

FOOD AND NUTRITION

Paper 0648/11 Theory

Key messages

- Questions requiring simple, straightforward answers were generally answered well.
- Introductory words and sentences should be used to establish the type of information required in the response.
- In order to gain higher marks, it is important that candidates give reasons, explanations and examples in questions that award more credit.

General comments

Candidates should be careful of repeating the same point twice in an answer as this uses time and does not gain additional credit.

It is important that comprehension of technical words related to Food and Nutrition such as 'function', 'symptom', 'source' and 'nutritional' are reinforced so that candidates are able to understand what is required from questions.

It was encouraging that very few 'no response' answers were seen.

Comments on specific questions

Section A

Question 1

- (a) A good proportion of candidates correctly answered this question.
- (b) Most candidates were able to explain that people who have physically demanding jobs need more energy or people with sedentary jobs need less energy. Some candidates did not fully explain their answer.
- (c) Popular answers to this question included becoming underweight or feeling tired.

Question 2

- (a) A good proportion of candidates were able to correctly name vitamin K as the vitamin that can help blood to clot.
- (b) The majority of candidates achieved the available mark by correctly naming either vitamin A, C or E as a vitamin that acts as an antioxidant.
- (c) The majority of candidates achieved the available mark by correctly naming iron as the mineral that can help prevent anaemia.
- (d) Many candidates achieved the available mark by correctly naming iodide as the mineral that can help prevent goitre.
- (e) Many candidates achieved the available mark by correctly naming a mineral that can help prevent tooth decay, the most popular answers being calcium and fluoride.

Question 3

- (a) It was well known that carbon and oxygen are chemical elements in carbohydrates.
- (b) Most candidates were able to name at least one good source of a food containing starch; potatoes and pasta were the most popular responses. It was clear that some candidates did not read the question carefully and listed names of cereals.
- (c) A minority of candidates knew that wheat, barley or rye are types of cereal that should be avoided by people with coeliac disease.
- (d) It was not well known that people with coeliac disease cannot digest gluten.

Question 4

- (a) This question was generally well answered with most candidates describing the physical effects of heat on butter causing it to melt, bubble or sizzle, darken in colour until blue smoke is given off and then the butter finally ignites. Very few candidates stated that butter splits into fatty acids and glycerol.
- (b) Most candidates were able to demonstrate some knowledge of the characteristics of a saturated fat. Popular responses included the fact that saturated fats contain only carbon-to-carbon single bonds and saturated fats are not able to take more hydrogen. Other correct answers referred to saturated fats usually being solid at room temperature and being found in animal foods.
- (c) The majority of candidates were able to correctly name a variety of nuts and seed products that are high in monounsaturated fat. Most popular responses included avocado oil, peanut butter, sesame seed oil and sunflower oil.
- (d) Only a small number of candidates knew that fat becomes rancid due to fat being stored for too long, being exposed to light, oxygen or prolonged heat.

Question 5

- (a) The majority of candidates were correctly able to suggest a variety of different ways the diet could be altered to help a person suffering with constipation. Most popular responses included using wholegrain bread or pasta, increasing the intake of fruits and vegetables and drinking more water.
- (b) Most candidates were able to name at least one possible health effect if a person suffering with constipation did not alter their diet. The most popular response was colon cancer.

Question 6

Most candidates clearly stated at least two different ways in which water helps the body to function effectively. Popular responses included its use in preventing constipation, ensuring faeces were soft and easy to pass, preventing dehydration and regulating body temperature.

Section B

Question 7

- (a) (i) The majority of candidates achieved the available mark by stating that sieving flour helps remove lumps. Some candidates correctly stated that sieving helps aerate the mixture.
- (ii) Many candidates noted that using fingertips for rubbing in prevents fat melting as they are the coolest part of the hand.
- (iii) Many candidates correctly stated that plain flour is used to make shortcrust pastry as it has a low gluten content. Others knew that a raising agent in the flour is not needed to make the pastry as air is added in through various other means.
- (iv) Many candidates were awarded the available mark by stating that butter adds colour or flavour to the pastry.
- (v) It was not well known that it is important not to add too much water to the pastry or more flour would have to be used which makes the pastry dry and tough as it alters the proportion of fat to flour.
- (vi) A good proportion of candidates knew that allowing pastry to relax in a cool place before baking relaxes gluten or allows the fat to harden.
- (b) Most candidates were able to state at least one method. The most common response was to sprinkle with sugar before baking the pie. A few candidates correctly proposed making a pattern with a fork around the edges or scoring the top with scissors or a knife. Suggestions to cover the pie with syrup or decorate with fruit or cream were not credited.
- (c) For some candidates there appeared to be confusion between what happens to shortcrust pastry and flaky or rough puff pastry during baking. Incorrect statements such as trapping air between layers or the pastry becoming flaky during baking were seen.

Most candidates gained some marks by describing the process of dextrinisation changing the colour of the pie to golden brown and stating that the pastry hardens. Some candidates accurately described the process of gelatinisation and the effect of the incorporated air in the pastry causing it to rise.

Question 8

This question was quite well answered with many candidates noting that amongst the disadvantages of steaming as a method of cooking were the lack of colour of the food, steamed food is not very tasty, the process of steaming may be dangerous so care must be taken and that steaming is a long process. Some answers referred to the expense of the equipment needed and the cost of the fuel, these were not credited.

Question 9

It was clear that very few candidates understood the concept of the work triangle as a feature of kitchen design. It was expected that answers would include reference to the cooker, fridge or food storage area and sink being positioned in close proximity to each other so as to enable efficient working in the kitchen with the least possible waste of time and energy.

Question 10

This was well answered with many candidates achieving several marks by suggesting a variety of reasons why some people may not wish to use convenience foods. Popular responses linked convenience food to high levels of fat, sugar and salt, the fact that portion sizes may not always be correct and the problems caused by packaging and additives.

Question 11

Many candidates were able to state facts about why paperboard is a suitable material for packaging, however in order to gain higher marks for this question, candidates also needed to provide an explanation for each reason.

It was well known that paperboard is a cheap, light material that can be moulded into different shapes and that it is both biodegradable and recyclable.

Question 12

- (a) Most candidates were able to give at least two reasons for this question giving answers such as it is hard-wearing, easy to clean and does not scratch or rust.
- (b) Popular suggestions for other materials that can be used to make saucepans were aluminium, copper and iron.

Section C

Candidates are expected to answer questions in this section in an essay style, using correct terminology and specialist language, where appropriate.

It is essential that when answering questions of this nature candidates read the requirements of the question carefully to give a balanced response that addresses all areas of the question equally.

Question 13

It was encouraging to note that a good proportion of candidates showed understanding and knowledge of problems that may occur for people who follow a vegan diet. Many identified specific nutrients that may be lacking and gave a function or health implication if the diet is deficient in the nutrient and some suggested food sources of the named nutrient that were suitable for a vegan. A few candidates identified some non-nutritional problems that may occur with a vegan diet and suggested varied ways of overcoming these problems.

Some candidates gave irrelevant detail that was not required by the question, for example some defined the term vegan, some gave many and varied reasons for choosing a vegan lifestyle and listed foods that vegans do not eat. Some candidates gave answers that were too brief and lacked detail and some confused vegan and vegetarian so suggested correct nutrients that may be lacking but with food sources that could not be consumed by a vegan.

Question 14

Many candidates demonstrated their knowledge by identifying several nutritional reasons why milk and milk products are important foods for a three-year-old child. Nutrients found in milk were correctly named and their function was specifically linked to the requirements of a three-year-old child. Most candidates gave various suitable recommendations of how to include milk and the different milk products in meals.

FOOD AND NUTRITION

Paper 0648/12 Theory

Key messages

- Questions requiring simple, straightforward answers were generally answered well.
- Centres need to prepare candidates by ensuring that they have a full understanding of the requirements of different question types: name, state, identify, describe, discuss and explain. Often, candidates had difficulty in achieving the full marks for questions asking for an explanation, because answers were not supported with a suitable explanation or relevant examples.

General comments

It is important that comprehension of technical words related to Food and Nutrition such as 'function', 'symptom', 'source' and 'nutritional' are reinforced so that candidates are able to understand what is required from questions.

Candidates should be reminded to read questions carefully. On many occasions, answers were produced which, although factually correct, were not relevant to the question.

Comments on specific questions

Section A

Question 1

- (a) Most candidates were able to give two correct effects in the body of taking in too much energy. The most popular responses being obesity, CHD, diabetes and high blood pressure. Sometimes two similar answers were given such as obesity and weight gain.
- (b)(i) Many candidates gave a correct statement in response to this question but then did not go on to provide a reason for the statement supplied; for example answers such as 'older people need less energy' need further reasoning to fully answer the question. The most popular correct answer was that young people need more energy due to being very active or due to growing.
- (ii) Overall this question was not well answered. Expected responses were that males tend to use more energy as they usually have a bigger body size or females generally have less muscle tissue so use less energy. Incorrect answers stated that men work harder, do more manual work and women do not do as much physical work or need energy for pregnancy, breastfeeding and menstruation.

Question 2

- (a) A good proportion of candidates showed some knowledge of the characteristics of an unsaturated fat. Most were able to state that fats are liquid, usually from plants or had double bonds. It appeared that some candidates were confused by the type of fats and guessed answers.
- (b) The majority of the candidates were able to give at least two different examples but then often gave a third example that repeated an answer from the same category. The most popular answers were sunflower oil, nuts, margarine and oily fish.

Question 3

- (a) The majority of candidates were able to identify at least one correct vitamin with antioxidant functions.
- (b)(i) Many candidates correctly named eggs, milk (or a milk product) or a named offal amongst a list of animal sources of vitamin B₁ (thiamin). Some stated 'meat' which was too vague or did not give an animal source of the vitamin.
- (ii) Some candidates correctly named beri-beri as the disease that may occur. Many responses referred to other deficiency diseases such as anaemia, spina bifida or night blindness.

Question 4

- (a) Many candidates correctly stated that iodide is needed to make the hormone thyroxine or prevents goitre. Very few candidates mentioned that iodide controls the rate of metabolism but instead stated that it had something to do with digestion or maintenance of the nervous system. A lot of candidates' answers referred to the function of other minerals, in particular iron, which may have been a misreading of the question or a lack of understanding.
- (b) Very few candidates were able to give a symptom of the deficiency disease associated with a lack of iodide. Some responses just stated 'goitre'.
- (c) The majority of candidates were able to name at least two different sources of iodide. Popular responses included a named dairy food, eggs, fish or a named green leafy vegetable.

Question 5

A good proportion of candidates were able to name the small intestine as the location of the villi in the digestive system. The role of the villi was less well answered as many candidates did not indicate absorption of nutrients but suggested digestion of food.

Question 6

- (a) When responding to these questions it was expected that candidates specifically consider the diet of a convalescent in relation to the function of the nutrients, however, many only gave general functions of each of the nutrients.
 - (i) Candidates needed to state that in the diet of a convalescent iron is required to replace any blood loss or is important for haemoglobin. Some correct answers stated that iron helps prevent anaemia.
 - (ii) Some correct answers stated that vitamin C help wounds heal and supports the immune system.
 - (iii) Many candidates stated that protein is needed for growth or maintenance of muscles, which is correct but not applicable for a convalescent.
 - (iv) Many candidates correctly stated that in the diet of a convalescent water prevents dehydration or constipation or replaces lost fluid.
 - (v) Many candidates stated that calcium keeps bones and teeth strong or strengthens bones and teeth which is correct but not applicable for a convalescent.
 - (vi) Many candidates correctly stated that vitamin D helps to absorb calcium.
- (b) There were very few high scoring responses to this question. The focus of the question was to explain why the menu would not be suitable for a convalescent, not how to alter it. Many candidates provided responses that referred to what nutrients were missing and suggested how improvements could be made to provide a more balanced meal for a convalescent. Some candidates identified that the meal was high in fat and sugar but did not indicate which foods contained these nutrients and why they were not suitable for a convalescent. When answered correctly the most popular responses indicated that the curry was spicy and high in fat making it difficult to digest and the doughnut was correctly identified as being high in sugar. Very rarely did

candidates mention the smell of the curry or that it may contain ghee or the total meal is high in energy which is not suitable for someone doing little exercise.

When candidates indicated that the meal needed to be improved, they correctly stated that extra vitamins, in the form of fruit and vegetables, would need to be added or that water should be provided. Although these suggestions were factually correct, they did not answer the question.

Section B

Question 7

- (a) Many candidates incorrectly stated potatoes or repeated a vegetable that was already in the recipe. When correctly answered the most popular root-type vegetables selected were beetroot, sweet potato and radishes.
- (b) Many candidates were able to correctly name two fruit-type vegetables that could be used in the lasagne. The most popular responses were eggplant, peppers, pumpkin and squash. Occasionally some candidates provided fruit answers e.g. pineapple, cherries and oranges or repeated a vegetable that was already in the recipe.
- (c) There were very few high scoring responses to this question which proved to be a challenging issue for many candidates possibly due to a lack of knowledge and understanding of the phrase *nutritional reasons*. Many candidates provided general reasons for increasing the amount of vegetables in the diet listing colour, texture and variety or the fact that they contained vitamins and minerals but failed to identify these individually.
When answered correctly the most popular responses referred to vegetables being a good source of NSP, high in water content and containing vitamins A and C and the minerals iron and calcium. The best responses then went on to include a suitable function for each nutrient named.

Question 8

- (a) Many candidates were able to correctly identify the roux method; some named the all-in-one method which was also correct. Occasionally the melting method was seen probably confusing melting the fat at the start of making the roux.
- (b) The majority of candidates were able to identify that flour thickened the sauce. Sometimes milk was given and some identified cornflour or cheese even though these were not in the recipe.
- (c) Few candidates were able to identify gelatinisation as the thickening process that happens as the sauce cooks. Coagulation was frequently named and quite a few candidates gave no response.
- (d) Most candidates correctly identified butter as the ingredient that made the sauce glossy though some gave milk or cheese which was not in the recipe.
- (e) (i) Most candidates correctly identified milk or butter as being unsuitable for a vegan though again some mentioned cheese even though it was not in the recipe.
- (ii) Most candidates provided a suitable alternative to the ingredient identified in (e)(i). If milk was selected the most popular alternatives given were soy, almond or coconut milk, however, some candidates gave full fat milk in (e)(i) and then substituted it for skimmed milk. Suggestions for replacing the butter were less well answered.
- (f) It was expected that candidates would be familiar with the process of sauce-making and would be able to identify exactly when it was important to stir the sauce to prevent lumps rather than simply state the sauce had not been stirred. Many candidates correctly stated lumps in the sauce could be caused by adding the milk too quickly or not stirring the sauce continuously during the process. Some responses mistakenly suggested a lumpy sauce could be caused by not sieving flour or the heat being too low. Some candidates provided answers that were more appropriate for (g).
- (g) This question was generally well answered with most candidates able to achieve some marks. The most popular correct responses included too much liquid, insufficient flour and not heated long enough. Very few associated the process of gelatinisation failing to occur as a cause of a thin sauce.

Question 9

- (a) Most candidates correctly named at least one item of fire safety equipment that would be useful in the kitchen.
- (b) Very few candidates achieved full marks for this question. Some candidates stated the heat should be turned down rather than off, some suggested covering the fire with a cloth instead of a lid or fire blanket. Worryingly some candidates suggested removing the pan from the heat or putting water on the fire.
- (c) Most candidates correctly indicated that the affected area should be placed in cool or cold water. Many candidates incorrectly mentioned covering the burn with cream or a bandage and some even suggested using toothpaste or ice which are not recommended treatments for a minor burn.

Question 10

- (a) Many candidates answered this question as if they were choosing a second-hand electric cooker which indicated they needed to read the question more carefully.

Some candidates were awarded at least three marks though few achieved the full six marks available. Quality of responses varied from complete sentences indicating the correct answer e.g. size of cooker to fit in the kitchen to vague statements indicating cost, colour, size etc. Sometimes candidates repeated a response therefore not allowing the marks for example they mentioned looking for a cooker to fit the space in the kitchen and then repeated this answer by saying size of cooker would depend on the size of the family. Some answers seemed to refer to other pieces of electrical equipment and included comments referring to the length of the wire, material the cooker is made from, durability and whether it is working or not. Very little reference was made to whether the cooker was to be integrated or free standing, the energy efficiency rating or features such as number of burners, automatic timer. Popular correct responses referred to size, budget, colour, warranty and well-known brand.

- (b) Answers to this question highlighted a lack of knowledge on how to reduce energy costs when using the hob. It was also evident that some candidates did not understand what a hob is and referred to using other electrical gadgets that save electricity. The majority of candidates were able to achieve some marks though few achieved the full six marks available. When correct responses were seen these often included cutting food into smaller pieces, turning the heat source off when food was cooked, putting a lid on the pan to retain heat and using a pressure cooker or a steamer.

Section C

Candidates are expected to answer questions in this section in an essay style, using correct terminology and specialist language, where appropriate.

It is essential that when answering questions of this nature candidates read the requirements of the question carefully to give a balanced response that addresses all areas of the question equally.

Question 11

Candidates attempted this question with widely varying degrees of depth. Some candidates appeared to have a good understanding of the topic and were able to provide a range of insightful measures for how to save money when shopping for food. The most commonly seen responses included buying foods in season when they are cheaper, only buying what is needed to prevent waste, buying in bulk as it is often cheaper, using cheaper cuts of meat, having a shopping list to reduce impulse buys, looking for special offers, using supermarket's own brands which are often cheaper, using 'money off' coupons, comparing prices between shops for 'best buy' and shopping locally to save transport costs. Many candidates could have achieved more marks if they had been more concise with their responses, for example instead of providing a long paragraph on the benefits of buying fruit and vegetables in season, a concise sentence would have given the same information. Long responses may have resulted in candidates running out of time so that they could not discuss any more points to achieve the higher marks. Some candidates lost marks by not extending the points made e.g. buy non-branded products, buy in bulk etc.

Question 12

Candidates who answered this question demonstrated knowledge of lots of information that could be found on a food label. Higher scoring answers were presented in a clear and organised way with an explanation to support each piece of information. Some candidates did not support their answers with a discussion as required by the question. Some candidates could have gained more marks if answers had been more concise, for example, writing extended descriptions around the ingredient label referencing different types of allergies in detail lost valuable time and marks. The most popular responses were expiry dates, ingredient information, nutrient information, cooking instructions, weights and serving sizes, barcode and prices, name of product and storage instructions.

FOOD AND NUTRITION

Paper 0648/13 Theory

Key messages

- Questions requiring simple, straightforward answers were generally answered well.
- Introductory words and sentences should be used to establish the type of information required in the response.
- In order to gain higher marks, it is important that candidates give reasons, explanations and examples in questions that award more credit.

General comments

Candidates should be careful of repeating the same point twice in an answer as this uses time and does not gain additional credit.

It is important that comprehension of technical words related to Food and Nutrition such as 'function', 'symptom', 'source' and 'nutritional' are reinforced so that candidates are able to understand what is required from questions.

It was encouraging that very few 'no response' answers were seen.

Comments on specific questions

Section A

Question 1

- (a) A good proportion of candidates correctly answered this question.
- (b) Most candidates were able to explain that people who have physically demanding jobs need more energy or people with sedentary jobs need less energy. Some candidates did not fully explain their answer.
- (c) Popular answers to this question included becoming underweight or feeling tired.

Question 2

- (a) A good proportion of candidates were able to correctly name vitamin K as the vitamin that can help blood to clot.
- (b) The majority of candidates achieved the available mark by correctly naming either vitamin A, C or E as a vitamin that acts as an antioxidant.
- (c) The majority of candidates achieved the available mark by correctly naming iron as the mineral that can help prevent anaemia.
- (d) Many candidates achieved the available mark by correctly naming iodide as the mineral that can help prevent goitre.
- (e) Many candidates achieved the available mark by correctly naming a mineral that can help prevent tooth decay, the most popular answers being calcium and fluoride.

Question 3

- (a) It was well known that carbon and oxygen are chemical elements in carbohydrates.
- (b) Most candidates were able to name at least one good source of a food containing starch; potatoes and pasta were the most popular responses. It was clear that some candidates did not read the question carefully and listed names of cereals.
- (c) A minority of candidates knew that wheat, barley or rye are types of cereal that should be avoided by people with coeliac disease.
- (d) It was not well known that people with coeliac disease cannot digest gluten.

Question 4

- (a) This question was generally well answered with most candidates describing the physical effects of heat on butter causing it to melt, bubble or sizzle, darken in colour until blue smoke is given off and then the butter finally ignites. Very few candidates stated that butter splits into fatty acids and glycerol.
- (b) Most candidates were able to demonstrate some knowledge of the characteristics of a saturated fat. Popular responses included the fact that saturated fats contain only carbon-to-carbon single bonds and saturated fats are not able to take more hydrogen. Other correct answers referred to saturated fats usually being solid at room temperature and being found in animal foods.
- (c) The majority of candidates were able to correctly name a variety of nuts and seed products that are high in monounsaturated fat. Most popular responses included avocado oil, peanut butter, sesame seed oil and sunflower oil.
- (d) Only a small number of candidates knew that fat becomes rancid due to fat being stored for too long, being exposed to light, oxygen or prolonged heat.

Question 5

- (a) The majority of candidates were correctly able to suggest a variety of different ways the diet could be altered to help a person suffering with constipation. Most popular responses included using wholegrain bread or pasta, increasing the intake of fruits and vegetables and drinking more water.
- (b) Most candidates were able to name at least one possible health effect if a person suffering with constipation did not alter their diet. The most popular response was colon cancer.

Question 6

Most candidates clearly stated at least two different ways in which water helps the body to function effectively. Popular responses included its use in preventing constipation, ensuring faeces were soft and easy to pass, preventing dehydration and regulating body temperature.

Section B

Question 7

- (a) (i) The majority of candidates achieved the available mark by stating that sieving flour helps remove lumps. Some candidates correctly stated that sieving helps aerate the mixture.
- (ii) Many candidates noted that using fingertips for rubbing in prevents fat melting as they are the coolest part of the hand.
- (iii) Many candidates correctly stated that plain flour is used to make shortcrust pastry as it has a low gluten content. Others knew that a raising agent in the flour is not needed to make the pastry as air is added in through various other means.
- (iv) Many candidates were awarded the available mark by stating that butter adds colour or flavour to the pastry.

- (v) It was not well known that it is important not to add too much water to the pastry or more flour would have to be used which makes the pastry dry and tough as it alters the proportion of fat to flour.
 - (vi) A good proportion of candidates knew that allowing pastry to relax in a cool place before baking relaxes gluten or allows the fat to harden.
 - (b) Most candidates were able to state at least one method. The most common response was to sprinkle with sugar before baking the pie. A few candidates correctly proposed making a pattern with a fork around the edges or scoring the top with scissors or a knife. Suggestions to cover the pie with syrup or decorate with fruit or cream were not credited.
 - (c) For some candidates there appeared to be confusion between what happens to shortcrust pastry and flaky or rough puff pastry during baking. Incorrect statements such as trapping air between layers or the pastry becoming flaky during baking were seen.
- Most candidates gained some marks by describing the process of dextrinisation changing the colour of the pie to golden brown and stating that the pastry hardens. Some candidates accurately described the process of gelatinisation and the effect of the incorporated air in the pastry causing it to rise.

Question 8

This question was quite well answered with many candidates noting that amongst the disadvantages of steaming as a method of cooking were the lack of colour of the food, steamed food is not very tasty, the process of steaming may be dangerous so care must be taken and that steaming is a long process. Some answers referred to the expense of the equipment needed and the cost of the fuel, these were not credited.

Question 9

It was clear that very few candidates understood the concept of the work triangle as a feature of kitchen design. It was expected that answers would include reference to the cooker, fridge or food storage area and sink being positioned in close proximity to each other so as to enable efficient working in the kitchen with the least possible waste of time and energy.

Question 10

This was well answered with many candidates achieving several marks by suggesting a variety of reasons why some people may not wish to use convenience foods. Popular responses linked convenience food to high levels of fat, sugar and salt, the fact that portion sizes may not always be correct and the problems caused by packaging and additives.

Question 11

Many candidates were able to state facts about why paperboard is a suitable material for packaging, however in order to gain higher marks for this question, candidates also needed to provide an explanation for each reason.
It was well known that paperboard is a cheap, light material that can be moulded into different shapes and that it is both biodegradable and recyclable.

Question 12

- (a) Most candidates were able to give at least two reasons for this question giving answers such as it is hard-wearing, easy to clean and does not scratch or rust.
- (b) Popular suggestions for other materials that can be used to make saucepans were aluminium, copper and iron.

Section C

Candidates are expected to answer questions in this section in an essay style, using correct terminology and specialist language, where appropriate.

It is essential that when answering questions of this nature candidates read the requirements of the question carefully to give a balanced response that addresses all areas of the question equally.

Question 13

It was encouraging to note that a good proportion of candidates showed understanding and knowledge of problems that may occur for people who follow a vegan diet. Many identified specific nutrients that may be lacking and gave a function or health implication if the diet is deficient in the nutrient and some suggested food sources of the named nutrient that were suitable for a vegan. A few candidates identified some non-nutritional problems that may occur with a vegan diet and suggested varied ways of overcoming these problems.

Some candidates gave irrelevant detail that was not required by the question, for example some defined the term vegan, some gave many and varied reasons for choosing a vegan lifestyle and listed foods that vegans do not eat. Some candidates gave answers that were too brief and lacked detail and some confused vegan and vegetarian so suggested correct nutrients that may be lacking but with food sources that could not be consumed by a vegan.

Question 14

Many candidates demonstrated their knowledge by identifying several nutritional reasons why milk and milk products are important foods for a three-year-old child. Nutrients found in milk were correctly named and their function was specifically linked to the requirements of a three-year-old child. Most candidates gave various suitable recommendations of how to include milk and the different milk products in meals.

FOOD AND NUTRITION

Paper 0648/02
Practical Test

Key messages

- Centres have clearly worked very hard to support candidates to complete a successful practical test result in this most challenging year.
- An updated version of the Practical Test Handbook, along with a new, detailed Scheme of Work and Delivery Guide is available from the Cambridge Assessment school Support Hub (see 'Qualifications' section). For each examination series centres should refer to the updated version of the Practical Test Handbook for guidance on marking the practical tests.
- All centres must ensure they are familiar with the instructions published by Cambridge International. These instructions clearly state that **five** of the eight published tests are to be used in each centre and that these are allocated to candidates in strict alphabetical order (by surname). Test numbers (not syllabus number) are to be written on planning sheets and mark sheets.
- Marks should be carefully totaled and transferred accurately to the summary sheet and MS1. The marks must be checked by another person for accuracy. In larger centres, where there are two or more Examiners, it is very important that the work is internally moderated prior to submission of marks and work for moderation. Examiners should avoid awarding half marks as this leads to over-marking and confusion when adding up the scores.
- For each series, centres should ensure that they download the most recent versions of documents from the Samples database for administration of the practical tests. The interactive summary mark sheet and working mark sheet will automatically total the marks and scale correctly.
- Summary mark sheets, attendance register and MS1 should all be included with the sample work for moderation. Please also include the Practical Examiner's Report and checklist with the candidates' work. This can be found in the Confidential Instructions document. It includes a record of the dates when the planning and practical tests were carried out, a seating plan and the opportunity for the teacher to report any difficulties that may have occurred during the practical test.
- Cambridge International have extended support for teachers of Food and Nutrition by introducing a new Discussion Forum on Teacher Support. The online discussion forums are a great way to keep up to date with the subject and to share ideas or upload resources. To see all the Discussion Forums available to Cambridge teachers, log in to Teacher Support and visit the Community pages.

General comments

The practical test was updated for this series, reducing the requirements to four instead of five dishes to be made. Updated documents for this series were available from the Samples database. The majority of centres carefully followed the updated instructions for this year. In a few centres, both the candidates' and the Examiners were confused about the requirements with some candidates planning five, six or more dishes per test, and Examiners marking a selection of these for Choice, but then marking a different selection for Method of making and Results. The Examiner should have selected the required number from the Choices section for marking and then follow those same dishes through the practical test to award marks in all sections.

Many centres presented work of a good standard where candidates have been very well supported enabling them to show their achievement through well-directed teaching and submit interesting and varied work which meets the assessment criteria. However, in several centres candidates often chose low-skill dishes or ones which did not meet the requirements of the test. Candidates generally need more guidance and practice with interpreting given assignments and menu planning. This will enable them to accurately answer the demands of the test allocated whilst demonstrating sufficient skills in using a wide range of ingredients, manipulation of various mixtures, knowledge of consistencies and different cooking methods that make full and sensible use of the oven, grill and the top of the cooker. Candidates need to be able to apply their theoretical knowledge of nutritional requirements for specific groups. A significant issue is the lack of understanding of the

requirements of a 'balanced meal'. Candidates should be taught how to select suitable dishes for a range of nutritional requirements so that during the planning session, they instinctively know how to plan a suitable balanced meal. In many cases, candidates are producing two main meals or a range of dishes that would not normally be served together in the same meal. Dishes to be served as a meal should complement each other.

Centres are reminded that only one set of preparation sheets should be issued to each candidate, with a maximum of two sets used. Marks must be reduced by 2 where candidates use more than two sets. Preparation sheets should be fastened together with staples or treasury tags in the correct order, along with the photographs. Placing the work inside individual plastic sleeves hinders the moderation process. Most centres are now using the interactive form to make scaling accurate but some of those that are still handwriting in the marks made errors in scaling. Centres are reminded to ensure they are using the current administration resources for each series. Most centres are providing good quality photographic evidence. A clear image of each labelled dish served is essential for the moderation process.

It is a requirement that all candidates' work must show evidence of marking, with annotation clearly written on the work and comments given on the mark sheet to evidence how and where marks have been awarded or reduced. Examiners should give clear, factual detail that supports marking. Many Examiners failed to annotate in sufficient detail – some did not provide any commentary at all – and this makes the moderation process extremely difficult. Candidates should indicate on their choices section which part of the test each dish is being made for. Examiners are reminded to indicate on the choices sheet how many marks have been awarded for each individual dish with justification given on the mark sheet. All of the planning should be clearly and concisely annotated using the key provided in the Handbook.

Working mark sheets need detailed comments about the candidates' method of working during the test and the final results. Many Examiners are writing comments such as 'good', 'palatable', 'edible' and 'nice'; these terms do not convey any useful information as to the actual texture, aroma, flavour or appearance of the food. Terminology to describe the finished dishes must be factual and descriptive.

Too many low-skill dishes are being chosen as main dishes and then awarded high marks in all sections. Low-skilled, repeated main ingredients, skills and methods, or incorrect choices affect the marks for choice, method of working and final results. Some tests demonstrated a limited variety of skills, often with too much similar vegetable preparation. Closer attention to the syllabus would be beneficial and would enable the candidates to achieve higher marks.

Comments on specific questions

Test 1

This was a popular with many centres. Candidates who performed best chose a well-balanced menu, wisely using the convenience ingredient to create a skilled dish. Some candidates were confused and made their own puff pastry instead of using ready-made, or used fresh fish instead of canned, and several candidates mistakenly used nuts instead of dried fruit. For **(b)**, many candidates made successful sponge or Genoise cakes which were filled with fruit and cream and piped with cream before garnishing. Biscuits were chosen by many candidates and good examples of biscuits made by different methods were seen.

Test 2

Only a few centres chose this test. The non-dairy meal was generally well answered by candidates. Some candidates went further and planned a meal without any animal produce which then tended to lack protein and a good balance of nutrients. For **(b)**, most candidates made the cake using the creaming method, although some centres and candidates still appear confused over these culinary terms. All cakes must be neatly decorated to gain full marks. Cakes made by the one-stage method are lower skilled.

Test 3

This was a popular test chosen by most centres, although it was evident that many candidates were not able to correctly identify the functions of eggs. Several candidates did not make any attempt to identify the function of the egg in their chosen dishes, leaving that to the Examiner and the Moderator to decide; and of those who did attempt to label their choices, many incorrectly named the functions. However, there were generally well-chosen dishes demonstrating high levels of skills across a range of uses of eggs. Both sweet and savoury dishes were chosen, for example quiche, sponge cakes, bread rolls using eggs as a glaze,

mayonnaise, and various dishes with eggs as a garnish. In some cases, eggs were named as a 'garnish' for fried rice, but then the egg was mixed into the rice instead.

Test 4

Some candidates who were allocated this test struggled to understand the requirement for a low-calorie meal for sedentary workers. Menus that were high in carbohydrates or fats were often planned. The best menus demonstrated choices of light, nutritious meals with plenty of vegetables and fruits, wholegrains and low-fat options. Portion sizes should also be checked here, as some candidates made quantities that are too large. For **(b)**, a dish using chocolate was the most popular choice, with cocoa being accepted as a common substitute for chocolate. A good array of cakes, biscuits, cheesecakes and gelatin-based mousse were made. Only a few candidates chose to make a dish using herbs.

Test 5

This was another popular choice. Turmeric, cinnamon, nutmeg and chilli were popular spices that were used in fried rice, fruit cakes, chilli con carne, Chelsea buns and egg custard. Some candidates had difficulty identifying a spice, with ingredients such as garlic, onions, herbs or spice mixes being used instead. For **(b)**, the pasta dish was chosen well – spaghetti Bolognese and macaroni cheese being the most popular. Some candidates did make small cakes but should ensure that these are neatly and skilfully decorated if they are to gain high marks. Too many candidates are simply sprinkling icing sugar or placing a small fruit on top as a 'decoration'. Where tray bakes are made, these must also be decorated and then evenly portioned.

Test 6

There were some good choices here showing knowledge of the needs of children. Many candidates had thought about what might be easier to eat and liked by the child such as pizza, macaroni cheese, caramel custard, spaghetti Bolognese, or chocolate mousse. Some candidates did make meals that would have been too calorific for 5-year-old children or made very bulky salads that would be unlikely to appeal. Many candidates listed very large quantities of ingredients that would have meant huge portion sizes, unsuitable for this age group. For **(b)**, the shortcrust pastry dish was usually something like a well-chosen quiche or tuna pasties. Many candidates made the melting method biscuits, with only a few getting the method wrong. Plain flapjacks are a low-skilled response; some candidates selected 'melting moments' which are in fact made by the creaming method.

Test 7

Only a few centres selected this question. Candidates mainly chose vegetables such as carrots, radishes, celeriac or beetroot. Potatoes were also accepted for this question. For **(b)**, there were some good examples of beautifully decorated Genoise or sponge cakes and well-made scones.

Test 8

This question was chosen by only a small number of centres. Some excellent party-themed tables were seen. Most candidates made skilful dishes that could be served cold for the buffet, such as samosas, pasties or vol-au-vents, mini pizza or chicken goujons. For **(b)**, candidates had the opportunity to really show off their cake-decorating skills, and some very appealing cakes were seen with piping or ganache as decorations.

Finally, candidates in many centres had clearly approached their practical tests with a high degree of practical skill. The main issues lie in the interpretation of the test requirements and ensuring the planning is more accurate. Candidates should be encouraged to make more suitable choices which fulfil the test requirements and which demonstrate the use of a range of ingredients, skills and a variety of cooking methods. They need to make skilled dishes which demonstrate their knowledge of consistencies and cooking methods and which require a range of manipulative skills. Where meals are required, candidates do seem to be able to make more suitable choices of accompaniments, although the skill level of these should be carefully monitored by Examiners.

Planning should include brief but accurate details of preparation and cooking methods, cooking times and oven temperatures. Methods need to be clearly stated to show understanding of what these are and how they are used. For example, candidates should write 'make Swiss roll by the whisking method', 'make shortcrust pastry by rubbing-in method', 'make cheese sauce using roux method' and so on. This removes the need to write out lengthy instructions that take up too much space on the planning sheets.

Candidates should ideally indicate on their time plans how they will test that each item of food or recipe is cooked – for example they should state that a sponge cake would be baked until ‘golden brown and springy to touch’, pasta ‘cooked until al dente’. They should be encouraged to develop the skill of ‘dovetailing’ when writing their time plans. For example, while one dish is cooking, another is being prepared or decorated. Timing of dishes should be more carefully considered with dishes requiring cooling made first and hot dishes planned later in the test.