

EXAMINATIONS COUNCIL OF ESWATINI

EGCSE

EXAMINATION REPORT

FOR

FOOD AND NUTRITION (6905)

YEAR

2021

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EGCSE FOOD AND NUTRITION**Paper 6905/01****Theory****General Comments**

3304 candidates sat for the Food and Nutrition Paper 1 examination this year. This showed an increase of 1036 candidates when compared to the previous year when 2268 candidates wrote the examination.

Performance

When comparing the 2020 and 2021 papers, they were of the same standard. The overall performance in the current examination was not satisfactory. It could be attributed to the extraordinary year and the possible aftereffects of the global pandemic. In some questions, a good knowledge of the subject was demonstrated by the candidates, even though most of them showed limited skills in responding to high-order questions. Most of the candidates attained fair marks in section A, as they could apply knowledge of nutrients. In Section B some had a challenge in explaining facts clearly, thus they could not be awarded full marks on most questions. In Section C most candidates confused burns for scalds and included undocumented information on the treatment of burns. Most of the candidates were knowledgeable about the subject matter but failed to express themselves clearly. There was a common tendency to misapprehend the rubric. The few candidates who were high achievers demonstrated a sound understanding of what was expected of them, especially in Section C.

Comments on Specific Questions**SECTION A****Question 1****(a) Sources of essential amino acids**

Most of the candidates correctly answered this question except for a very few who gave answers like, 'plant' protein.

Correct responses were:

Meat, fish, cheese, eggs, soya beans

(b) LBV protein animal source

Most candidates failed to give the correct answer except for a few. Most wrote beans as a source of protein.

The correct answer was:

Gelatin

(c) Symptoms of anorexia nervosa

Most candidates had a problem with the correct terminology to describe the symptoms, e. g. they gave answers as thin bones, skeleton shows, and loss of appetite.

Correct responses were:

- refuses to eat
- develops dry skin, and brittle dry hair on cheeks, back of the neck, arms and legs
- menstruation stops, may lead to osteoporosis and infertility
- has cold feet and hands, and possibly heart problems
- has constipation

(d) Reasons for protein increase in individuals

Most candidates were just stating the functions of proteins without relating them to the given individuals.

Correct responses were:

- (i) Pregnant mother – growth of the foetus
- (ii) Convalescent – repair tissues are worn out during sickness
- (iii) Babies and children – to promote growth as they grow rapidly.

Question 2**(a) Reasons why the body needs energy**

Common answers that were given by candidates included: able to do work, be active, for growth, repair worn-out tissues, for heat. Some responses were correct but under the same use of energy.

Correct responses were:

- Movement of muscles/ mechanical energy
- For chemical and basal metabolic reactions
- To maintain body temperature
- For transmission of nerve impulses/electrical energy

(b) Effects of too much fats

Well answered by most candidates.

Correct responses were:

- Excessive accumulation of body weight
- Difficulty in breathing
- Problems during operation
- Lack of self-esteem

- Diabetes
- Hypertension
- Varicose veins

(c) Why are the different nutrients required for energy production

Most of the candidates just gave the function of the nutrients without stating how they help release energy from food.

Correct responses were:

- Iron – helps in the transportation of oxygen to cells for respiration
- Vitamin B1 – helps in the metabolism of energy from foods
- Iodine – it makes the hormone thyroxine which controls the metabolic rate

(d) Food pyramid

This question was poorly attempted by most candidates and those who attempted it had a problem giving the correct servings.

Missing food groups and their servings per day.

Dairy foods – 2 servings

Meat/ Fish / Poultry – 2-4 servings

Question 3

(a) Functions of Vitamin D

Most of them gave only one correct function of Vitamin D, i.e formation of strong bones and teeth, and the other function was not known. Some wrote about absorption of iron and normal growth.

Correct responses were:

- required for the proper formation of bones and teeth
- Helps in the absorption of calcium and phosphorus

(b) Nutrients that work with vitamin D

Most candidates only gave one correct mineral 'calcium' and phosphorus was only given to a very few candidates. Some common wrong responses were iron, vitamins and minerals.

Correct answers were:

- Calcium
- Phosphorus

(c) Dangers of too much Vitamin D in the diet

This question was poorly attempted by most candidates. Common wrong responses included cancer, jaundice, and big bones.

Correct responses were:

- it results in the excess absorption of calcium in the blood which is then deposited into the lungs and kidneys which causes death eventually.

(d) Loss of vitamin C in foods

Most candidates had a problem giving the correct responses to this question. Most of them were stating points related to preparing, cooking, and serving vegetables without fully explaining them.

Correct answers were:

- The presence of an alkali e. g bicarbonate of soda
- By exposure to light during storage
- By oxidation-exposure to air during preparation and cooking
- When cooking in too much water
- By cooking for too long

Question 4**(a) Importance of salivary glands**

This question was well attempted by most candidates.

The correct answers were:

- produce saliva to moisten food
- make it easy to swallow the food

(b) Importance of rennin and hydrochloric acid**(i) Rennin**

Well answered by most candidates except for a few who gave incorrect answers such as, to digest proteins, clotting/curdling of milk

– found in baby’s stomach to clot milk

(ii) Hydrochloric acid

Well answered by most candidates, except for some who gave ‘neutralizing acid as an answer’.

Correct responses were:

- Stops action of salivary amylase
- Destroys most bacteria
- Gives suitable pH for the action of the pepsin

(c) Digestion of fats in the duodenum

This question was poorly attempted by most candidates. Some gave the end products of fat digestion without giving the enzyme. Some described the digestion of proteins.

Correct answers were:

- bile emulsifies fats so that they are dispersed in the liquid
- pancreatic lipase breaks down fats
- fats are broken into soluble glycerol and fatty acids

(d) The role of the villi in the absorption of nutrients

Most candidates were able to write ‘provide a large surface area’ and described the structure of the villi but did not describe the absorption of nutrients.

Correct answers were:

- has a large surface area for absorption
- fatty acids and glycerol are absorbed in the lacteal part of the villi
- sugars, amino acids, minerals, vitamins, and water pass in the blood capillaries of the villi

SECTION B**Question 1****(a) Savoury dishes from bread dough**

Some candidates gave sweet dishes, instead of savoury dishes. Some wrote Gingerbread, pies, toad in the hole, Kota, and burger.

Correct responses were:

- Savoury bread rolls
- Pizza
- Cheese bread /garlic bread
- Loaf of bread

(b) Characteristics of well-bakes bread

This question was well answered except for a few who wrote 'hollow sound, brown, even rising, well-shaped

Correct responses were:

- light texture with moist and resilient crumb
- well risen but not over-inflated
- symmetrical shape with a well-rounded top
- uniform and golden-brown crust which is both thin and smooth

(c) Effects of too much salt in bread making

Well attempted by most candidates, but some gave wrong answers such as bitter, sour, spoils taste, and not rising instead of stating the reason for not rising.

Correct responses were;

- inhibits the action of yeast resulting in poor volume and close texture
- salty taste

(d) (i) Method used when preparing scones

Well answered by most candidates, although some just gave the other methods of cake making.

Correct responses were;

- rubbing in method

(ii) How baking powder causes the mixture to rise

This was fairly attempted by most candidates, although only a few mentioned neutralization. Some incorrect answers such as 'it contains carbon dioxide.

Correct responses were;

- Neutralization occurs when liquid is added
- Produces carbon dioxide
- Gas expands when heated and raises the mixture

(e) Functions of labour-saving devices

(i) Electric mixer

Some candidates gave advantages of an electric mixer instead of its uses.

Correct answers were:

- whisking mixtures
- creaming mixtures
- mashing vegetables
- beating mixtures

(ii) Blender

Some candidates wrote 'blend' fruits as the answer, otherwise, this question was fairly answered.

Correct answers were;

- Making soups
- Pureeing fruits and vegetables
- Mixing batters
- Chopping nuts, herbs, and breadcrumbs
- Grinding sugar into icing sugar

(f) Rules to observe when storing food in a freezer

This question was not well answered by most candidates. Most of them gave an answer to the storage of food in the refrigerator.

Correct answers were;

- freeze only fresh foods –as it is at their peak quality
- once prepared or harvested, freeze the food quickly – to avoid deterioration
- handle and freeze the food hygienically – to prevent contamination
- use suitable packaging material and wrap the food properly
- pack food in single or multiple portions according to family size – because large quantities take longer to freeze.
- Remove as much air as possible from the packaging before freezing – may have bacteria
- Label the packs clearly – to easily identify
- Chill the food in the refrigerator before freezing – so as not to raise the temperature inside the freezer
- Avoid packing food close together when bulk freezing – to avoid slowing down the freezing process

(g) (i) How are vegetables classified

Most candidates could not give the correct answer to this question. Most of them gave answers such as ‘according to structure or colour’

The correct answer was;

According to the part which they come from – the edible part

(ii) Classification of vegetables

Well answered by most candidates.

Correct answers were;

- Leaves – cabbage, spinach, lettuce, Brussels sprouts
- Fruit – tomatoes, cucumber, corns, marrows
- Roots- carrots, beetroots, radish, turnip
- Seeds and pods – peas, beans, okra
- Stems – celery, asparagus
- Flower- cauliflower, broccoli
- Bulbs – onion, leeks, shallots
- Tubers – potatoes, cassava, yams, sweet potatoes

(b) Uses of nuts and examples

This question was not well answered by most candidates. Some common wrong response responses included; soup, relish, main dish and indakala.

Correct responses were;

Uses	Examples
In baking/confectionery	Biscuits, cakes, sprinkles on icings
Stuffings	Chicken stuffing, turkey stuffing
Served in salad	Flavouring with salad
Nut roast / snack	Cashew, almonds roast
In casserole	Flavour and texture in chicken, beef
Garnish for vegetables	Sprinkled on salads

(c) Storage of dried pulses

Fairly answered, although some candidates gave wrong answers such as store in a dark, dry place and on a cooling rack.

Correct answers were;

- store in airtight containers
- keep away from direct sunlight if the container is made of glass
- maximum shelf life should not exceed six months

(d) (i) Proteins in milk

Well attempted by most candidates, but they had a problem with the correct the spelling of the proteins.

Correct answers were;

Caseinogen, lactalbumin, lactoglobulin

(ii) Homogenisation

Only a few got this question correct. Most of them had a problem with the temperatures.

The correct answer was;

- Milk is first pasteurized
- Is forced through tiny holes/mesh under pressure, allowing fat to be evenly distributed throughout milk / produce a substance that is of uniform consistency.

Sterilization

- Milk is heated in sealed bottles to 113* C for 15 –40 minutes
- Kills harmful and souring bacteria completely

(e) Why the starter is added to milk in the production of cheese

Most of the candidates left this question unanswered.

Correct answers were;

- it sours the milk / converts the milk sugar lactose to lactic acid
- lactic acid preserves the cheese and contributes to the flavour

SECTION C

Most candidates discussed scalds instead of burns, frying and its safety precautions. Some wrote about kitchen planning and general kitchen safety rules. Some wrote that non-medical substances are usually used at home to treat burns, such as colgate, a green bar, eggs, and soot.

Correct answers were;**Burns**

Definition/causes: A burn is caused by a dry, naked flame, hot coal, hot objects

Prevention of burns

- Protect fireplaces with a net wire or fireguard
- Use oven gloves to remove hot items from the oven
- Sleeves rolled up/ tie tucked in / no flowing skirts
- Switch off electrical appliances such as bread toasters after use
- Keep matches out of reach of children
- Teach children about the heat or not to go near / play with fire

First Aid treatment for burns

- If clothing catches fire, throw the patient to the floor and smother flames with a rug or blanket
- Cool the whole area with cold water for several minutes to kill the pain
- Do not remove clothing from a severe burn if possible, take the injured person to the hospital
- Cover the area with a clean cloth to reduce the risk of infection
- Protect blisters, do not burst them
- Do not apply herbs, ointment or creams to the burn that have not been prescribed
- Badly burnt patients may be given sips of water

Cuts

- An incision on the skin caused by a sharp object

Causes of cuts

- Broken glasses
- Using a blunt knife for chopping
- Chopping on the hand
- Washing and drying knife with the sharp part facing the hand
- Using a knife for a wrong task

Prevention of cuts

- Remove broken glasses immediately
- Avoid stacking glasses when storing them
- Store knives out of reach of children
- Keep knives separate and not be mixed with other cutlery
- Use a chopping board when cutting
- Cut away from the body
- Carry with the blade pointing down towards the floor
- Wash knives individually not with other cutlery
- Avoid storing glass items on higher shelves

First Aid treatment for cuts

- Use sterilized tweezers or gauze to remove any foreign matter from the wound
- Wash wound with cold water and sterile pads or gauze
- Dry carefully and apply antiseptic lotion
- Do not cover or clean with cotton wool as fibres would adhere to the cut
- Leave the cut open / cover with an adhesive waterproof plaster

EGCSE FOOD AND NUTRITION**Paper 6905/02****Practicals****General Comments and Recommendations****Introduction**

There were 3304 candidates enrolled for the food and nutrition practical component. This showed an increase of 1016 as compared to the previous year 2020 when 2368 candidates sat for this paper. All centres submitted portfolios and some centres submitted portfolios which were up to commendable standards. However, most centres submitted portfolios which were not up to the commendable standard as compared to the previous year. The portfolios were sent without cover pages, in the hard file, with unclear pictures, some in pockets and some were not arranged in chronological order.

It is expected that portfolios be arranged chronologically, and they should include: a cover page, declaration statement, and pictures of the well-set tables showing finished dishes.

Planning session:

There are still gaps in the write-up of the planning sheets. There was an improvement in the choice of dishes - sheet 1. However, the time plan- sheet 2, remains a challenge for most candidates. The sequencing, order of working, dovetailing, and timing of the dishes are not always well coordinated. On sheet 2, some candidates tended to duplicate the whole method of working from their recipe books for each of their planned dishes, instead of including the key steps to summarise each method.

Dovetailing:

Regarding the write-up on Sheet 2, few candidates were able to include the dovetailing of their work from beginning up to the serving point of their cooked dishes. There were also instances where some candidates were unable to allocate the serving of food at convenient times; instead, they indicated the serving of all the dishes at the end.

Sheet 3 - List of quantities:

The importance of the correct quantities of ingredients required when planning for a particular Test should be emphasized during teaching and learning. It is recommended that Candidates plan for 2-3 people unless specified by the test differently. Moreover, in sheet 3 most candidates had challenges in writing ingredients in correct columns. In addition, teachers should encourage candidates to stick to the **keywords** of each test question asked. Candidates are also encouraged to specify in brackets, the

method asked in a test question e.g. bean stew (stewing) and an ingredient that has been asked about in a test e.g. macaroni cheese (fresh milk) for easy marking. **This applies to all questions with specific requirements in a test.**

Comments on Specific Questions

Generally, responses given by the candidates were quite good with a few candidates giving dishes with less skill and not giving appropriate answers to the given questions. Low skill dishes are discouraged like preparing a custard sauce as a dessert and boiled rice, especially in (a) of a test, as high skill dishes are required. Moreover, one-pot dishes require cooked and raw vegetables to substantiate the meal. Some candidates would serve macaroni cheese with lettuce salad only. While they are required to add cooked a vegetable like buttered carrots, boiled mixed vegetables, baked pumpkin, etc.

Test 1

- (a) The candidates were required to prepare, cook, and serve two dishes illustrating each illustrating given cooking methods – stewing and grilling. Candidates did not have a challenge in answering this question. However, they had a challenge in the (b) part of the question, which required a two-course meal for a breastfeeding mother. Most candidates did not consider the nutritional needs of a lactating woman and they forgot to include a beverage which is important for milk production.

Correct dishes included:

(a) **Stewing**

Stewed meats

Stewed beans

Stewed fruits with a sauce

The stewed dish is used as filling e.g.in pies and other dishes

(b) **Grilling**

Grilled meats

Grilled fish

Macaroni cheese

Test 2

- (a) Candidates were required to prepare, cook, and serve a **two-course** meal for two adolescent girls that include a legume. Candidates were able to prepare different legumes dishes. However, some could not follow the nutritional needs of adolescents.

Suggested dishes

Bean dishes

Soya products dishes

Cakes and puddings with nuts e.g. almond cake, Dundee cake, walnut cake, etc.

- (b) Candidates were able to prepare biscuits using the melting method and any drink. However, some candidates were using convenience foods for the drink.

Suggested dishes

Melting methods

Ginger biscuits

Fruit cookies

Chocolate and nut wafer biscuits

Crunchy oat biscuits

Nutties

Anzac nutties

Test 3

- (a) Candidates were supposed to prepare, cook, and serve one sweet and one savoury dish using a cereal or cereal product. Candidates were able to prepare dishes using a cereal. However, some would prepare low-skill dishes like sauce only, whereas if a sauce is prepared it should be served with another dish. Moreover, some will prepare sweet scones as a sweet dish whereas scones were not appropriate, they are served as a snack in a meal, not a sweet dish.

Suggested dishes

Savoury	Sweet
savoury rice macaroni cheese spaghetti Bolognese fried meat coated with cereals rice bake	Puddings Cakes Fruit salad with corn flour sauce Sweet pies, flans, tarts, and quenches

- (b) Most candidates were able to prepare a two-course meal for manual workers without challenges.

Test 4

- (a) Candidates were required to prepare, cook and serve two dishes to illustrate the use of fresh milk and eggs. Candidates did not have a challenge in answering this question. However, some prepared low-skill dishes like custard sauce using milk, and some used eggs to prepare a fried egg and an omelette and egg flip drink.

Suggested dishes

Fresh milk (dishes made of the following)	Eggs (uses)
Batters Cakes Puddings Sauces Quiche Lorraine	Coating Binding Trapping air Cake making Thickening Emulsifying Glazing Enriching Garnishing

- (b) Some candidates were able to prepare a two-course meal for the elderly. However, some did not consider the nutritional needs of the elderly as they served foods like macaroni cheese and fried foods which are difficult to digest. Some would serve highly spiced foods which will result in stomach upset for the elderly.

Test 5

- (a) Candidates were supposed to prepare, cook, and serve a flan dish using rough puff pastry and a savoury dish using a coating batter. A few candidates were able to attempt this question without a problem. However, most candidates had the challenge of choosing a dish which uses a flan ring thus they would opt for shortcrust pastry dishes and flaky pastry dishes. For those that were required to use a coating batter a good choice of dishes was prepared. However, some used a pouring batter which was not required by the question.

Suggested dishes

Flan dish (rough puff pastry)	Savoury dish using a coating batter
Quenches Tarts Flans Pies Sea saffron French custard	Fried chicken Fried fish Tod-in the hole

- (b) Candidates were required to prepare a two-course lunch which included a nourishing drink. Most candidates did not have a challenge with this question except that some prepared a refreshing drink instead of a nourishing drink whose main ingredient is milk.