in meal preparation; suggest four guidelines that should be followed when shopping for food to ensure nourishing meals are prepared; state one reason why bread flour should be used instead of cake flour for making bread and describe four effects of heat on beef after it has been stewed.

Part (a) was very well done, as candidates were able to respond adequately by listing guidelines such as:

- A wide range of goods available
- Prices are generally cheaper for many items
- Food is usually of good quality and fresh
- The standard of hygiene is usually high.

In part (b) (i) most of the candidates were able to correctly identify convenience foods and state one advantage and one disadvantage of using such foods in meal preparation as required of (b) (ii) and (b) (iii) respectively.

Many candidates were able to suggest acceptable guidelines that should followed when shopping for food as required in part (c) (i). Some popular responses included:

- Make a shopping list
- Compare prices, stores and brands
- Purchase meat extenders.

Part (c) (ii) presented some difficulty to many candidates. Few were unable to explain that cake flour is unsuitable for making bread because it is weak or low in

Most candidates were able to give a partial definition of 'brunch', 'cocktails', and 'table d'hôte' in (a) (i), (ii) and (iii) respectively, and thus were able to obtain at least 50 per cent of the marks.

Complete definitions for each term are as follows:

- (a) (i) 'Brunch' a go – between breakfast and lunch. Food items or dishes are usually heavier than normal breakfast foods and lighter than lunch dishes.
- (ii) 'Cocktails' – usually refer to hors-d'oeuvres, finger and bite-size foods, also a mixture of juices – fruit and vegetables, with or without alcohol, served at a social gathering.
- (iii) 'Table d'hôte' – a menu offering a complete meal for a set price.

Candidates were able to obtain at least 50 per cent of the marks for part (b) (i). Some of the acceptable factors given were:

- Food should be easy to digest.
- Increased requirement for vitamin D to prevent decalcification of the bones and teeth.
- Increased fibre intake.
- Increased requirement for iron to prevent anaemia.

Part (b) (ii) was well answered by most candidates, as many of them planned menus in accordance with the instructions given in the stem of the question. However, some candidates failed to state ways of conserving fuel **in relation to the meal selected** in part (iii), and gave general points for saving fuel. Most candidates scored well on this question.